UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2020

or

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

Commission File Number 001-35547

ALLSCRIPTS HEALTHCARE SOLUTIONS, INC.

(Exact name of registrant as specified in its charter)

Delaware	**36-4392754**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**

222 Merchandise Mart Plaza, Suite 2024, Chicago, IL 60654
(Address of principal executive offices and zip code)
(800) 334-8534
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class:	Trading Symbol	Name of Each Exchange on which Registered
Common Stock, par value $0.01 per share	**MDRX**	**The Nasdaq Stock Market LLC (Nasdaq Global Select Market)**

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding twelve months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer", "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
		Emerging growth company	☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☒

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The aggregate market value of the voting and non-voting common stock held by non-affiliates of the registrant based upon the closing sale price of the common stock on June 30, 2020, the last business day of the registrant's most recently completed second fiscal quarter, was $1,078,860,200. Solely for purposes of this disclosure, shares of common stock held by executive officers and directors of the registrant as of such date have been excluded because such persons may be deemed to be affiliates. This determination of executive officers and directors as affiliates is not necessarily a conclusive determination for any other purposes.

As of February 22, 2021, there were 140,032,248 shares of the registrant's common stock issued and outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive proxy statement related to its 2021 annual meeting of stockholders (the "2021 Proxy Statement") are incorporated by reference into Part III of this Annual Report on Form 10-K where indicated. The 2021 Proxy Statement will be filed with the U.S. Securities and Exchange Commission within 120 days after the end of the fiscal year to which this report relates.

ALLSCRIPTS HEALTHCARE SOLUTIONS, INC.
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FOR THE FISCAL YEAR ENDED DECEMBER 31, 2020

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Each of the terms "we," "us," "our" or "company" as used herein refers collectively to Allscripts Healthcare Solutions, Inc. ("Allscripts") and/or its wholly-owned subsidiaries and controlled affiliates, unless otherwise stated.

The "Business" section, the "Risk Factors" section, the "Management's Discussion and Analysis of Financial Condition and Results of Operations" section and other sections of this Annual Report on Form 10-K (this "Form 10-K") contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements are based on the current beliefs and expectations of our management with respect to future events and are subject to significant risks and uncertainties. Such statements can be identified by the use of words such as "future," "anticipates," "believes," "estimates," "expects," "intends," "plans," "predicts," "will," "would," "could," "continue," "can," "may" and similar terms. Actual results could differ from those set forth in the forward-looking statements, and reported results should not be considered an indication of future performance. Certain factors that could cause our actual results to differ materially from those described in the forward-looking statements include, but are not limited to, those discussed in Part I, Item 1A, "Risk Factors" of this Form 10-K, which are incorporated herein by reference. We do not undertake to update any forward-looking statements to reflect the impact of circumstances or events that may arise after the date of the forward-looking statements for any reason, except as required by law.

PART I

Item 1. Business

We deliver information technology ("IT") solutions and services to help healthcare organizations around the world achieve optimal clinical, financial and operational results. Our solutions and services are sold to:

- Physician practices and specialty groups
- Hospitals
- Governments and militaries
- Health systems
- Health plans
- Life-sciences companies
- Retail clinics
- Surgery centers
- Retail pharmacies
- Pharmacy benefit managers
- Insurance companies
- Employer wellness clinics
- Post-acute organizations
- Consumers
- Lab companies
- Urgent care facilities

Our portfolio, which we believe offers some of the most comprehensive solutions in our industry today, helps clients advance the quality and efficiency of healthcare by providing electronic health records ("EHR"), financial management, population health management, precision medicine and consumer solutions. Built on an open integrated platform, our solutions enable users to streamline workflows, leverage functionality from other software vendors and exchange data. The Allscripts Developer Program focuses on nurturing partnerships with other developers to help clients optimize the value of their Allscripts investment.

Recent Business Developments

On October 13, 2020, Allscripts announced a definitive agreement to sell its CarePort Health business ("CarePort") to WellSky Corp., in exchange for $1.35 billion. CarePort solutions assist hundreds of hospitals and thousands of post-acute care providers to efficiently coordinate and transition patients through different settings of care. The transaction closed on December 31, 2020. Prior to the sale, CarePort was part of the Data, Analytics and Care Coordination reportable segment.

On July 30, 2020, we announced a definitive agreement to sell the EPSi™ business (“EPSi”), a leading provider of financial decision support and planning tools for hospitals and health systems, to Strata Decision Technology, in exchange for $365 million. The transaction closed on October 15, 2020. Prior to the sale, EPSi was part of the Unallocated category as it did not meet the requirements to be a reportable segment nor the criteria to be aggregated into our two reportable segments. As a result of each sale, and since both businesses were part of the same strategic initiative, were sold within the same period and the combined sale of EPSi and CarePort represents a strategic shift that had a major effect on our operations and financial results, these businesses are now reported together as discontinued operations for the years ended December 31, 2020, 2019 and 2018.

On July 13, 2020, Allscripts and Microsoft jointly announced the extension of their long-standing strategic alliance to enable the expanded development and delivery of cloud-based health IT solutions. The five-year extension will support Allscripts’ cloud-based Sunrise™ electronic health record, making Microsoft the cloud provider for the solution and opening up co-innovation opportunities to help transform healthcare with smarter, more scalable technology.

On January 13, 2020, we announced that we extended our engagement with our largest customer, Northwell Health, which is New York’s largest health system. Our managed service business supports the organization’s infrastructure as well as our solutions and third-party applications. We also provide comprehensive service desk support and application management services, as well as project delivery, strategic and leadership-planning activities.

Corporate Information

Founded in 1986, Allscripts is incorporated in Delaware with principal executive offices located at 222 Merchandise Mart Plaza, Suite 2024, Chicago, Illinois 60654. Our principal website is www.allscripts.com. The contents of this website are not incorporated into this filing. Furthermore, our references to the URLs for this website are intended to be inactive textual references only.

Solutions

Our portfolio addresses a range of healthcare industry needs, with the goal of enabling smarter care delivered with greater precision, for healthier communities. Across care settings, our solutions enable clinical, financial and operational efficiencies while helping patients deepen their engagement in their own care. Our principal solutions consist of the following:

Electronic Health Records

Allscripts offers a suite of EHRs for hospitals and health systems, as well as community and physician practices. Built on an open platform with advanced clinical decision support, our EHRs provide analysis and insights. Our EHR solutions deliver a single patient record, workflows and consolidated analytics. Our innovative solutions help deliver improved patient care and outcomes. Our EHR solutions consist of the following:

Sunrise™ is a comprehensive platform of health for hospitals and health systems. Sunrise™ supports hospitals and health systems by delivering a single patient record that supports inpatient and outpatient care and provides advanced decision guidance and supportive workflows for clinicians. Sunrise provides mobile support for clinicians, delivering the power of innovative healthcare IT where they are.

The Sunrise™ platform of health includes:

- Acute care
- Ambulatory care
- Emergency care
- Mobility solutions
- Pharmacy
- Radiology and enterprise wide viewer
- Surgical care
- Tissue management
- Anesthesia information management
- Laboratory information management
- Blood bank solutions
- Wound care
- Oncology care
- Rehabilitation care
- Financial management solutions
- Enterprise-wide registration and scheduling solutions
- Health information management and abstracting solutions
- Allscripts Go (integrated patient ride-share, transportation solution)
- Charge Logic (charge optimization for outpatient facilities)
- Supply chain and point-of-use supply solutions
- Clinical performance management analytics
- Surgical analytics, surgeon access and OR optimization solutions
- Patient Flow (patient throughput solution and census logic analytics)
- Infusion analytics

Paragon® is an integrated clinical, financial and administrative EHR solution tailored for community hospitals and health systems. The solution supports the full scope of care delivery and business processes, from patient access management and accounting through clinical assessment, documentation and treatment.

Allscripts TouchWorks® EHR is an EHR solution for larger single and multispecialty practices and is built on an open platform that brings data sources together. This open platform feature, along with the ability to customize workflows, enables clinical staff to effectively coordinate and deliver both primary and specialized care. Functionality is also offered on mobile devices.

Allscripts Professional EHR™ is an EHR solution for small- to mid-size physician practices. Allscripts Professional EHR™ works in accountable care organizations ("ACOs"), patient-centered medical homes and Federally Qualified Health Centers. The solution's mobile offering, Allscripts Professional EHR™ Mobile, provides on-the-go access to Allscripts Professional EHR™, driving greater efficiency and improved patient care.

Practice Fusion is a cloud-based EHR and is an intuitive and easy-to-use solution for clinicians in small and independent practices. The solution helps drive operational efficiencies with smart charting that adapts to each practice's specific needs and enables patients to receive medications more quickly. Practice Fusion also reduces administrative burdens by helping staff simplify front-office tasks and improve billing efficiency.

BOSSnet is an electronic document management solution that digitizes paper for our EHR customers and serves as a digital health record solution for emerging markets with low digital maturity. The solution currently has a large customer base in Australia and is now expanding across other geographies.

Payer and Life Sciences

Veradigm™ is the Allscripts payer and life science business unit which is an integrated data systems and services business that combines data-driven clinical insights with actionable tools that reside in clinical workflow. Veradigm™ provides solutions to their client base which help key healthcare stakeholders improve the quality, efficiency and value of healthcare delivery - including biopharma, health plans, healthcare providers, health technology partners, and most importantly, the patients they serve.

Consumer Solutions

FollowMyHealth® is a comprehensive patient engagement platform with options for telehealth and remote patient monitoring. This patient engagement platform serves as the foundation for emerging consumer health initiatives, including automated secure messaging.

Financial Management

Allscripts financial solutions support revenue cycle, claims management, budgeting and analytic functions for healthcare organizations. These tools can help change clinician behavior to improve patient flow, increase quality, advance outcomes, optimize referral networks, decrease leakage and reduce costs. Plus, our solutions allow our clients to extract the data needed to support new reimbursement models. Offerings include:

- Sunrise™ Financial Manager
- Sunrise™ Abstracting
- STAR
- Allscripts Revenue Cycle Management Services

Population Health Management

Allscripts provides robust, community-connected population health solutions that enable and deliver care coordination, connectivity, data aggregation and analytics.

- Allscripts care coordination solutions include Allscripts® Care Director, dbMotion™ and chronic care management services.
- Our connectivity and data aggregation solutions include the dbMotion™ Solution and dbMotion™ Community powered by OnePartner.
- Allscripts Clinical Performance Management enables healthcare organizations to measure performance and outcomes, analyze utilization, manage risk, reduce cost and improve quality across the continuum of care.

Services

In addition to our solutions, Allscripts offers customizable professional and managed service offerings. From hosting, consulting, optimization and managed IT services to revenue cycle services for practices, Allscripts partners with clients to meet their goals.

Our Strategy

Our strategy is built upon our vision of enabling smarter care at virtually every point of the healthcare continuum. Given the breadth of our portfolio and global client base, we are well positioned to connect providers to patients and payers across all healthcare settings. Smarter care is a strategic imperative for healthcare organizations globally and requires a balance between managing cost while maintaining the highest quality of care. Our solutions are positioned to facilitate the transformation in healthcare delivery by connecting communities, driving interoperability, providing data analytics, delivering consumer engagement features and assisting clients manage the evolution toward value-based care. These key strategic areas all help healthcare providers better manage populations of patients, especially those with costly chronic conditions, such as diabetes, asthma and heart disease, to help bring down the cost of care and improve patient outcomes.

- **Connecting communities –** Our care coordination solutions improve safety and quality as a patient transitions from one care setting to another. To do so, care coordination solutions help build assessments, monitor results, track outcomes and make modifications in a patient's care plan. Healthcare is a group effort and having full visibility into a patient's care plan is critical. Access to comprehensive patient information is key, and our community solutions help create an organized, longitudinal patient record spanning all points of care.

- **Interoperability –** We provide clients a wide array of interoperability tools to support their need and desire to connect to numerous stakeholders in the industry, including other healthcare providers, labs, imaging facilities, public health entities and patients, as well as other third-party technology providers. Allscripts open platform is proven, scalable and user-friendly, and connects both clinical and financial data across every setting. We also offer Application Programming Interfaces ("APIs") based on the Fast Healthcare Interoperability Resources. With this platform, clients can connect to any certified application or device, which saves time and money and gives clients full access to a variety of innovative solutions.

- **Data analytics –** Allscripts understands that healthcare organizations need to analyze dependencies, trends and patterns so that they can develop business and clinical intelligence. Our analytics offerings help organizations better manage their patient populations by using clean data for better decisions at the point of care. Insights and analytics serve as the foundation for informed analysis and effective planning.

- **Consumer engagement –** Our patient engagement software helps healthcare organizations achieve better outcomes, reduce emergency room visits and decrease hospitalizations. Our solutions also integrate with health IT offerings across an organization, regardless of a provider's chosen vendor. With a patient engagement platform, individuals and their families have the opportunity to become active members of their care team, which improves results.

- **Payer and life sciences –** Through Veradigm™, we are positioned to help clients manage the evolution toward value-based care, facilitate patient medication access and affordability and provide new, efficient operating models for generating the real-world evidence necessary to accelerate the development of new therapies and to enhance the value of existing ones.

Material Government Regulations

Our business operations are worldwide and are subject to various federal, state, local, and foreign laws, and our products and services are governed by a number of rules and regulations. Although there is no assurance that existing or future government laws, rules and other regulations applicable to our operations, products or services will not have a material adverse effect on our capital expenditures, results of operations and competitive position, we do not currently anticipate materially increased expenditures in response to government regulations or future material impacts to our results or competitiveness. Nonetheless, as discussed below, healthcare laws and global trade regulations have materially impacted and could continue to materially impact our business and operations. For a discussion of the risks associated with government regulations that may materially impact us, please see the section entitled "Risk Factors" in Item 1A.

Healthcare IT Industry

The healthcare IT industry in which we operate is highly regulated, and the services we provide are subject to a complex set of healthcare laws and regulations, including, among others, the 21st Century Cures Act (the "Cures Act"), the Medicare Access and CHIP Reauthorization Act ("MACRA"), the Health Information Technology for Economic and Clinical Health Act ("HITECH"), the Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), regulations issued by the Centers for Medicare and Medicaid Services ("CMS") and the Department of Health and Human Services ("HHS"), a number of fraud and abuse laws, including the federal Anti-Kickback Statute and the False Claims Act, and the Patient Protection and Affordable Care Act (as amended, the "PPACA"), as discussed below. In addition, the healthcare IT industry is subject to changing political, legislative, regulatory and other industry standards, which create both significant opportunities as well as certain challenges. These include:

- **HITECH:** In 2009, the United States federal government enacted HITECH, which authorized the Office of the National Coordinator for Health Information Technology ("ONC") to establish the functionality that EHR products must meet in order for our technologies to be considered certified and for our customers to qualify for participation in various government incentive programs.

- **Provider Reimbursement**: In recent years, there have been significant changes to provider payment models by the United States federal government, moving toward a value-based care model similar to those being adopted by commercial payers and state governments. This leads to increasing pressure on healthcare organizations to reduce costs and increase demonstration of quality care, replacing fee-for-service models in part by expanding advanced payment models. Such changes to provider payment models could further encourage the adoption of healthcare IT as a means of improving quality of patient care through increased efficiency, care coordination, and improved access to complete medical documentation.

    - The passage of MACRA in 2015 codified the creation of new payment models, such as Accountable Care Organizations and the Quality Payment Program, that have significantly expanded and will continue to significantly expand the number of ambulatory healthcare professionals delivering care under payment programs that are driven by quality measurement. In 2016, CMS issued preliminary regulations for the Quality Payment Program ("QPP"), and many of our clients are also involved with the Comprehensive Primary Care Plus program, which is working toward similar goals by emphasizing the role of the primary care provider. Other important drivers of healthcare IT adoption in the primary care space are the Patient Centered Medical Home program, a voluntary program in which many of our clients participate that has a strong emphasis on quality measurement and patient engagement. Even where some of these programs will likely be adjusted in part by HHS under the new Biden Administration, significant levels of reimbursements will still require providers to capture, communicate, measure and share outcomes through technology solutions such as ours, given that those requirements are bound in federal statute.

- **PPACA:** PPACA, which was signed into law in 2010, has impacted us and our clients. While at this time repeal of the law is unlikely, particularly under the new Biden Administration, legal challenges continue to advance through the justice system, including an impending ruling from the Supreme Court. Many components of the law, including those which have had a positive effect on our business by requiring the expanded use of health IT products, are expected to remain in effect, as they are not subject to repeal or modification under any currently pending legislation. Certain provisions of PPACA, such as those mandating reductions in reimbursement for certain types of providers or decreasing the number of covered lives in the United States or the depth of insurance coverage available to patients, may have a negative effect on our sales by reducing the resources available to our current and prospective clients to purchase our products.

- **Cures Act**: In late 2016, Congress passed the Cures Act, a sweeping piece of legislation attempting to modernize many areas of the healthcare industry. Sections of the law addressing interoperability also codified the concept of information blocking, requiring a new regulatory structure to respond to concerns that actors in the healthcare industry intentionally block the exchange of information between various stakeholders. The Cures Act authorized penalties for any such action for health IT developers and health information exchange entities, as well as virtually every type of provider organization that Allscripts serves. We will respond to the requirements of the final associated regulation on Interoperability, Information Exchange and Certification released by ONC in March 2020 as thoroughly as possible. The ONC regulation, which involves complex and specific requirements, requires that we evaluate changes to business processes related to requests for the access, exchange or use of Electronic Health Information. Our Company has been and remains committed to open and efficient information exchange and we will continue to support clients in their efforts to exchange health data and meet all new associated certification requirements.

- **Privacy and Health Data:** Allscripts is subject to numerous privacy and security laws and regulations, including HIPAA and the FTC Act.

    HIPAA: HIPAA and its implementing regulations contain substantial restrictions and requirements with respect to the use and disclosure of individuals' protected health information. As part of the operation of our business, Allscripts, and our subcontractors may have access to, or our clients may provide to us, individually identifiable health information related to the treatment, payment and operations of providers' practices. In the United States, government and industry legislation and rulemaking, especially HIPAA, HITECH and standards and requirements published by industry groups such as the Joint Commission, require the use of standard transactions, standard identifiers, security and other standards and requirements for the transmission of certain electronic health information. HIPAA applies to "Covered Entities," such as certain healthcare providers, health plans, and "healthcare clearinghouses," as well as business associates that performed functions on behalf of or provided services to Covered Entities. We consider ourselves a Covered Entity due to our acting as a healthcare clearinghouse through our provision of Allscripts Payerpath due to its filing of electronic healthcare claims on behalf of healthcare providers that are subject to HIPAA and HITECH. In addition, as a result of our dealings with certain clients and others in the healthcare industry that may be considered Covered Entities under or otherwise subject to the requirements of HIPAA, we are, in some circumstances, considered a business associate under HIPAA. As a business associate, we are subject to the HIPAA requirements relating to the privacy and security of protected health information. Among other things, HIPAA requires business associates to (i) maintain physical, technical and administrative safeguards to prevent protected health information from misuse, (ii) report

security incidents and other inappropriate uses or disclosures of the information, including to individuals and governmental authorities, and (iii) assist Covered Entities from which we obtain health information with certain of their duties under HIPAA. We have policies and procedures that we believe comply with federal and state confidentiality requirements for the handling of protected health information ("PHI") that we receive and with our obligations under Business Associate Agreements.

The principal effects of HIPAA are, first, to require that our systems be capable of being operated by us and our clients in a manner that is compliant with the Transaction, Security and Privacy Standards mandated by HIPAA, and second, to comply with HIPAA when it directly applies to us. We have policies and safeguards in place intended to protect health information as required by HIPAA and have processes in place to assist us in complying with applicable laws and regulations regarding the protection of this data and responding to any security incidents. The Office of Civil Rights has proposed updates and changes to HIPAA-related regulations, and Allscripts plans to adjust our processes and procedures as necessary, as new rules are finalized.

- **FTC Act**: Section 5 of the Federal Trade Commission Act (the "FTC Act") prohibits unfair methods of competition and unfair or deceptive acts or practices in or affecting commerce. The FTC Act, and the rules promulgated thereunder, may be applicable to health information that is held in a capacity that does not implicate HIPAA. Therefore, for certain activities and applications, we employ processes designed to comply with the FTC Act.
- **42 CFR Part 2:** The Substance Abuse and Mental Health Services Administration is also expected to promulgate regulations amending requirements and restrictions related specifically to the storage and exchange of behavioral health- and substance use disorder-related patient data, working to ease integration between such sensitive health data and the patient's larger health record. Similarly, we will adjust policies and procedures as required by any final regulation as released.

- **Fraud and Abuse Laws:** The healthcare industry is subject to laws and regulations on fraud and abuse that, among other things, prohibit the direct or indirect payment or receipt of any remuneration for patient referrals, or for the purchase or order, or arranging for or recommending referrals or purchases, of any item or service paid for in whole or in part by these federal or state healthcare programs. Federal enforcement personnel have substantial funding, powers and remedies to pursue suspected or perceived fraud and abuse. Moreover, both federal and state laws forbid bribery and similar behavior.

Federal Anti-Kickback Statute: The federal Anti-Kickback Statute prohibits any person or entity from offering, paying, soliciting or receiving anything of value, directly or indirectly, for the referral of patients covered by Medicare, Medicaid and other federal healthcare programs or the leasing, purchasing, ordering or arranging for or recommending the lease, purchase or order of any item, good, facility or services covered by these programs. Courts have interpreted the law to provide that a financial arrangement may violate this law if any one of the purposes of an arrangement is to encourage patient referrals or other federal healthcare program business, regardless of whether there are other legitimate purposes for the arrangement. There are several limited exclusions known as safe harbors that may protect some arrangements from enforcement penalties. Penalties for federal Anti-Kickback Statute violations can be severe, and include imprisonment, criminal fines, civil money penalties with triple damages (when the False Claims Act is implicated) and exclusion from participation in federal healthcare programs. Many states have adopted laws similar to the federal Anti-Kickback Statute, some of which apply to the referral of patients for healthcare items or services reimbursed by any source, not only the Medicare and Medicaid programs. HHS finalized changes to the latest regulations stemming from the federal Anti-Kickback Statute and Stark Law in late 2020, continuing to make further allowances for exclusions associated with the purchase of health information technology.

- **False Claims Act:** The federal False Claims Act prohibits anyone from, among other things, knowingly presenting, or causing to be presented, for payment to federal programs (including Medicare and Medicaid) claims for items or services that are false or fraudulent. Although we do not submit claims directly to payors, Allscripts could be held liable under the False Claims Act if we are deemed to "cause" the submission of false or fraudulent claims by, for example, providing inaccurate billing or coding information to customers through our revenue cycle/claims management services, or if our EHR products are found to have caused providers to have inaccurately attested to incentive or reimbursement program criteria.

We believe that these and other changes in laws and regulations, along with increasing pressure from private payers to move providers to quality-based payment programs and market opportunities to maximize the data that is increasingly being created and captured through the care process, will continue to drive adoption of healthcare IT products and services such as ours. With the incoming Biden Administration, we anticipate continued pressure through a variety of administrative and regulatory levers to increase interoperability in the industry across a variety of stakeholders, including implementing regulations that require robust, sophisticated health technology. For example, although many large physician groups have already purchased EHR technology, we expect those groups may choose to replace their older EHR technology to comply with future Quality Payment Program and Accountable Care Organization requirements and to add new features and functionality. Further, opportunities for healthcare provider organizations to expand their care coordination efforts in order to successfully comply with new payment programs or to add software specific to the precision medicine expansion, as outlined in the Cures Act, could lead to additional demand for our solutions.

Global Trade

As a global company, the import and export of our products and services are subject to laws and regulations including international treaties, U.S. export controls and sanctions laws, customs regulations, and local trade rules around the world. Such laws, rules and regulations may delay the introduction of some of our products or impact our competitiveness through restricting our ability to do business in certain places or with certain entities and individuals, or requiring compliance with disparate local laws concerning transfer and disclosure of health data and laws concerning controlled technology or source code. The consequences of any failure to comply with domestic and foreign trade regulations could limit our ability to conduct business globally.

Business Organization

We derive our revenues primarily from sales of our proprietary software (either as a direct license sale or under a subscription delivery model), which also serves as the basis for our recurring service contracts for software support and maintenance and certain transaction-related services. In addition, we provide various other client services, including installation, and managed services such as outsourcing, private cloud hosting and revenue cycle management.

During 2020, we realigned our reporting structure to organize the Company around strategic business units to maximize delivery of client commitments, operational effectiveness and competitiveness. Refer to Note 19, “Business Segments,” to our consolidated financial statements included in Part II, Item 8, “Financial Statements and Supplementary Data” of this Form 10-K for detailed discussion about these changes. Our two reportable segments are as follows:

- The Core Clinical and Financial Solutions reportable segment derives its revenue from the sale of software applications for patient engagement, integrated clinical and financial management solutions, which primarily include EHR-related software, financial and practice management software, related installation, support and maintenance, outsourcing, private cloud hosting and revenue cycle management.

- The Data, Analytics and Care Coordination reportable segment derives its revenue from the sale of practice reimbursement and payer and life sciences solutions, which are mainly targeted at physician practices, payers, life sciences companies and other key healthcare stakeholders. These solutions enable clients to transition, analyze and coordinate care and improve the quality, efficiency and value of healthcare delivery across the entire care community.

The results of operations related to CarePort, which was sold on December 31, 2020, is presented throughout our financial statements as discontinued operations. Prior to the sale, CarePort was included in the Data, Analytics and Care Coordination reportable segment. Refer to Note 18, “Discontinued Operations” to our consolidated financial statements included in Part II, Item 8, “Financial Statements and Supplementary Data” of this Form 10-K.

Clients

Our clients in the Core Clinical and Financial Solutions segment include physician practices and hospitals, which include some of the most prestigious medical groups and hospitals in the United States and internationally and often serve as reference sources for prospective clients that are interested in purchasing our solutions. Our clients in the Data, Analytics and Care Coordination segment include coordinated community care organizations, health plans and payors, life science companies and physician practices. For the year ended December 31, 2020, we had one client that accounted for 12% of our revenue. No other single client accounted for more than 10% of our revenue in the years ended December 31, 2020, 2019 and 2018.

Research and Development

Rapid innovation characterizes the healthcare IT industry. We believe our ability to compete successfully depends heavily on our ability to ensure a continual and timely flow of competitive products, services and technologies to the markets in which we operate.

Because of this, we continue to invest into our research and development efforts with a focus on growth opportunities. These efforts include developing new solutions as well as new features and enhancements to our existing solutions, which we believe will ensure that our solutions comply with continually evolving regulatory requirements and create additional opportunities to connect our systems to the healthcare community.

Competition

The markets for our solutions and services are highly competitive and are characterized by rapidly evolving technology and solution standards and user needs, as well as frequent introduction of new solutions and services. Some of our competitors may be more established, benefit from greater name recognition, and have substantially greater financial, technical, and marketing resources than we do.

We compete primarily with numerous types of organizations, including developers of revenue cycle and practice management software and services, large system integrators, IT service providers, ambulatory and acute care EHR solutions, population health management and value-based care technologies, analytics systems, care management solutions and post-acute solutions. We generally compete on the basis of several factors, including breadth and depth of services (including our open architecture and the level of solution integration across care settings), integrated platform, regulatory compliance, reputation, reliability, accuracy, security, client service, total cost of ownership, innovation and industry acceptance, expertise and experience. We believe we compete favorably on these metrics and are one of the leading companies offering a suite of healthcare IT solutions.

Moreover, we expect that competition will continue to increase as a result of consolidation in both the IT and healthcare industries. If one or more of our competitors or potential competitors were to merge or partner with another of our competitors, the change in the competitive landscape could adversely affect our ability to compete effectively.

Our principal existing competitors in these markets include, but are not limited to (in alphabetical order) AdvancedMD, athenahealth Inc., Availity, Cerner Corporation, Change Healthcare, CPSI (Computer Programs and Systems Inc.), CureMD Healthcare, eClinicalWorks, Enli Health Intelligence, Epic Systems Corporation, Evolent Health, Greenway Medical Technologies, Harris Healthcare, Healthagen, Health Catalyst, IBM Watson Health, Inovalon, IQVIA, Kareo, The Lash Group, Inc., MEDHOST, Inc., Meditech (Medical Information Technology, Inc.), Nextgen, nThrive, Optum, Philips Healthcare, Premier Inc., Science 37, T-System, The TriZetto Group, Inc. (a division of Cognizant Technology Solutions, Inc.), Waystar and Wellsoft Corporation.

Backlog

We had a contract backlog of $4.1 billion as of both December 31, 2020 and 2019, respectively. Contract backlog represents the value of bookings and support and maintenance contracts that have not yet been recognized as revenue. Bookings reflect the value of executed contracts for software, hardware, other client services, private-cloud hosting, outsourcing and subscription-based services. Total contract backlog can fluctuate between periods based on the level of revenue and bookings as well as the timing and mix of renewal activity and periodic revalidations. We estimate that approximately 35% of our aggregate contract backlog as of December 31, 2020 will be recognized as revenue during 2021.

Intellectual Property

We rely on a combination of trademark, copyright, trade secret and patent laws in the United States and other jurisdictions, as well as confidentiality procedures and contractual provisions to protect our proprietary technology and our brand. We also enter into confidentiality and proprietary rights agreements with our employees, consultants and other third parties and control access to software, documentation and other proprietary information.

Many of our products include intellectual property obtained from third parties. For example:

- Many of our products are built on technology provided by Microsoft Corporation, such as the Microsoft SQL Server information platform, the Microsoft .NET Framework and the Microsoft Azure cloud platform.
- We license content from companies such as OptumInsight, 3M Health Information Systems, Wolters Kluwer Health, Elsevier, IMO and Clinical Architecture, which we incorporate or use in certain solutions.

It may be necessary in the future to seek or renew licenses relating to various aspects of our products and services. While we have generally been able to obtain licenses on commercially reasonable terms in the past, there is no guarantee that we can obtain such licenses in the future on reasonable terms or at all. Because of continuous healthcare IT innovation, current extensive patent coverage and the rapid rate of issuance of new patents, it is possible that certain components of our solutions may unknowingly infringe upon an existing patent or other intellectual property rights of others. Occasionally, we have been notified that we may be infringing certain patent or other intellectual property rights of third parties. While the outcome of any litigation or dispute is uncertain, we do not believe that the resolution any of these infringement notices will have a material adverse impact on our business.

Geographic Information

Historically, the majority of our clients and revenue have been associated with North America, where we have clients in the United States and Canada. While we remain focused on the North American market, which we expect will continue to drive our revenue in the future, we believe that there are opportunities for us globally as other countries face similar challenges of controlling healthcare costs while improving the quality and efficiency of healthcare delivery. As a result, we have increased our efforts to selectively expand the sales of many of our solutions outside of North America, primarily in the United Kingdom, the Middle East, Asia and Australia.

Human Capital

We track and report internally on key talent metrics including workforce demographics, talent pipeline, diversity data and engagement of our employees. As of December 31, 2020, we had approximately 8,400 employees, including approximately 58.9% in the United States, 36.4% in India, 1.4% in Canada, 1.3% in Israel, and 2.0% in other international countries. We also engage contractors and consultants. None of our employees are covered by a collective bargaining agreement or are represented by a labor union.

Our employees are a significant asset and we recognize that attracting, motivating and retaining talent at all levels is vital to continuing our success. We aim to create an inclusive, respectful and open work environment and culture comprising talented employees of diverse backgrounds, in which our employees can grow and advance their careers, with the overall goal of developing, expanding and retaining our workforce to support our business. We strive to sustain a work environment in which each employee's perspective, background, skills and abilities are valued in support of our mission to create solutions that enable smarter care for healthier patients, populations and communities. We invest in our employees through high-quality benefits and various health and wellness initiatives, and offer competitive compensation packages.

The health and safety of our employees is key to our success. For Allscripts, many of our employees are client facing and participate in the day to day operations of hospitals and medical centers. In response to the novel coronavirus ("COVID-19") pandemic, we moved quickly to make informed decisions to support the health and safety of our employees. We responded with the following actions: (i) immediately transitioning employees in all of our global offices to a remote work environment, with essential (IT/Systems) employees working staggered shifts to maintain social distance; (ii) implementing a COVID-19 self-reporting process that allowed us to quickly provide assistance to COVID-19-impacted employees and their families; (iii) updating our corporate intranet to prominently inform employees of COVID-19 protocol and remind them to incorporate new hygiene habits into their days; (iv) partnering with our Managed Services sites to ensure our front-line employees were part of their vaccination programs; (v) providing letters to our employees that regularly visit clients and interact with site staff and patients to support their ability to obtain timely vaccinations; and (vi) reminding employees of the CMD (Clean, Mask, Distance) protocols in every communication from our Chief Executive Officer.

Fostering inclusivity and equity in our workforce is also vital to our success. Allscripts' Cabinet, comprised of our Chief Executive Officer's direct staff, is made up of five men and five women. Globally, our population of employees at the level of Director and above is 66% male and 34% female. We have established Allscripts Women Engagement, which assists women in managing their careers and driving professional development, all while creating professional development opportunities for women to excel in their careers and in our Company. We have a nine block leadership development process in place that helps us to identify our high potential talent each year. This gives us a view to succession planning for promotions in the organization. Our strategy incorporates thoughtful review around ensuring we have a lens of diversity on identifying high potential talent in the organization. With a focus on development, we were able to fill 59% of our management openings through internal promotion during 2020, with a fill rate of 71% during the last half of the year. Also during 2020, we launched a Champions Network of employees at all levels across our global team that will be working together to enhance our diversity and inclusion initiatives and to ensure that our goals, vision and mission result in a workplace that celebrates each unique individual. We regularly solicit feedback through surveys and other mechanisms to gain insights into workplace engagement, what motivates employees to do their best work and overall employee satisfaction. Employees are provided opportunities to raise suggestions and collaborate with leadership to implement actions for ongoing improvements. We use the results of the surveys to influence our people strategy and policies.

In 2020, our employee experience framework utilized several listening opportunities to hear and learn from employees. The three primary tools used are: a bi-annual company-wide Engagement survey, Lifecycle surveys (new hire and exit surveys) and Learning & Development surveys. Our Engagement Survey puts emphasis on measuring confidence in leadership, perceived care for employees, consistency in how policies are applied, and effectiveness of communication efforts.

Our Chief Executive Officer reviews overall Company results with employees and leaders at all levels and engages in actions that are aimed at removing barriers to engagement. Based on employee feedback and continued action around our 2019 Employee Survey, selected activities were added for 2020, including: our Chief Executive Officer communicating on a weekly basis to all employees, creating new Resource Groups with employee engagement, and quarterly All Hands meetings to review the current state of the business and answer employee questions.

Information about our Executive Officers

The following sets forth certain information regarding our executive officers as of February 26, 2021, based on information furnished by each of them:

Name	Age	Position
Paul Black	62	Chief Executive Officer
Richard Poulton	55	President and Chief Financial Officer
Lisa Khorey	54	Executive Vice President, Chief Client Delivery Officer
Tejal Vakharia	48	Senior Vice President and General Counsel

Paul Black has served as our Chief Executive Officer since December 2012 and is also a member of our Board of Directors (our "Board"). Mr. Black also served as our President from December 2012 to September 2015. Prior to joining Allscripts, Mr. Black served as Operating Executive of Genstar Capital, LLC, a private equity firm, and Senior Advisor at New Mountain Finance Corporation, an investment management company. From 1994 to 2007, Mr. Black served in various executive positions (including Chief Operating Officer from 2005 to 2007) at Cerner Corporation, a healthcare IT company. Mr. Black has also served as a director and Chairman (2010-2012) of Truman Medical Centers from 2001-2017. He serves on the board of the Harry S. Truman Presidential Library and the University of Kansas Health System Advancement Board.

Richard Poulton has served concurrently as both our President and Chief Financial Officer since March 2020. Mr. Poulton has served as our President since October 2015. Furthermore, Mr. Poulton served as our Chief Financial Officer from October 2012 to March 2016 and as an Executive Vice President from October 2012 to September 2015. From 2006 to 2012, Mr. Poulton served in various positions at AAR Corp., a provider of products and services to commercial aviation and the government and defense industries. His most recent role at AAR Corp. was Chief Financial Officer and Treasurer. Mr. Poulton also spent more than ten years at UAL Corporation in a variety of financial and business development roles, including Senior Vice President of Business Development as well as President and Chief Financial Officer of its client-focused Loyalty Services subsidiary.

Lisa Khorey has served as our Executive Vice President, Chief Client Delivery Officer since November 2016. Prior to joining Allscripts, Ms. Khorey was the executive director of Ernst & Young's National Provider Practice, specializing in analytics. Previously, Ms. Khorey held a variety of technical and executive leadership roles at University of Pittsburgh Medical Center.

Tejal Vakharia has served as our Senior Vice President and General Counsel since June 2020. Prior to that, Ms. Vakharia was the Senior Vice President and Chief Compliance Counsel for Allscripts. Prior to joining Allscripts in 2011, she held business, compliance and legal leadership positions at General Electric and Abbott Laboratories, and was an attorney at the multinational law firms of Foley & Lardner and Dentons.

Available Information

Copies of our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to reports filed pursuant to Sections 13(a) and 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), are filed with the U.S. Securities and Exchange Commission (the "SEC"). We are subject to the informational requirements of the Exchange Act and we file or furnish reports, proxy statements and other information with the SEC. Such reports and information are available free of charge at our website at investor.allscripts.com as soon as reasonably practicable following our filing of any of these reports with, or furnishing any of these reports to, the SEC. The SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC (http://www.sec.gov).

Item 1A. Risk Factors

Our business, financial condition, operating results and stock price can be materially and adversely affected by a number of factors, whether currently known or unknown, including, but not limited to, those described below. Any one or more of such factors, some of which are outside of our control, could directly or indirectly cause our actual financial condition and operating results to vary materially from our past or anticipated future financial condition or operating results.

Because of the following factors, as well as other factors affecting our financial condition and operating results, past financial performance should not be considered a reliable indicator of future performance, and investors should not use historical trends to anticipate results or trends in future periods.

These risk factors may be important to understanding any statement made by us in this Form 10-K or elsewhere. The following information should be read in conjunction with Part II, Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the consolidated financial statements and related notes in Part II, Item 8, "Financial Statements and Supplementary Data" of this Form 10-K.

Risks Related to COVID-19

The novel coronavirus ("COVID-19") pandemic has adversely impacted and could continue to adversely impact the business, results of operations, financial condition, liquidity and cash flows of us and our clients.

The COVID-19 pandemic and efforts to control its spread have had a significant, ongoing impact on our operations and the operations of our healthcare clients. The magnitude and duration of the disruption and resulting decline in business activity will largely depend on future developments which are highly uncertain and cannot be predicted. Because our hospital and other health care provider clients have understandably prioritized their resources toward the COVID-19 outbreak, we expect that our business will continue to be adversely affected, including by negatively impacting the demand and timing for implementing our solutions and the timing of payment for our solutions. For example, the COVID-19 pandemic negatively impacted revenue for the year ended December 31, 2020, as we saw delays in deals with upfront software revenue and professional services implementations across our inpatient and outpatient base. We also experienced lower revenue from our clients as patient volumes were lower for most of our clients. We are unable to predict the continuing magnitude of any such effect.

As a result of the COVID-19 pandemic, certain industry events that we sponsor or at which we present and certain client events have been canceled, postponed or moved to virtual-only experiences, and we have instituted a work-from-home policy for most of our employees and have significantly restricted employee travel, which has restricted our sales, marketing and other important business activities. In addition, concerns over the economic impact of the COVID-19 pandemic have caused extreme volatility in financial and other capital markets which has adversely impacted and may continue to adversely impact our stock price and our ability to access capital markets. The extent to which the COVID-19 pandemic will continue to impact our results of operations and financial condition will depend on future developments that are highly uncertain and cannot be predicted, including the duration and severity of the pandemic, resurgences or additional "waves" of outbreaks of the virus in various jurisdictions (including new strains or mutations of the virus), the impact of the pandemic on economic activity, the actions taken by health authorities and policy makers to contain its impacts on public health and the global economy, and the availability and effectiveness of vaccines. The COVID-19 pandemic may also have the effect of heightening many of the other risks described below, such as those relating to our products and services, sales cycles and implementation schedules, the retention of key employees, financial performance and debt obligations.

Risks Related to Our Industry

Markets for our products and services are highly competitive and subject to rapid technological change, and we may be unable to compete effectively in these markets.

The markets for our products and services are intensely competitive and are characterized by rapidly evolving technology, solution standards and user needs and the frequent introduction of new products and services. Some of our competitors may be more established, benefit from greater name recognition and have substantially greater financial, technical and marketing resources than us. Moreover, we expect that competition will continue to increase as a result of potential incentives provided by government programs and as a result of consolidation in both the IT and healthcare industries.

We compete on the basis of a number of factors, including:

- breadth and depth of services, including our open architecture and the level of product integration across care settings;
- integrated platform;
- regulatory compliance;
- reputation;
- reliability, accuracy and security;
- client service;

- total cost of ownership;
- innovation; and
- industry acceptance, expertise and experience.

There can be no assurance that we will be able to compete successfully against current and future competitors or that the competitive pressures that we face will not materially and adversely impact our business, financial condition and operating results.

Consolidation in the healthcare industry could adversely impact our business, financial condition and operating results.

Many healthcare provider organizations are consolidating to create integrated healthcare delivery systems with greater market power. As provider networks and managed care organizations consolidate, thus decreasing the number of market participants, competition to provide products and services like ours will become more intense, and the importance of establishing and maintaining relationships with key industry participants will increase. These industry participants may try to use their market power to negotiate price reductions for our products and services. Further, consolidation of management and billing services through integrated delivery systems may decrease demand for our products. Such consolidation may also lead integrated delivery systems to require newly acquired physician practices to replace their current Allscripts EHR product with that already in use in the larger enterprise. Any of these factors could materially and adversely impact our business, financial condition and operating results.

We are subject to a number of existing laws, regulations and industry initiatives, and we are susceptible to a changing regulatory environment.

As a participant in the healthcare industry, our operations and relationships, and those of our clients, are regulated by a number of foreign, federal, state and local governmental entities. The impact of this regulation on us is direct, to the extent we are ourselves subject to these laws and regulations, and is also indirect, both in terms of the level of government reimbursement available to our clients and in that, in a number of situations, even if we are not directly regulated by specific healthcare laws and regulations, our products must be capable of being used by our clients in a manner that complies with those laws and regulations. The ability of our clients to comply with laws and regulations while using our solutions could affect the marketability of our products or our compliance with our client contracts, or even expose us to direct liability under the theory that we had assisted our clients in a violation of healthcare laws or regulations. Because our business relationships with physicians, hospitals and other provider clients are unique and the healthcare IT industry as a whole is relatively young, the application of many state and federal regulations to our business operations and to our clients is uncertain. It is possible that a review of our business practices or those of our clients by courts or regulatory authorities could result in a determination that could adversely affect us. See the risk factor entitled “The failure by Practice Fusion to comply with the terms of its settlement agreements with the U.S. Department of Justice (the “DOJ”) could have a material and adverse impact on our business, results of operations and financial condition, and, even if Practice Fusion complies with those settlement agreements, the costs and burdens of compliance could be significant, and we may face additional investigations and proceedings from other governmental entities or third parties related to the same or similar conduct underlying the agreements with the DOJ.” Furthermore, as we expand our business globally, we become subject to comparable laws and regulations in each non-United States jurisdiction in which we operate, which creates additional risks. See the risk factor entitled “Our business is subject to the risks of global operations” below for more information.

Specific risks include, but are not limited to:

Healthcare Fraud. Federal and state governments continue to enhance regulation of and increase their scrutiny over practices involving healthcare fraud perpetrated by healthcare providers and professionals whose services are reimbursed by Medicare, Medicaid and other government healthcare programs. Any determination by a regulatory, prosecutorial or judicial authority that any of our activities involving our clients, vendors or channel partners violate any of these laws could subject us to civil or criminal penalties, require us to change or terminate some portions of our business, require us to refund a portion of our license or service fees or disqualify us from providing services to clients doing business with government programs, any of which could have a material adverse effect on our business, financial condition and operating results. Even an unsuccessful challenge by regulatory or prosecutorial authorities of our activities could result in adverse publicity, require a costly response from us and have a material adverse effect on our business, financial condition and operating results.

Patient Information. Our business is subject to rules, particularly HIPAA and HITECH, and contractual obligations relating to the privacy and security of protected health information (“PHI”) that we and our subcontractors may have access to as part of the operation of our business. These rules and obligations have increased the cost of compliance and could subject us to additional enforcement actions and contractual liability, which could further increase our costs and adversely affect the way in which we do business.

The penalties for a violation of HIPAA or HITECH are significant and could have an adverse impact upon our business, financial condition and operating results, if such penalties ever were imposed. If we or our subcontractors do not follow procedures and policies for the handling of PHI, or if those procedures and policies are not sufficient to prevent the unauthorized disclosure of PHI, we could be subject to civil and/or criminal liability, fines and lawsuits, termination of our client contracts or our operations could be shut down. Moreover, because all HIPAA standards and HITECH implementing regulations and guidance are subject to

change or interpretation, we cannot predict the full future impact of HIPAA, HITECH or their implementing regulations on our business and operations. Additionally, certain state privacy laws are not preempted by HIPAA and HITECH and may impose independent obligations upon our clients or us. Additional legislation governing the acquisition, storage and transmission or other dissemination of health record information and other personal information, including social security numbers and other identifiers, continues to be proposed and come into force at the state level. There can be no assurance that changes to state or federal laws will not materially restrict the ability of providers to submit information from patient records using our products and services.

Electronic Prescribing. The use of our software by physicians to perform a variety of functions, including electronic prescribing, which refers to the electronic routing of prescriptions to pharmacies and the ensuing dispensation, is governed by state and federal law, including fraud and abuse laws. States have differing prescription format requirements, which we have programmed into our software. There is significant variation in the laws and regulations governing prescription activity, as federal law and the laws of many states permit the electronic transmission of certain controlled prescription orders, while the laws of several states neither specifically permit nor specifically prohibit the practice. Restrictions exist at the federal level on the use of electronic prescribing for controlled substances and certain other drugs. However, some states (most notably New York) have passed complementary laws governing the use of electronic prescribing tools in the use of prescribing opioids and other controlled substances, and we expect this to continue to be addressed with regulations in other states.

In general, regulations in this area impose certain requirements which can be burdensome and evolve regularly and may adversely affect our business model. Aspects of our clinical products are affected by such regulation because of our need to include features or functions in our products to meet certain regulatory requirements, as well as the need of our clients to comply, and we expect this will continue for the foreseeable future.

Electronic Health Records. A number of important federal and state laws governing the use and content of EHRs may affect the design of such technology. As a company that provides EHRs to a variety of providers of healthcare, our systems and services must be designed in a manner that facilitates our clients' compliance with these laws. We cannot predict the content or effect of possible changes to these laws or new federal and state laws that might govern these systems and services. We may also be subject to future legislation and regulations concerning the development and marketing of healthcare software systems or requirements related to product functionality. These could increase the cost and time necessary to market new services and could affect us in other respects not presently foreseeable. Furthermore, several of our products are certified by an Office of the National Coordinator for Health Information Technology-approved certifying body as meeting the standards for functionality, interoperability and security under HITECH. Our failure to maintain this certification or otherwise meet industry standards could adversely impact our business.

HITECH identified the "meaningful use" of interoperable electronic health records throughout the United States health care delivery system as a critical national goal. By using certified EHR technology and submitting information on the quality of care and other measures to the Secretary of Health & Human Services, eligible healthcare professionals and hospitals have been able to qualify for an additional Medicare and Medicaid payment for the Meaningful Use of certified EHR technology that meets specified objectives under the EHR Incentive program. If our clients do not receive or lose expected incentive payments, this could harm their willingness to purchase future products or upgrades, and therefore could have an adverse effect on our future revenues.

Claims Transmission. Our system electronically transmits medical claims by physicians to patients' payers for approval and reimbursement. In addition, we offer revenue cycle management services that include the manual and electronic processing and submission of medical claims by physicians to patients' payers for approval and reimbursement. Federal law provides that it is both a civil and a criminal violation for any person to submit, or cause to be submitted, a claim to any payer, including, without limitation, Medicare, Medicaid and all private health plans and managed care plans, seeking payment for any services or products that overbills or bills for items that have not been provided to the patient. We have in place policies and procedures that we believe assure that all claims that are transmitted by our system and through our services are accurate and complete, provided that the information given to us by our clients is also accurate and complete. If, however, we or our subcontractors do not follow those procedures and policies, or they are not sufficient to prevent inaccurate claims from being submitted, we could be subject to liability.

Furthermore, to the extent that there is an information security breach, it could have a material adverse effect on our business. See "If our security is breached, we could be subject to liability, and clients could be deterred from using our products and services."

Medical Devices. Certain computer software products are regulated as medical devices under the Federal Food, Drug and Cosmetic Act. The Cures Act, passed in December 2016, clarified the definition of a medical device to exclude health information technology such as EHRs; however, the legislation did leave the opportunity for that designation to be revisited if determined to be necessary by changing industry and technological dynamics. Accordingly, the Food and Drug Administration (the "FDA") may become increasingly active in regulating computer software intended for use in healthcare settings. Depending on the product, we could be required to notify the FDA and demonstrate substantial equivalence to other products on the market before marketing such products or obtain FDA approval by demonstrating safety and effectiveness before marketing a product. Depending on the intended use of a device, the FDA could require us to obtain extensive data from clinical studies to demonstrate safety or effectiveness or substantial equivalence. If the FDA requires this data, we could be required to obtain approval of an investigational device exemption

before undertaking clinical trials. Clinical trials can take extended periods of time to complete. We cannot provide assurances that the FDA would approve or clear a device after the completion of such trials. In addition, these products would be subject to the Federal Food, Drug and Cosmetic Act's general controls. The FDA can impose extensive requirements governing pre- and post-market conditions such as approval, labeling and manufacturing, as well as governing product design controls and quality assurance processes. Failure to comply with FDA requirements can result in criminal and civil fines and penalties, product seizure, injunction and civil monetary policies—each of which could have an adverse effect on our business.

Increased government involvement in healthcare could materially and adversely impact our business.

United States healthcare system reform at both the federal and state level could increase government involvement in healthcare, reconfigure reimbursement rates and otherwise change the business environment of our clients and the other entities with which we have a business relationship. We cannot predict whether or when future healthcare reform initiatives at the federal or state level or other initiatives affecting our business will be proposed, enacted or implemented or what impact those initiatives may have on our business, financial condition or operating results. Our clients and the other entities with which we have a business relationship could react to these initiatives and the uncertainty surrounding these proposals by curtailing or deferring investments, including those for our products and services.

Additionally, government regulation could alter the clinical workflow of physicians, hospitals and other healthcare participants, thereby limiting the utility of our products and services to existing and potential clients and curtailing broad acceptance of our products and services. Further examples of government involvement could include requiring the standardization of technology relating to EHRs, providing clients with incentives to adopt EHR solutions or developing a low-cost government-sponsored EHR solution, or increased enforcement activity targeting healthcare fraud and abuse.

Changes in interoperability and other regulatory standards applicable to our software could require us to incur substantial additional development costs.

Our clients and the industry leaders enacting regulatory requirements are concerned with, and often require, that our software solutions be interoperable with other third-party health IT suppliers. Market forces or governmental authorities have created and could continue to create software interoperability standards that could apply to our solutions, and if our applicable products or services are not consistent with those standards, we could be forced to incur substantial additional development costs and delays may result in connection therewith. If our applicable products or services are not consistent with these varying and evolving standards or do not support our clients in their efforts to meet new certification requirements, our market position and sales could be adversely affected, and we may have to invest significantly in changes to our software solutions, which could materially and adversely impact our financial condition and operating results.

Risks Related to Our Company

We could fail to maintain and expand our business with our existing clients or effectively transition our clients to newer products.

For the year ended December 31, 2020, we had one client that accounted for 12% of our revenue. Our business model depends on our success with maintaining our existing clients, particularly our significant clients, and selling new and incremental products and services to these existing clients. In addition, our success with certain clients requires our achieving interoperability between our new products and our legacy products to provide a single solution that connects healthcare providers across care settings. Certain of our clinical solutions clients initially purchase one or a limited number of our products and services. These clients may choose not to expand their use of, or purchase, additional modules. Also, as we deploy new applications and features for our existing solutions or introduce new solutions and services, our current clients could choose not to purchase these new offerings. If we fail to generate additional business from our current clients, our revenue could grow at a slower rate or even decrease.

In addition, the transition of our existing clients to current versions of our products presents certain risks, including the risk of data loss or corruption or delays in completion. If such events occur, our client relationships and reputation could be damaged. Any of the foregoing could materially and adversely impact our business, financial condition and operating results.

Our products or services could fail to perform properly due to errors or similar problems.

Complex technology, such as ours, often contains defects or errors, some of which may remain undetected for a period of time. It is possible that such errors may be found after the introduction of new products or services or enhancements to existing products or services. We continually introduce new solutions and enhancements to our solutions and, despite testing by us, it is possible that errors may occur in our software or offerings. If we detect any errors before we introduce a solution, we may have to delay deployment for an extended period of time while we address the problem. If we do not discover errors that affect our new or current solutions or enhancements until after they are deployed, we would need to provide enhancements to correct such errors. Errors in our products or services could result in:

- product-related liabilities, fraud and abuse or patient safety issues;
- unexpected expenses and liability and diversion of resources to remedy errors;

- harm to our reputation;
- lost sales;
- delays in commercial releases;
- delays in or loss of market acceptance of our solutions;
- license termination or renegotiations; and
- privacy and/or security vulnerabilities.

Furthermore, our clients may use our products or services together with products or services from other companies or those that they have developed internally. As a result, when problems occur, it may be difficult to identify the source of the problem. Even when our products or services do not cause these problems, the existence of these errors may cause us to incur significant costs, divert the attention of our technical personnel from our other solution development efforts, impact our reputation and cause significant issues with our client relationships.

We could be subject to liability as a result of information security breaches, and clients could be deterred from using our products and services.

Our business relies on the secure electronic transmission, storage and hosting of sensitive information, including PHI, financial information and other sensitive information relating to our clients, company and workforce. As a result, we face risk of deliberate or unintentional incidents involving unauthorized access to our computer systems or data that could result in the misappropriation or loss of assets or the disclosure of sensitive information, the corruption of data, or other disruption of our business operations. We believe that companies in our industry may continue to be targeted by such events with increasing frequency due to the value of healthcare-related data. Any future denial-of-service, ransomware or other Internet-based attacks may range from mere vandalism of our electronic systems to systematic theft of sensitive information and intellectual property. For example, in 2018 we were subject to a ransomware attack that impacted two of our data centers, resulting in outages that left certain of our solutions offline for our clients. In addition, we recently became aware that a third party obtained unauthorized access to personally identifiable information stored in our computer systems. The means of such access has been removed and we are otherwise responding to the incident. While we are still evaluating any potential impact and have no indication the information was distributed or used, we cannot be certain that this or any future breach or incident will not materially and adversely impact our business, financial condition, or operating results.

We have devoted and continue to devote significant resources to protecting and maintaining the confidentiality of this information, including designing and implementing security and privacy programs and controls, training our workforce and implementing new technology. We have no guarantee that these programs and controls will be adequate to prevent all possible security threats. Any compromise of our electronic systems, including the unauthorized access, use or disclosure of sensitive information or a significant disruption of our computing assets and networks, could adversely affect our reputation or our ability to fulfill contractual obligations, could require us to devote significant financial and other resources to mitigate such problems, and could increase our future cyber security costs, including through organizational changes, deploying additional personnel and protection technologies, further training of employees, and engaging third party experts and consultants. Moreover, unauthorized access, use or disclosure of such sensitive information, including any resulting from the incidents described above, could result in civil or criminal liability or regulatory action, including potential fines and penalties. In addition, any real or perceived compromise of our security or disclosure of sensitive information may deter clients from using or purchasing our products and services in the future, which could materially and adversely impact our financial condition and operating results.

We use third-party contractors to store, transmit and host sensitive information for our clients. While we have contractual or other mechanisms in place with these third-party contractors that require them to have appropriate security programs and controls in place and, frequently, to indemnify us for security-related breaches, any compromise or failure of these contractors' privacy and security practices could adversely affect our reputation, require us to devote financial and other resources to mitigate these breaches, or subject us to litigation from our clients or shareholders, as well as actions by regulatory agencies.

Companies, including Allscripts, and governmental agencies have experienced high profile incidents involving data security breaches by entities that transmit and store sensitive information. Lawsuits resulting from these and other similar security breaches have sought very significant monetary damages. While we maintain insurance coverage that, subject to policy terms and conditions and subject to a significant self-insured retention, is designed to address certain aspects of security-related risks, such insurance coverage may be insufficient to cover all losses or all types of claims that may arise in our business, and we cannot provide assurance that this coverage will prove to be adequate or will continue to be available on acceptable terms.

The failure by Practice Fusion to comply with the terms of its settlement agreements with the U.S. Department of Justice (the "DOJ") could have a material and adverse impact on our business, results of operations and financial condition, and, even if Practice Fusion complies with those settlement agreements, the costs and burdens of compliance could be significant, and we may face additional investigations and proceedings from other governmental entities or third parties related to the same or similar conduct underlying the agreements with the DOJ.

On January 27, 2020, we announced that our subsidiary Practice Fusion entered into a series of agreements to resolve an investigation conducted by the DOJ and the U.S. Attorney for the District of Vermont. See the risk factor entitled "We have acquired and expect to acquire new companies, investments or technologies, which are subject to significant risks." Practice Fusion has entered a three-year deferred prosecution agreement with the U.S. Attorney for the District of Vermont ("Deferred Prosecution Agreement") and a civil settlement agreement with the DOJ ("Civil Settlement Agreement"), and has entered into separate civil settlement agreements with the Medicaid programs for each U.S. state, the District of Columbia and Puerto Rico ("State Settlement Agreements" and, together with the Deferred Prosecution Agreement and the Civil Settlement Agreement, the "Settlement Agreements").

Under the Deferred Prosecution Agreement, Practice Fusion consented to the filing of a two count criminal information: one felony count of violating the Anti-Kickback Statute and one felony count of conspiracy to violate the Anti-Kickback Statute. The Deferred Prosecution Agreement required Practice Fusion to pay a criminal fine of $25.3 million and a forfeiture payment of $959,700, both of which have been paid in full, and for the Company and Practice Fusion to regularly review and certify compliance with the Deferred Prosecution Agreement. Practice Fusion also agreed to implement Additional Civil Compliance Terms, which include the appointment of an Oversight Organization and the implementation of compliance measures set forth in a Compliance Addendum, each as described further in the Deferred Prosecution Agreement. The Oversight Organization Mandate requires Practice Fusion to retain an Oversight Organization selected by the U.S. Attorney's Office for the District of Vermont for three years. The Oversight Organization is required to take steps to provide reasonable assurance that Practice Fusion establishes and maintains compliance systems, controls and processes reasonably designed, implemented and operated to ensure Practice Fusion's compliance with the terms of the Deferred Prosecution Agreement, including the Compliance Addendum, as well as reducing the risk of any recurrence of misconduct as described in the information and statement of facts. The Compliance Addendum also required Practice Fusion to, within 90 days of the execution of the Deferred Prosecution Agreement, implement and maintain a Sponsored Clinical Decision Support ("CDS") Compliance Program that sets procedures and systems to review all current or future Sponsored CDSs on the Practice Fusion electronic health records system. Practice Fusion is subject to the Compliance Addendum for a three-year period from the effective date of the Deferred Prosecution Agreement.

Practice Fusion also entered into the Civil Settlement Agreement to resolve allegations by the DOJ that false claims were submitted to governmental healthcare programs. The Civil Settlement Agreement required Practice Fusion to pay a civil settlement of $118.6 million, which included $5.2 million designated for the state Medicaid program expenditures and has been paid in full. In addition, Practice Fusion entered into the State Settlement Agreements to resolve Medicaid claims under state law analogues to the federal False Claims Act. The financial terms of the State Settlement Agreements are substantially similar to those set forth in the Civil Settlement Agreement.

See Note 22, "Contingencies," to our consolidated financial statements included in Part II, Item 8, "Financial Statements and Supplementary Data" of this Form 10-K for additional information.

Compliance with the terms of the Settlement Agreements has imposed and could continue to impose significant costs and burdens on us. If we fail to comply with any such Settlement Agreement, the DOJ may impose substantial monetary penalties, exclude Practice Fusion from Medicare, Medicaid and other federal healthcare programs, and/or criminally prosecute Practice Fusion, which could have a material adverse effect on our business, financial condition and results of operations.

Other government investigations or legal or regulatory proceedings, including investigations or proceedings brought by private litigants or shareholders, federal agencies, private insurers and states' attorneys general, may follow as a consequence of our entry into the Settlement Agreement or the existing government investigation of our EIS Business, which could result in criminal liability, the imposition of damages or non-monetary relief, significant compliance, litigation or settlement costs, other losses, or a diversion of management's attention from other business concerns and have a material adverse effect on our business, results of operations and financial condition. We may also be subject to negative publicity related to these matters that could harm our reputation, reduce demand for our solutions and services, result in employee attrition and negatively impact our stock price.

We have acquired and expect to acquire new companies, investments or technologies, which are subject to significant risks.

We have recently made investments in, or acquisitions of, businesses, joint ventures, new services and technologies, and other intellectual property rights. We expect that we will continue to make such investments and acquisitions in the future.

Our investments and acquisitions involve numerous risks, including:

- the potential failure to achieve the expected benefits of the investment or acquisition, including the inability to generate sufficient revenue to offset acquisition or investment costs, or the inability to achieve expected synergies or cost savings;
- unanticipated expenses related to acquired businesses or technologies;
- the diversion of financial, managerial and other resources from existing operations;
- the risks of entering into new markets in which we have little or no experience or where competitors may have stronger positions;
- unanticipated regulatory and other compliance risks related to acquired companies or technologies;

- potential write-offs or amortization of acquired assets or investments;
- the potential loss of key employees, clients or partners of an acquired business;
- delays in client purchases due to uncertainty related to any acquisition;
- potential unknown liabilities associated with an investment or acquisition; and
- the tax effects of any such acquisitions.

In addition, prior to their acquisition by us, the Enterprise Information Solutions business acquired from McKesson Corporation (the "EIS Business") received a request for documents and information from the U.S. Attorney's Office pursuant to a civil investigative demand (a "CID"). The CID relates to the certification of the respective business's software under the U.S. Office of the National Coordinator for Health Information Technology's electronic health record certification program and related business practices. In August 2018, an additional CID sought similar information related to a separate EIS Business solution. If either CID leads to a claim or legal proceeding against us or our businesses that results in the imposition of damages, non-monetary relief, significant compliance, litigation or settlement costs or any other losses, in each case for which we are not indemnified by the seller of the acquired business, or are otherwise unable to recover against the seller, such damages, relief, costs or losses could materially and adversely impact our business, financial condition and operating results.

Additionally, prior to their acquisition by us, Practice Fusion received a request for documents and information from the U.S. Attorney's Office for the District of Vermont pursuant to a CID. Subsequent to their acquisition by us, Practice Fusion received additional requests for documents and information pursuant to additional CIDs and HIPAA subpoenas. These requests related to the certification of Practice Fusion's software under the U.S. Department of Health and Human Services' Electronic Health Record Incentive Program, compliance with the Anti-Kickback Statute, and related business practices. On January 27, 2020, Practice Fusion entered into a series of agreements to resolve these investigations. See risk factor entitled "The failure by Practice Fusion to comply with the terms of its settlement agreements with the DOJ could have a material and adverse impact on our business, results of operations and financial condition, and, even if Practice Fusion complies with those settlement agreements, the costs and burdens of compliance could be significant, and we may face additional investigations and proceedings from other governmental entities or third parties related to the same or similar conduct underlying the agreements with the DOJ."

Furthermore, the success of our acquisitions will depend, in part, on our ability to integrate our existing businesses with those of the acquired businesses, including the integration of employees, products and technologies. These integrations are inherently complex, costly and time-consuming processes and involve numerous risks, including, but not limited to, unanticipated expenses and the diversion of financial, managerial and other resources from both our existing operations and those of the acquired businesses. The integration of foreign acquisitions presents additional challenges associated with integrating operations across different cultures and languages, as well as currency and regulatory risks associated with specific countries.

If we fail to properly evaluate and execute acquisitions or investments, or if we fail to successfully integrate acquired businesses, we may not be able to achieve projected results or support the amount of consideration paid for such acquired businesses or investments, which could materially and adversely impact our business, financial condition and operating results.

Finally, if we finance acquisitions or investments by issuing equity or convertible or other debt securities or loans, our existing stockholders may be diluted, or we could face constraints related to the terms of and repayment obligations related to the incurrence of indebtedness. This could materially and adversely impact our stock price.

The realignment of our sales, services and support organizations could adversely affect client relationships and affect our future growth.

We periodically make adjustments to our sales, services and support organizations in response to market opportunities, management changes, product introductions and other internal and external considerations. These changes could result in a temporary lack of focus and reduced productivity. In addition, these adjustments could result in our clients experiencing a change in our employees with whom they interact. Any of these changes could adversely impact individual client relationships, client retention, and sales of products and services to existing clients. It is also possible that these changes could adversely affect our ability to sell our products and services to new clients. Any such events could materially and adversely impact our business, financial condition and operating results.

Our clients may not accept our products and services or may delay decisions whether to purchase our products and services.

Our business model depends on our ability to sell our products and services. Acceptance of our products and services may require our clients to adopt different behavior patterns and new methods of conducting business and exchanging information. We cannot provide assurance that our clients will integrate our products and services into their workflow or that participants in the healthcare market will accept our products and services as a replacement for traditional methods of conducting healthcare transactions. Achieving market acceptance for our products and services will require substantial sales and marketing efforts and the expenditure of significant financial and other resources to create awareness and demand by participants in the healthcare industry. If we fail to achieve broad acceptance of our products and services by physicians, hospitals and other healthcare industry participants, or if we fail

to position our services as a preferred method for information management and healthcare delivery, our business, financial condition and operating results could be materially and adversely impacted.

It is difficult to predict the sales cycle and implementation schedule for our products and services.

The duration of the sales cycle and implementation schedule for our products and services depends on a number of factors, including the nature and size of the potential client and the extent of the commitment being made by the potential client, all of which may be difficult to predict. Our sales and marketing efforts with respect to hospitals and large health organizations generally involve a lengthy sales cycle due to these organizations' complex decision-making processes. Additionally, in light of increased government involvement in healthcare and related changes in the operating environment for healthcare organizations, our current and potential clients may react by reducing or deferring investments, including their purchases of our solutions or services. If clients take longer than we expect to decide whether to purchase our solutions, our selling expenses could increase and our revenues could decrease, which could materially and adversely impact our business, financial condition and operating results. If clients take longer than we expect to implement our solutions, our recognition of related revenue would be delayed, which could also materially and adversely impact our business, financial condition and operating results.

The implementation of large and complex contracts requires us to devote sufficient personnel, systems, equipment, technology and other resources necessary to ensure a timely and successful implementation. In addition, due to the amount of resources dedicated to implement large and complex contracts, our ability to successfully bid for and implement other new customer contracts may be adversely affected. If we fail to implement large and complex contracts successfully and in a timely manner, or if as a result of resource constraints, we fail to properly implement other new customer contracts, we may face significant challenges that will adversely affect our business, financial condition and operating results.

Our future success depends upon our ability to grow, and if we are unable to manage our growth effectively, we may incur unexpected expenses and be unable to meet our clients' requirements.

We will need to expand our operations if we successfully achieve market acceptance for our products and services. We cannot be certain that our systems, procedures, controls and existing space will be adequate to support expansion of our operations. Our future operating results will depend on the ability of our officers and employees to manage changing business conditions and to effectively maintain and improve our technical, administrative, financial control and reporting systems. We may not be able to expand and upgrade our systems and infrastructure to accommodate these increases. Difficulties in managing any future growth, including as a result of integrating any prior or future acquisition with our existing businesses, could cause us to incur unexpected expenses, render us unable to meet our clients' requirements, and consequently could materially and adversely impact our business, financial condition and operating results.

We are working to expand our operations in markets outside of the United States. There can be no assurance that these efforts will be successful. We have limited experience in marketing, selling, implementing and supporting our products and services abroad. Expansion of our global sales and operations may require us to divert the efforts of our technical and management personnel and could result in significant expense to us, which could materially and adversely impact our operating results.

We may be unable to successfully introduce new products or services or fail to keep pace with advances in technology.

The successful implementation of our business model depends on our ability to adapt to evolving technologies and increasingly aggressive industry standards and introduce new products and services accordingly. We cannot provide assurance that we will be able to introduce new products on schedule, or at all, or that such products will achieve market acceptance. Moreover, competitors may develop competitive products that could adversely affect our operating results. Any failure by us to introduce planned products or other new products or to introduce these products on schedule could have an adverse effect on our revenue growth and operating results.

If we cannot adapt to changing technologies, our products and services may become obsolete and our business could suffer. Because the markets in which we operate are characterized by rapid technological change, we may be unable to anticipate changes in our current and potential clients' or users' requirements that could make our existing technology obsolete. Our success will depend, in part, on our ability to continue to enhance our existing products and services, develop new technology that addresses the increasingly sophisticated and varied needs of our prospective clients and users, license leading technologies and respond to technological advances and emerging industry standards and practices, all on a timely and cost-effective basis. The development of our proprietary technology entails significant technical and business risks. We may not be successful in using new technologies effectively or adapting our proprietary technology to evolving client or user requirements or emerging industry standards. Any of the foregoing could materially and adversely impact our business, financial condition and operating results.

Our business depends in part on our ability to establish and maintain additional strategic relationships.

To be successful, we must continue to maintain our existing strategic relationships and establish additional strategic relationships with leaders in a number of the markets in which we operate. This is critical to our success because we believe that these relationships contribute to our ability to:

- extend the reach of our products and services to a larger number of physicians and hospitals and to other participants in the healthcare industry;
- develop and deploy new products and services;
- further enhance our brand; and
- generate additional revenue and cash flows.

Entering into strategic relationships is complicated because strategic partners may decide to compete with us in some or all of the markets in which we operate. In addition, we may not be able to maintain or establish relationships with key participants in the healthcare industry if we conduct business with their competitors.

We depend, in part, on our strategic partners' ability to generate increased acceptance and use of our products and services. If we lose any of these strategic relationships or fail to establish additional relationships, or if our strategic relationships fail to benefit us as expected, this could materially and adversely impact our business, financial condition and operating results.

We may be unable to protect, and we may incur significant costs in enforcing, our intellectual property rights.

Our patents, trademarks, trade secrets, copyrights, and other intellectual property rights are important assets to us. Various events outside of our control pose a threat to our intellectual property rights, as well as to our products, services, and technologies. For instance, any of our current or future intellectual property rights may be challenged by others or invalidated through administrative process or litigation. Any of our pending or future patent applications, whether or not being currently challenged, may not be issued with the scope of the claims we seek, if at all.

We have taken efforts to protect our proprietary rights, including a combination of license agreements, confidentiality policies and procedures, confidentiality provisions in employment agreements, confidentiality agreements with third parties, and technical security measures, as well as our reliance on copyright, patent, trademark, trade secret and unfair competition laws. These efforts may not be sufficient or effective. For example, the secrecy of our trade secrets or other confidential information could be compromised by our employees or by third parties, which could cause us to lose the competitive advantage resulting from those trade secrets or that confidential information. Unauthorized third parties may try to copy or reverse engineer portions of our products or otherwise infringe upon, misappropriate or use our intellectual property. We may not be able to discover or determine the extent of any unauthorized use of our proprietary rights. We may also conclude that, in some instances, the benefits of protecting our intellectual property rights may be outweighed by the expense.

In addition, our platforms incorporate "open source" software components that are licensed to us under various public domain licenses. Open source license terms are often ambiguous, and there is little or no legal precedent governing the interpretation of many of the terms of certain of these licenses. Therefore, the potential impact of such terms on our business is somewhat unknown. Further, some enterprises may be reluctant or unwilling to use cloud-based services, because they have concerns regarding the risks associated with the security and reliability, among other things, of the technology delivery model associated with these services. If enterprises do not perceive the benefits of our services, then the market for these services may not expand as much or develop as quickly as we expect, either of which would adversely affect our business, financial condition, or operating results.

Legal standards relating to the validity, enforceability and scope of protection of intellectual property rights are uncertain and evolving. The laws of some foreign countries may not be as protective of intellectual property rights as those in the United States, and effective intellectual property protection may not be available in every country in which our products and services are distributed.

Any impairment of our intellectual property rights, or our failure to protect our intellectual property rights adequately, could give our competitors' access to our technology and could materially and adversely impact our business and operating results. Any increase in the unauthorized use of our intellectual property could also divert the efforts of our technical and management personnel and result in significant additional expense to us, which could materially and adversely impact our operating results. Finally, we may be required to spend significant resources to monitor and protect our intellectual property rights, including with respect to legal proceedings, which could result in substantial costs and diversion of resources and could materially and adversely impact our business, financial condition and operating results.

We could be impacted by unfavorable results of legal proceedings and claims, such as being found to have infringed on a third party's intellectual property rights.

We are subject to various legal proceedings and claims that have not yet been fully resolved, including the CIDs and those discussed under Note 22, "Contingencies," to our consolidated financial statements included in Part II, Item 8, "Financial Statements and Supplementary Data" of this Form 10-K, and additional claims may arise in the future. For example, companies in our industry, including many of our competitors, have been subject to litigation based on allegations of patent infringement or other violations of intellectual property rights. In particular, patent holding companies often engage in litigation seeking to monetize patents that they have purchased or otherwise obtained. As the number of competitors, patents and patent holding companies in our industry increases, the functionality of our products and services expands, and as we enter into new geographies and markets, the number of intellectual

property rights-related actions against us has increased and is likely to continue to increase. We are vigorously defending against these actions in a number of jurisdictions.

If we are found to infringe one or more patents or other intellectual property rights, regardless of whether we can develop non-infringing technology, we may be required to pay substantial damages or royalties to a third party, and we may be subject to a temporary or permanent injunction prohibiting us from marketing or selling certain products or services. Furthermore, certain of our agreements require us to indemnify our clients and third-party service providers for third party intellectual property infringement claims, which would increase the costs to us of an adverse ruling on such claims and could adversely impact our relationships with our clients and third party service providers. In certain cases, we may consider the desirability of entering into licensing agreements, although no assurance can be given that such licenses can be obtained on acceptable terms or that litigation will not occur. These license agreements may also significantly increase our operating expenses.

Regardless of the merit of particular claims, legal proceedings may be expensive, time-consuming, disruptive to our operations and distracting to our management. If one or more legal matters were resolved against or settled by us in a reporting period for amounts in excess of management's expectations, our consolidated financial statements for that reporting period could be materially and adversely impacted. Such an outcome could result in significant compensatory, punitive or other monetary damages; disgorgement of revenue or profits; remedial corporate measures; or other injunctive or equitable relief against us, any of which could materially and adversely impact our business, financial condition and operating results.

We maintain insurance coverage that may apply in the event we are involved in a legal proceeding or claim. This coverage may not continue to be available on acceptable terms, may not be available in sufficient amounts to cover one or more claims against us, and may include larger self-insured retentions or exclusions for certain products or services. In addition, the insurer might disclaim coverage as to any future claim. This could increase the magnitude of the impact of one or more legal proceedings or claims being resolved against or settled by us.

Our exposure to risks associated with various claims, including the use of intellectual property, may be increased as a result of acquisitions of other companies. For example, we may have a lower level of visibility into the development process with respect to intellectual property, or the care taken to safeguard against infringement risks, with respect to the acquired company or its technology. In addition, third parties may make infringement or related claims after we have acquired companies that had not been asserted prior to the acquisition.

Our success depends on the continued service and availability of key personnel.

Much of our future performance depends on the continued availability and service of our key personnel, including our Chief Executive Officer and our President, the other members of our senior management team, and our other highly qualified personnel, as well as being able to hire additional highly qualified personnel who have a deep understanding of our industry. Competition in our industry for such personnel, especially with respect to sales and technical personnel, is intense. We are required to expend significant resources on identifying, hiring, developing, motivating and retaining such personnel throughout our organization. Many of the companies with whom we compete for such personnel have greater resources than us and may be able to offer more attractive terms of employment. Our investment in training and developing our employees makes them more attractive to our clients and competitors, who may then seek to recruit them. Furthermore, our compensation arrangements, such as our equity award programs, may not always be successful in attracting new employees and retaining and motivating our existing employees. Our failure to attract new highly qualified personnel, or our failure to retain and motivate our existing key personnel, could materially and adversely impact our business, financial condition and operating results.

Our independent content and service providers may fail to perform adequately or comply with laws, regulations or contractual covenants.

We depend on independent content and service providers for communications and information services and for some of the benefits we provide through our software applications and services, including the maintenance of managed care pharmacy guidelines, drug interaction reviews, the routing of transaction data to third-party payers and the hosting of our applications. Our ability to rely on these services could be impaired as a result of the failure of such providers to comply with applicable laws, regulations and contractual covenants or as a result of events affecting such providers, such as power loss, telecommunication failures, software or hardware errors, computer viruses and similar disruptive problems, fire, flood and natural disasters. Any such failure or event could adversely affect our relationships with our clients and damage our reputation. This could materially and adversely impact our business, financial condition and operating results.

We may have no means of replacing content or services on a timely basis or at all if they are inadequate or in the event of a service interruption or failure. We also rely on independent content providers for the majority of the clinical, educational and other healthcare information that we provide. In addition, we depend on our content providers to deliver high quality content from reliable sources and to continually upgrade their content in response to demand and evolving healthcare industry trends. If these parties fail to develop and maintain high quality, attractive content, the value of our brand and our business, financial condition and operating results could be materially and adversely impacted.

We may be liable for use of content we provide.

We provide content for use by healthcare providers in treating patients. Third-party content suppliers provide certain of this content. If this content is incorrect or incomplete, adverse consequences, including death, may occur and give rise to product liability and other claims against us. In addition, certain of our solutions provide applications that relate to patient clinical information, and a court or government agency may take the position that our delivery of health information directly, including through licensed practitioners, or delivery of information by a third party site that a consumer accesses through our websites, exposes us to personal injury liability, or other liability for wrongful delivery or handling of healthcare services or erroneous health information. While we maintain insurance coverage in an amount that we believe is sufficient for our business, we cannot provide assurance that this coverage will prove to be adequate or will continue to be available on acceptable terms, if at all. A claim that is brought against us that is uninsured or under-insured could materially and adversely impact our business, financial condition and operating results. Even unsuccessful claims could result in substantial costs and diversion of management and other resources.

Changes to the healthcare regulatory landscape could force us to reduce our prices.

We may be subject to pricing pressures with respect to our future sales arising from various sources, including practices of managed care organizations, group purchasing arrangements made through government programs such as the Regional Extension Centers, and government action affecting reimbursement levels related to physicians, hospitals, home health professionals or any combination thereof under Medicare, Medicaid and other government health programs. Our clients and the other entities with which we have a business relationship are affected by changes in statutes, regulations and limitations in governmental spending for Medicare, Medicaid and other programs. Recent government actions and future legislative and administrative changes could limit government spending for the Medicare and Medicaid programs, limit payments to hospitals and other providers, increase emphasis on competition, impose price controls, initiate new and expanded value-based reimbursement programs and create other programs that potentially could have an adverse effect on our clients and the other entities with which we have a business relationship. If our pricing experiences significant downward pressure, our business will be less profitable and our financial condition and operating results could be materially and adversely affected.

Our failure to license and integrate third-party technologies could harm our business.

We depend upon licenses for some of the technology used in our solutions from third-party vendors and intend to continue licensing technologies from third parties. These technologies may not continue to be available to us on commercially reasonable terms or at all. Most of these licenses can be renewed only by mutual consent and may be terminated if we breach the terms of the license and fail to cure the breach within a specified period of time. Our inability to obtain, maintain or comply with any of these licenses could delay development until equivalent technology can be identified, licensed and integrated, which would harm our business, financial condition and operating results.

Most of our third-party licenses are non-exclusive, and our competitors may obtain the right to use any of the technology covered by these licenses and use the technology to compete directly with us. Our use of third-party technologies exposes us to increased risks, including, but not limited to, risks associated with the integration of new technology into our solutions, the diversion of our resources from development of our own proprietary technology and our inability to generate revenue from licensed technology sufficient to offset associated acquisition and maintenance costs. In addition, if our vendors choose to discontinue support of the licensed technology in the future or are unsuccessful in their continued research and development efforts, we may not be able to modify or adapt our own solutions.

Our business is subject to the risks of global operations.

We operate in several countries outside of the United States, including significant operations in Canada, India, Israel, the UK and Australia, and we are further expanding our global sales efforts. This subjects our business to risks and challenges associated with operating globally, which include:

- changes in local political, economic, social and labor conditions;
- natural disasters, acts of war, terrorism, pandemics or security breaches;
- different employee/employer relationships, existence of workers' councils and labor unions, and other challenges caused by distance, language and cultural differences;
- restrictions on foreign ownership and investments, and stringent foreign exchange controls that may prevent us from repatriating, or make it cost-prohibitive for us to repatriate, cash earned in countries outside of the United States;
- import and export requirements, tariffs, trade disputes and barriers;
- longer payment cycles in some countries, increased credit risk and higher levels of payment fraud;
- uncertainty regarding liability for our products and services, including uncertainty as a result of local laws and lack of legal precedent;
- different or lesser protection of our intellectual property;
- different legal and regulatory requirements that may apply to our products and/or how we operate;

- the discontinuation of the London Interbank Offered Rate ("LIBOR") and the replacement with an alternative reference rate, which may adversely impact interest rates; and

- localization of our products and services, including translation into foreign languages and associated expenses.

All of the foregoing risks could prevent or restrict us from offering products or services to a particular market, could increase our operating costs, and could otherwise materially and adversely impact our business, financial condition and operating results.

In addition, our compliance with complex foreign and United States laws and regulations that apply to our global operations increases our cost of doing business. These numerous and sometimes conflicting laws and regulations include, but are not limited to, internal control and disclosure rules, data privacy requirements, anti-corruption laws (such as the United States Foreign Corrupt Practices Act) and other local laws prohibiting corrupt payments to government officials, and antitrust and competition regulations. Violations of these laws and regulations could result in, among other things, fines and penalties, criminal sanctions, prohibitions on the conduct of our business and on our ability to offer our products and services in one or more countries, and could also affect our global expansion efforts, our business and our operating results. Although we have implemented policies and procedures designed to ensure compliance with these laws and regulations, there can be no assurance that our employees, contractors, agents or distributors, or third parties with whom we do business, will not violate our policies. Furthermore, potential changes in data privacy and protection requirements may increase our future legal and regulatory compliance burden.

Finally, since we conduct business in currencies other than the United States dollar, but report our financial results in United States dollars, we face exposure to fluctuations in currency exchange rates. Significant fluctuations in exchange rates between the United States dollar and foreign currencies may make our products and services more expensive for our global clients, or otherwise materially and adversely impact our operating results. We may occasionally hedge our global currency exposure; however, hedging programs are inherently risky and could expose us to additional risks.

Risks Related to Our Common Stock and Indebtedness

Our Board of Directors is authorized to issue preferred stock, and our certificate of incorporation, bylaws and debt instruments contain anti-takeover provisions.

Our Board of Directors (our "Board") has the authority to issue up to 1,000,000 shares of preferred stock and to determine the preferences, rights and privileges of those shares without any further vote or action by our stockholders. In the event that we issue shares of preferred stock in the future that have preference over our common stock with respect to payment of dividends or upon our liquidation, dissolution or winding-up, or if we issue shares of preferred stock that are convertible into our common stock at greater than a one-to-one ratio, the voting and other rights of the holders of our common stock or our stock price could be materially and adversely impacted. The ability of our Board to issue shares of preferred stock without any action on the part of our stockholders could discourage, delay or prevent a change in control of our company or changes in our management that certain of our stockholders may deem advantageous, which could lower our stock price.

Our certificate of incorporation and bylaws also contain provisions that could discourage, delay, or prevent a change in control of our company or changes in our management that certain of our stockholders may deem advantageous, which could lower our stock price. These provisions, among other things, prohibit our stockholders from acting by written consent or calling a special meeting of stockholders, and provide that our Board is expressly authorized to make, alter or repeal our bylaws. Additionally:

- the indenture (the "Indenture") governing our 0.875% Convertible Senior Notes due 2027 (the "Convertible Notes") may prohibit us from engaging in a change of control of our company unless, among other things, the surviving entity assumes our obligations under the Convertible Notes;

- if a change of control of our company occurs, the Indenture may permit holders of the Convertible Notes to require us to repurchase all or a portion of the Convertible Notes, and may also require us to pay a make-whole premium (in either cash, shares of our common stock or a combination of cash or shares of our common stock) by increasing the conversion rate for a note holder who elects to convert; and

- immediately prior to a change of control of our company, the Second Amended Credit Agreement (as defined under Note 10, "Debt," to our consolidated financial statements included in Part II, Item 8, "Financial Statements and Supplementary Data" of this Form 10-K) may require us to repay all indebtedness outstanding thereunder.

These provisions in our certificate of incorporation, bylaws, and debt instruments could discourage, delay or prevent a change of control of our company or changes in our management that certain of our stockholders may deem advantageous, and therefore could limit our stock price.

Finally, our certificate of incorporation includes an election to be governed by Section 203 of the Delaware General Corporation Law, which prohibits us from engaging in any business combination with an interested stockholder for a period of three years from the date the person became an interested stockholder, unless certain conditions are met. This provision could discourage, delay or prevent a change of control of our company by making it more difficult for stockholders or potential acquirers to effect such a

change of control without negotiation, and may apply even if some of our stockholders consider the acquisition beneficial to them. This provision could also adversely affect our stock price.

Our stock price is subject to volatility.

The market for our common stock has experienced and may experience significant price and volume fluctuations in response to a number of factors, many of which are beyond our control. Additionally, the stock market in general, and the market prices for companies in our industry in particular, have experienced extreme volatility that has often been unrelated or disproportionate to the operating performance of those companies. These broad market and industry fluctuations may materially and adversely impact our stock price, regardless of our actual operating performance. Furthermore, volatility in our stock price could force us to increase our cash compensation to employees or grant larger stock awards than we have historically, which could materially and adversely impact our financial condition and operating results.

Some companies that have experienced volatility in the trading price of their stock have been the subject of securities class action litigation. If we are the subject of such litigation, it could result in substantial costs to us and divert our management's attention and resources, which could materially and adversely impact our financial condition and operating results.

Our quarterly operating results may vary.

Our quarterly operating results have varied in the past, and we expect that our quarterly operating results will continue to vary in future periods depending on a number of factors, some of which we have no control over, including clients' budgetary constraints and internal acceptance procedures, the sales, service and implementation cycles for our software products, potential downturns in the healthcare market and in economic conditions generally, and other factors described in this "Risk Factors" section.

We base our expense levels in part on our expectations concerning future revenue, and these expense levels are relatively fixed in the short-term. If we have lower revenue than expected, we may not be able to reduce our spending in the short-term in response. Any shortfall in revenue could materially and adversely impact our operating results. In addition, our product sales cycle for larger sales is lengthy and unpredictable, making it difficult to estimate our future bookings for any given period. If we do not achieve projected booking targets for a given period, securities analysts may change their recommendations on our stock price. For these and other reasons, we may not meet the earnings estimates of securities analysts or investors, and our stock price could be materially and adversely impacted.

Our indebtedness could adversely affect our financial condition and prevent us from fulfilling our obligations.

Our level of indebtedness could have important consequences. For example, it could make it more difficult for us to satisfy our obligations, increase our vulnerability to general adverse economic and industry conditions, require us to dedicate a substantial portion of our cash flow from operations to payments on our indebtedness, and otherwise place us at a competitive disadvantage compared to our competitors who have less indebtedness. We may also be able to incur substantial additional indebtedness in the future. If new indebtedness is added to our current indebtedness levels, the related risks that we face could intensify.

The Second Amended Credit Agreement and the Indenture each contain, and any future indebtedness would likely contain, a number of restrictive covenants that impose significant operating and financial restrictions on us, including restrictions on our ability to take actions that may be in our best interests. Additionally, the Second Amended Credit Agreement requires us to satisfy and maintain specified financial ratios. Our ability to meet those financial ratios can be affected by events beyond our control, and we may not be able to continue to meet those ratios. A breach of any of these covenants could result in an event of default under the Second Amended Credit Agreement or the Indenture.

Under the Indenture, holders of the Convertible Notes have the right to require us to repurchase their Convertible Notes upon the occurrence of a "fundamental change" (as defined in the Indentures) at a fundamental change repurchase price equal to 100% of the principal amount of the notes to be repurchased, plus accrued and unpaid interest, if any. However, we may not have enough available cash or be able to obtain financing at the time we are required to make such repurchases of the Convertible Notes. Our failure to repurchase the Convertible Notes at a time when the repurchase is required would constitute a default under the Indenture, which may result in acceleration of our outstanding indebtedness. In addition, if, upon the occurrence of a "fundamental change" (as defined in the Indenture), holders of at least $35 million aggregate principal amount of the Convertible Notes require us to repurchase their respective Convertible Notes, this will result in a default under the Second Amended Credit Agreement, which may result in, among other things, the requirement to immediately repay all outstanding amounts owed thereunder.

Upon the occurrence of an event of default under the Second Amended Credit Agreement or the Indenture, our lenders could terminate all commitments to extend further credit, and some or all of our outstanding indebtedness may become immediately due and payable. We may not have or be able to obtain sufficient funds to make these accelerated payments. Additionally, we have pledged substantially all of our tangible and intangible property as collateral under the Second Amended Credit Agreement, and the lenders under the Second Amended Credit Agreement could proceed against such collateral if we were unable to timely repay these amounts.

The conditional conversion feature of the Convertible Notes, if triggered, may adversely affect our financial condition and operating results.

In the event the conditional conversion feature of the Convertible Notes is triggered, holders of the Convertible Notes will be entitled to convert the Convertible Notes at any time during specified periods at their option. See Note 10, "Debt," to our consolidated financial statements included in Part II, Item 8, "Financial Statements and Supplementary Data" of this Form 10-K. If one or more holders elect to convert their Convertible Notes, unless we elect to satisfy our conversion obligation by delivering solely shares of our common stock, we would be required to settle a portion or all of our conversion obligations through the payment of cash, which could adversely affect our liquidity. In addition, even if holders do not elect to convert their Convertible Notes, we could be required under applicable accounting rules to reclassify all or a portion of the outstanding principal of the Convertible Notes as a current rather than long-term liability, which would result in a material reduction of our net working capital.

The accounting method for convertible debt securities that may be settled in cash, such as the Convertible Notes, could have a material effect on our reported financial results.

Under applicable accounting standards, an entity must separately account for the liability and equity components of the convertible debt instruments (such as the Convertible Notes) that may be settled entirely or partially in cash upon conversion in a manner that reflects the issuer's economic interest cost. The effect on the accounting for the Convertible Notes is that the equity component is required to be included in the additional paid-in capital section of stockholders' equity on our consolidated balance sheet, and the value of the equity component would be treated as original issue discount for purposes of accounting for the debt component of the Convertible Notes. As a result, we will be required to record a greater amount of non-cash interest expense in current periods presented as a result of the amortization of the discounted carrying value of the Convertible Notes to their face amount over the term of the Convertible Notes. We will report lower net income in our financial results because interest is required to include both the current period's amortization of the debt discount and the instrument's coupon interest, which could adversely affect our reported or future financial results, the trading price of our common stock and the trading price of the Convertible Notes.

In addition, under certain circumstances, convertible debt instruments (such as the Convertible Notes) that may be settled entirely or partly in cash are currently accounted for utilizing the treasury stock method, the effect of which is that the shares issuable upon conversion of the Convertible Notes are not included in the calculation of diluted earnings per share except to the extent that the conversion value of the Convertible Notes exceeds their principal amount. Under the treasury stock method, for diluted earnings per share purposes, the transaction is accounted for as if the number of shares of common stock that would be necessary to settle such excess, if we elected to settle such excess in shares, are issued. We cannot be sure that the accounting standards in the future will continue to permit the use of the treasury stock method. If we are unable to use the treasury stock method in accounting for the shares issuable upon conversion of the Convertible Notes, then our diluted earnings per share would be adversely affected.

In August 2020, the FASB issued Accounting Standards Update No. 2020-06, "*Debt-Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging-Contracts in Entity's Own Equity (Subtopic 815-40): Accounting for Convertible Instruments and Contracts in an Entity's Own Equity*". The new standard changes the accounting for the convertible debt instruments described above. An entity may no longer be required to separately account for the liability and equity components of convertible debt instruments. This could have the impact of reducing non-cash interest expense, and thereby increasing net income. Additionally, the treasury stock method for calculating earnings per share will no longer be allowed for convertible debt instruments whose principal amount may be settled using shares. Rather, the if-converted method may be required, which would decrease our diluted weighted-average earnings per share. We are currently evaluating the impact of this accounting guidance, which is not effective for fiscal years and interim periods within those fiscal years, until after December 15, 2021. The new standard is discussed under Note 1, "Basis of Presentation," to our consolidated financial statements included in Part II, Item 8, "Financial Statements and Supplementary Data" of this Form 10-K.

General Risk Factors

We could be subject to changes in our tax rates, the adoption of new United States or international tax legislation or exposure to additional tax liabilities.

We are subject to taxation in the United States and numerous foreign jurisdictions. Current economic and political conditions make tax rates in any jurisdiction, including those in the United States, subject to significant change. Our future effective tax rates could also be affected by changes in the mix of our earnings in countries with differing statutory tax rates, changes in the valuation of our deferred tax assets and liabilities, or changes in tax laws or their interpretation, including changes in tax laws affecting our products and services and the healthcare industry more generally. We are also subject to the examination of our tax returns and other documentation by the Internal Revenue Service and other tax authorities. We regularly assess the likelihood of an adverse outcome resulting from these examinations to determine the adequacy of our provision for taxes. There can be no assurance as to the outcome of these examinations or that our assessments of the likelihood of an adverse outcome will be correct. If our effective tax rates were to increase, particularly in the United States, or if the ultimate determination of our taxes owed is for an amount in excess of amounts previously accrued, then this could materially and adversely impact our financial condition and operating results.

Our business and reputation may be impacted by IT system failures or other disruptions.

We may be subject to IT systems failures and network disruptions. These may be caused by natural disasters, accidents, power disruptions, telecommunications failures, acts of terrorism or war, computer viruses, physical or electronic break-ins, or other events or disruptions. System redundancy may be ineffective or inadequate, and our disaster recovery planning may not be sufficient for all eventualities. Such failures or disruptions could prevent access to or the delivery of certain of our products or services, compromise our data or our clients' data or result in delayed or cancelled orders, as well as potentially expose us to third party claims. System failures and disruptions could also impede our transactions processing services and financial reporting.

War, terrorism, geopolitical uncertainties, public health issues and other business disruptions have caused and could cause damage to the global economy, and thus have a material and adverse impact on our business, financial condition and operating results. Our business operations are subject to interruption by natural disasters, fire, power shortages, terrorist attacks and other hostile acts, labor disputes, public health issues and other issues beyond our control. Such events could decrease our demand for our products or services or make it difficult or impossible for us to develop and deliver our products or services to our clients. A significant portion of our research and development activities, our corporate headquarters, our IT systems and certain of our other critical business operations are concentrated in a few geographic areas. In the event of a business disruption in one or more of those areas, we could incur significant losses, require substantial recovery time and experience significant expenditures in order to resume operations, which could materially and adversely impact our business, financial condition and operating results.

Our failure to maintain proper and effective internal controls over financial reporting could impair our ability to produce accurate and timely financial statements.

We maintain internal financial and accounting controls and procedures that are designed to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of our financial statements in accordance with accounting principles generally accepted in the United States ("GAAP"). Ensuring that we have adequate internal financial and accounting controls and procedures in place, such that we can provide accurate financial statements on a timely basis, is a costly and time-consuming process that requires significant management attention. Additionally, if our independent registered public accounting firm, which is subject to oversight by the Public Company Accounting Oversight Board, is not satisfied with our internal controls over financial reporting, or if the firm interprets the relevant rules, regulations or requirements related to the maintenance of internal controls over financial reporting differently than we do, then it may issue an adverse opinion.

As we continue to expand our business, the challenges involved in implementing adequate internal controls over financial reporting will increase.

Any failure to maintain adequate controls, any inability to produce accurate financial statements on a timely basis, or any adverse opinion issued by our independent registered public accounting firm related to our internal controls over financial reporting, could increase our operating costs and materially and adversely impact our operating results. In addition, investors' perceptions that our internal controls over financial reporting are inadequate, or that we are unable to produce accurate financial statements on a timely basis, may harm our stock price and make it more difficult for us to effectively market and sell our services to clients, which could materially and adversely impact our business, financial condition, and operating results. This could also subject us to sanctions or investigations by Nasdaq, the SEC or other applicable regulatory authorities, which could require the commitment of additional financial and management resources.

We could suffer losses due to asset impairment charges.

We are required under GAAP to test our goodwill and indefinite-lived intangible assets for impairment on an annual basis, as well as on an interim basis if indicators for potential impairment, such as a decline in our stock price, exist. Additional indicators that are considered include, but are not limited to, significant changes in performance relative to expected operating results and negative economic trends. In addition, we periodically review our finite-lived intangible assets for impairment when events or changes in circumstances indicate the carrying value may not be recoverable. Factors that may be considered a change in circumstances indicating that the carrying value of our intangible assets may not be recoverable include slower growth rates or the divestiture of a business or asset below its carrying value. We may be required to record a charge to earnings in our consolidated financial statements during the period in which any impairment of our goodwill or intangible assets is determined. This could materially and adversely impact on our operating results.

There are inherent uncertainties in management's estimates, judgments and assumptions used in assessing recoverability of goodwill and intangible assets. Any changes in key assumptions, including failure to meet business plans, a further deterioration in the market or other unanticipated events and circumstances, may affect the accuracy or validity of such estimates and could potentially result in an impairment charge.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Our corporate headquarters are located in Chicago, Illinois. As of December 31, 2020, we leased 1.1 million square feet of building space worldwide. Our facilities are primarily located in the United States, although we also maintain facilities in Australia, Canada, India, Israel, Singapore and the United Kingdom. Our facilities house various sales, services, support, development, and data processing functions, as well as certain ancillary functions and other back-office functions related to our current operations. We believe that our existing facilities are adequate to meet our current business requirements. If we require additional space, we believe that we will be able to obtain such space on acceptable, commercially reasonable terms.

Item 3. Legal Proceedings

Refer to Note 22, "Contingencies," to our consolidated financial statements included in Part II, Item 8, "Financial Statements and Supplementary Data" of this Form 10-K.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

Item 5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Market Information for Common Stock

Our common stock is traded on the Nasdaq Global Select Market (“Nasdaq”) under the symbol “MDRX.”

Unregistered Sales of Equity Securities, Use of Proceeds and Issuer Purchases of Equity Securities

On August 2, 2018, we announced that our Board approved a stock purchase program (the “2018 Program”) under which we could repurchase up to $250 million of our common stock through December 31, 2020. We repurchased 4.1 million shares of our common stock under the 2018 Program for a total of $46.7 million during the fourth quarter of 2020.

On November 18, 2020, we announced that our Board approved a new stock purchase program (the “2020 Program”) under which we may repurchase up to $300 million of our common stock through December 31, 2021. The 2020 Program replaced the 2018 Program. During the fourth quarter of 2020, we repurchased 14.1 million shares of our common stock under the 2020 Program. This is inclusive of shares repurchased through the accelerated share repurchase agreements noted below.

On November 30, 2020, we entered into separate Master Confirmations (each, a “Master Confirmation”) and Supplemental Confirmations (each, together with the related Master Confirmation, an “ASR Agreement”), with JPMorgan Chase Bank, National Association and Wells Fargo Bank, National Association (each, an “ASR Counterparty”, or collectively, “ASR Counterparties”), to purchase shares of our common stock for a total payment of $200.0 million (the “Prepayment Amount”). Under the terms of the ASR Agreements, on November 30, 2020, we paid the Prepayment Amount to the ASR Counterparties and received on December 2, 2020 an initial delivery of 11.7 million shares of our common stock, which is approximately 80% of the total number of shares that could be repurchased under the ASR Agreements if the final purchase price per share equaled the closing price of our common stock on November 30, 2020. These repurchased shares became treasury shares and were recorded as a $165.7 million reduction to shareholder’s equity. The remaining $34.3 million of the Prepayment Amount was recorded as a reduction to shareholders’ equity as an unsettled forward contract indexed to our common stock. We excluded the potential share impact of any remaining shares subject to repurchase from the computation of diluted earnings per share as these shares would be anti-dilutive for the year ended December 31, 2020. The approximate dollar value of shares of our common stock that may yet be purchased under the 2020 Program following the ASR Agreements is $67.2 million as of December 31, 2020.

At final settlement, depending on the final purchase price per share, the ASR Counterparties may be required to deliver additional shares of our common stock to the Company, or, under certain circumstances, we may be required to make a cash payment to each ASR Counterparty or may elect to deliver the equivalent value in shares of our common stock. The final purchase price per share under each ASR Agreement will generally be based on the average of daily volume-weighted average prices of shares of our common stock during the term set forth in the such ASR Agreement. The ASR Agreements contain provisions customary for agreements of this type, including provisions for adjustments to the transaction terms, the circumstances generally under which the ASR Agreements may be accelerated, extended or terminated early by the ASR Counterparties and various acknowledgments, representations and warranties made by the parties to one another. Final settlement of the ASR Agreements is expected to be completed during the second quarter of 2021, although the settlement may be accelerated at the ASR Counterparties’ option.

Any future stock repurchase transactions may be made through open market transactions, block trades, privately negotiated transactions (including accelerated share repurchase transactions) or other means, subject to our working capital needs, cash requirements for investments, debt repayment obligations, economic and market conditions at the time, including the price of our common stock, and other factors that we consider relevant. Our stock repurchase program may be accelerated, suspended, delayed or discontinued at any time.

(In thousands, except per share amounts)

Period (Based on Trade Date)	Total Number Of Shares Purchased	Average Price Paid Per Share(1)(2)	Total Number Of Shares Purchased As Part Of Publicly Announced Plans Or Programs	Approximate Dollar Value Of Shares That May Yet Be Purchased Under The Plans Or Programs
10/01/20—10/31/20	0	$ 0.00	0	$ 46,647
11/01/20—11/30/20	6,535	$ 12.16	6,535	$ 267,196
12/01/20—12/31/20	11,696		11,696	$ 67,196
	18,231	$ 12.16	18,231	

(1) Average price paid per share excludes effect of accelerated share repurchases. See additional disclosure above regarding our accelerated share repurchase activity during 2020.

(2) Excludes broker commissions in the case of open market transactions.

Dividend Policy

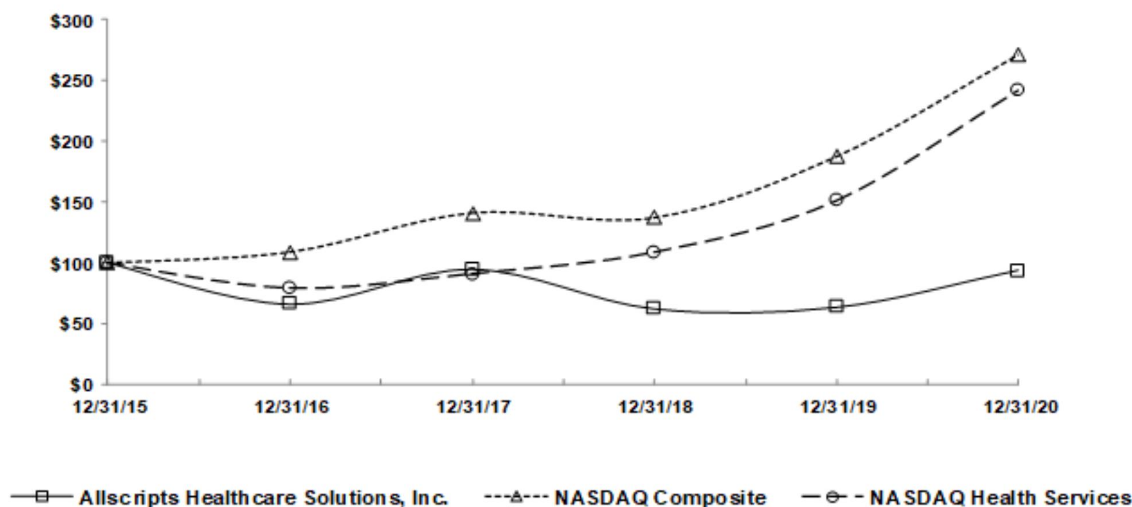
We currently do not intend to declare or pay cash dividends on our shares of common stock in the foreseeable future. Any future determination to pay cash dividends will be at the discretion of our Board and will depend upon our results of operations, financial condition, current and anticipated cash needs, contractual restrictions, restrictions imposed by applicable law and other factors that our Board deems relevant. The covenants in the Senior Secured Credit Facility (as defined below) include a restriction on our ability to declare dividends and other payments in respect of our capital stock. See Note 10, “Debt,” to our consolidated financial statements included in Part II, Item 8, “Financial Statements and Supplementary Data” of this Form 10-K for further information regarding our Senior Secured Credit Facility.

Stockholders

According to the records of our transfer agent, as of February 22, 2021, there were 356 holders of record of our common stock, including banks, brokers and other nominees who hold shares of our common stock on behalf of an indeterminate number of beneficial owners.

Performance Graph

The following graph compares the cumulative 5-Year total return to stockholders on our common stock relative to the cumulative total returns of the Nasdaq Composite index and the Nasdaq Health Services index for the period commencing on December 31, 2015 through December 31, 2020, and assuming an initial investment of $100. Data for the Nasdaq Composite index and the Nasdaq Health Services index assumes reinvestment of dividends. The following will not be deemed incorporated by reference into any of our other filings under the Exchange Act or the Securities Act of 1933, as amended, except to the extent we specifically incorporate it by reference into such filings. Note that historic stock price performance is not necessarily indicative of future stock price performance.



*$100 invested on 12/31/15 in stock or index, including reinvestment of dividends.
Fiscal year ending December 31.

	2015	2016	2017	2018	2019	2020
Allscripts Healthcare Solutions, Inc.	**100.00**	**66.38**	**94.60**	**62.68**	**63.82**	**93.89**
NASDAQ Composite	**100.00**	**108.87**	**141.13**	**137.12**	**187.44**	**271.64**
NASDAQ Health Services	**100.00**	**78.91**	**90.89**	**108.53**	**151.08**	**242.42**

Item 6. Selected Financial Data

The selected consolidated financial data shown below should be read in conjunction with Part II, Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" and Part II, Item 8, "Financial Statements and Supplementary Data" in this Form 10-K to fully understand factors that may affect the comparability of the information presented below. The consolidated statements of operations data for the years ended December 31, 2020, 2019 and 2018 and the balance sheet data as of December 31, 2020 and 2019 are derived from our audited consolidated financial statements included elsewhere in this Form 10-K. The consolidated statements of operations data for the years ended December 31, 2017 and 2016 and the balance sheet data as of December 31, 2018, 2017 and 2016 are derived from audited consolidated financial statements that are not included in this Form 10-K. The historical results are not necessarily indicative of results to be expected for any future period.

	Year Ended December 31,				
(In thousands, except per share amounts)	2020	2019[1]	2018[2]	2017[3]	2016[4]
Consolidated Statements of Operations Data:					
Revenue	$ 1,502,700	$ 1,632,611	$ 1,617,841	$ 1,364,697	$ 1,255,697
Cost of revenue	937,005	1,022,324	996,450	840,843	765,831
Gross profit	565,695	610,287	621,391	523,854	489,866
Selling, general and administrative expenses	389,941	400,808	432,849	389,569	327,415
Research and development	206,061	245,443	258,736	195,787	170,861
Asset impairment charges	74,969	10,837	58,166	0	4,650
Goodwill impairment charge	0	25,700	13,466	0	0
Amortization of intangible and acquisition-related assets	25,604	27,188	26,558	17,316	15,878
Loss from operations	(130,880)	(99,689)	(168,384)	(78,818)	(28,938)
Interest expense	(34,104)	(43,172)	(50,914)	(37,540)	(29,478)
Other income (loss), net	54	(138,904)	69	(512)	829
Gain on sale of businesses, net	0	0	172,258	0	0
Impairment of long-term investments	(1,575)	(651)	(15,487)	(165,290)	0
Equity in net income (loss) of unconsolidated investments	17,194	665	259	821	(7,501)
Loss from continuing operations before income taxes	(149,311)	(281,751)	(62,199)	(281,339)	(65,088)
Income tax benefit	16,692	43,340	18,983	41,214	37,393
Loss from continuing operations, net of tax	(132,619)	(238,411)	(43,216)	(240,125)	(27,695)
Income from discontinued operations	71,448	75,235	2,501	79,386	50,304
Gain on sale of discontinued operations	1,156,504	0	500,471	0	0
Income tax effect on discontinued operations	(394,926)	(19,426)	(51,949)	6,564	(19,579)
Income from discontinued operations, net of tax	833,026	55,809	451,023	85,950	30,725
Net income (loss)	700,407	(182,602)	407,807	(154,175)	3,030
Net loss (income) attributable to non-controlling interest	0	424	4,527	1,566	(146)
Accretion of redemption preference on redeemable convertible non-controlling interest - discontinued operations	0	0	(48,594)	(43,850)	(28,536)
Net income (loss) attributable to Allscripts Healthcare Solutions, Inc. stockholders	$ 700,407	$ (182,178)	$ 363,740	$ (196,459)	$ (25,652)
Net income (loss) attributable to Allscripts Healthcare Solutions, Inc. stockholders per share:					
Basic:					
Continuing operations	$ (0.83)	$ (1.43)	$ (0.22)	$ (1.32)	$ (0.15)
Discontinued operations	$ 5.23	$ 0.33	$ 2.29	$ 0.23	$ 0.01
Net income (loss) attributable to Allscripts Healthcare Solutions, Inc. stockholders per share	$ 4.40	$ (1.10)	$ 2.07	$ (1.09)	$ (0.14)
Diluted:					
Continuing operations	$ (0.83)	$ (1.43)	$ (0.22)	$ (1.32)	$ (0.15)
Discontinued operations	$ 5.23	$ 0.33	$ 2.29	$ 0.23	$ 0.01
Net income (loss) attributable to Allscripts Healthcare Solutions, Inc. stockholders per share	$ 4.40	$ (1.10)	$ 2.07	$ (1.09)	$ (0.14)

(1) Results of operations for the year ended December 31, 2019 include the results of operations of (i) Pinnacle and Diabetes and Collaborative Registries subsequent to the date of acquisition, which was July 2, 2019 and (ii) a third party engaged in a specialty prescription drug platform subsequent to the date of acquisition, which was June 10, 2019.

(2) Results of operations for the year ended December 31, 2018 include the results of operations of: (i) Health Grid Holding Company subsequent to the date of acquisition, which was May 18, 2018 and (ii) Practice Fusion, Inc., subsequent to the date of acquisition, which was February 13, 2018.

(3) Results of operations for the year ended December 31, 2017 include the results of operations of: (i) Enterprise Information Solutions ("EIS") subsequent to the date of acquisition, which was October 2, 2017; and (ii) NantHealth's patient/provider engagement solutions business for the period subsequent to the date of acquisition, which was August 25, 2017.

(4) Results of operations for the year ended December 31, 2016 include the results of operations of: (i) a third party for the period subsequent to the date of acquisition, which was December 2, 2016; (ii) a third party for the period subsequent to the date of acquisition, which was October 14, 2016; and (iii) a third party for the period subsequent to the date of acquisition of a controlling interest, which was September 8, 2016.

	As of December 31,				
(In thousands)	**2020**	**2019**	**2018**	**2017**	**2016**
Consolidated Balance Sheet Data:					
Cash, cash equivalents and marketable securities	$ 537,465	$ 137,539	$ 184,795	$ 130,994	$ 71,545
Working capital (deficit)	218,445	(369,428)	61,235	(32,515)	(62,610)
Goodwill and intangible assets, net	1,261,331	1,341,238	1,408,438	1,216,653	1,048,385
Total assets	2,917,618	3,205,739	3,181,484	4,230,150	3,832,159
Long-term debt	167,587	551,004	647,539	906,725	717,853
Total stockholders' equity	1,666,243	1,285,188	1,580,427	1,160,072	1,273,201

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion should be read in conjunction with the consolidated financial statements and notes thereto included in Part II, Item 8, "Financial Statements and Supplementary Data" of this Form 10-K under the heading "Financial Statements and Supplementary Data" and the other financial information that appears elsewhere in this Form 10-K. We assume no obligation to revise or update any forward-looking statements for any reason, except as required by law.

Overview

Our Business Overview and Regulatory Environment

We deliver information technology ("IT") solutions and services to help healthcare organizations achieve optimal clinical, financial and operational results. We sell our solutions to physicians, hospitals, governments, health systems, health plans, life sciences companies, retail clinics, retail pharmacies, pharmacy benefit managers, insurance companies, employer wellness clinics, and post-acute organizations, such as home health and hospice agencies. We help our clients improve the quality and efficiency of health care with solutions that include electronic health records ("EHRs"), information connectivity, private cloud hosting, outsourcing, analytics, patient access and population health management. We derive our revenues primarily from sales of our proprietary software (either as a perpetual license sale or under a subscription delivery model), support and maintenance services, and managed services, such as outsourcing, private cloud hosting and revenue cycle management.

Our solutions empower healthcare professionals with the data, insights and connectivity to other caregivers they need to succeed in an industry that is rapidly changing from fee-for-service models to fee-for-value advanced payment models. We believe we offer some of the most comprehensive solutions in our industry today. Healthcare organizations can effectively manage patients and patient populations across all care settings using a combination of our physician, hospital, health system, post-acute care and population health management products and services. We believe these solutions will help transform health care as the industry seeks new ways to manage risk, improve quality and reduce costs.

Globally, healthcare providers face the urgency of the COVID-19 crisis, as well as an aging population and the challenge of caring for an increasing number of patients with chronic diseases. At the same time, practitioners worldwide are also under growing pressure to demonstrate the delivery of high-quality care at lower costs and to fully embrace expectations of efficient, patient-centered information exchange. Congressional oversight of EHRs and health information technology has increased in recent years. This increased oversight could impact our clients and our business. The passage of the 21st Century Cures Act in December 2016 assuaged some concerns about interoperability and possible U.S. Food and Drug Administration ("FDA") oversight of EHRs, and the ensuing regulations on data blocking and interoperability were released by the Department of Health and Human Services ("HHS") in March 2020. Some aspects of the new regulations will have a significant effect on our business processes and how our clients must exchange patient information. In particular, Allscripts will need to complete development work to satisfy the revised and new certification criterion, and we and our clients will be making adjustments to business practices associated with information exchange and provision of Electronic Health Information.

Population health management, analytics, data connectivity based on open APIs and other exchange mechanisms, and patient engagement are strategic imperatives that can help address these challenges. In the United States, for example, such initiatives are critical tools for success under the framework of the QPP, launched by the Centers for Medicare & Medicaid Services ("CMS") in response to the passage of the Medicare Access and CHIP Reauthorization Act ("MACRA"). As healthcare providers and payers continue to migrate from volume-based to value-based care delivery and also weigh compliance with the newly finalized information blocking and interoperability regulations from the Office of the National Coordinator for Health Information Technology ("ONC") and CMS, solutions that are connected to the consumer marketplace are the key to market leadership in the new healthcare reality. Additionally, there is a small but growing portion of the market interested in payment models not reliant on insurance, such as the direct primary care model, where doctors and other healthcare professionals understand the clinical value of the interoperable EHR separate and apart from payment mechanisms established by public or commercial payers or associated reporting requirements.

We believe our solutions are delivering value to our clients by providing them with powerful connectivity, as well as increasingly robust patient engagement and care coordination tools, enabling users to successfully participate in alternative payment models that reward high value care delivery. Population health management is commonly viewed as one of the critical next frontiers in healthcare delivery, and we expect this evolving area to be a key driver of our future growth, both domestically and globally.

Recent advances in molecular science and computer technology are creating opportunities for the delivery of personalized medicine solutions. We believe these solutions will transform the coordination and delivery of health care, ultimately improving patient outcomes.

Specific to the United States, the healthcare IT industry in which we operate continues to experience a period of change, primarily due to new laws and regulations, as well as modifications to industry standards. Various incentives that exist today (including alternative payment models that reward high value care delivery) have been rapidly moving health care toward a time where EHRs are as common as practice management or other financial systems in all provider offices. As a result, we believe that legislation, such as the aforementioned MACRA, as well as other government-driven initiatives (including at the state level), will continue to affect healthcare IT adoption and expansion, including products and solutions like ours. We also believe that we are well-positioned in the market to take advantage of the ongoing opportunity presented by these changes.

The recently finalized ONC regulation on interoperability, information blocking and certification is the most recent major government action that will affect the health IT industry. The rule requires that we evaluate changes to business processes related to requests for the access, exchange or use of Electronic Health Information, as defined in the ONC regulation. The rule, which involves complex and specific requirements, will necessitate adjustments in our interactions with the market, but we also believe it may lead healthcare organizations to further invest in technologies, such as those sold by Allscripts, that facilitate the exchange of health data and support patients' access to their information. Given Allscripts' OPEN strategy, the Company's application programming interface-based approach to connectivity launched more than a decade ago that exemplified for policy makers the potential benefits of APIs, we expect that Allscripts may be better positioned to adjust more quickly than some other companies in our sector to the requirement to remove barriers to information exchange.

In addition, given that CMS annually proposes new and revised regulations, including payment rules for upcoming years, which require the use of EHRs and other health information technology even as we comply with previously published rules, Allscripts continues to prepare on an ongoing basis for additional areas in which we must execute compliance. Similarly, our ability to achieve newly expanded applicable product certification requirements resulting from changing strategies at the ONC and the scope of related development and other efforts required to meet regulatory standards could both materially impact our capacity to maximize the market opportunity. All of our market-facing EHR solutions and several other relevant products have successfully completed the testing process and are certified as 2015 Edition-compliant by an ONC-Authorized Certification Body (the most recent edition), and we remain committed to satisfying the new certification requirements and meeting the 2015 Edition conditions of certification that were finalized in March 2020 by the ONC.

The MACRA encouraged the adoption of health IT necessary to satisfy new requirements more closely associating the report of quality measurements to Medicare payments. Following the finalization of the Physician Fee Schedule rule each year, providers accepting payment from Medicare must select one of two payment models: the Merit-based Incentive Payment System ("MIPS") or an Advanced Alternative Payment Model ("APM"). Both of these approaches require substantive reporting on quality measures. Additionally, the MIPS consolidated several preexisting incentive programs, including Medicare Meaningful Use and Physician Quality Reporting System, under one umbrella, as required by statute. We believe this law, coupled with other pay for value programs, continues to drive additional interest in our products among providers who were not eligible for or chose not to participate in the Health Information Technology for Economic and Clinical Health Act ("HITECH") incentive program but now need EHR and other health IT solutions and among those looking to purchase more robust systems to comply with increasingly complex MACRA requirements. Additional regulations continue to be released annually, clarifying requirements related to reporting and quality measures, which will enable physician populations and healthcare organizations to make strategic decisions about the purchase of analytic software or other solutions important to comply with the new law and associated regulations.

Given the ongoing expansion of payment models requiring analytics, reporting and greater data connectivity, we believe large physician groups will continue to purchase and enhance their use of EHR technology; while the number of very large practices with over 100 physicians that have not yet acquired such technology is insignificant, the number of those considering replacement purchases is increasing. Such practices may choose to replace older EHR technology in the future as regulatory requirements (such as those related to Advanced APMs) and business realities dictate the need for updates and upgrades, as well as additional features and functionality. As incentive payment strategies shift again through policies released by the new Biden Administration in the United States (including the anticipated growth in Medicaid payment models) and the role of commercial payers and their continued expansion of alternative payment models and interest in attaining larger volumes of clinical data, we expect that there will be additional incentives for purchase and expansion of EHR technology.

We also continue to see activity in local community-based buying, whereby individual hospitals, health systems and integrated delivery networks subsidize the purchase of EHR licenses or related services for local, affiliated physicians and physicians across their employed physician base in order to leverage buying power and to help those practices take advantage of payment reform opportunities. This activity has also resulted in a pull-through effect where smaller practices affiliated with a community hospital are motivated to participate in a variety of incentive programs, while the subsidizing health system expands connectivity within the local provider community. We believe that the rules related to exceptions to the Stark Law and Anti-Kickback Statute, which were revised to continue to allow hospitals and other organizations to subsidize the purchase of EHRs, will possibly further contribute to the growth of this market dynamic. We expect that these regulatory revisions from HHS will further support value-based payment models and their associated purchasing arrangements between hospitals and physician practices, including allowing subsidization of replacement EHRs and not just initial purchases. The associated challenge we face is to successfully position, sell, implement and support our products sold to hospitals, health systems or integrated delivery networks that subsidize their affiliated physicians. We believe the community programs we have in place will help us penetrate these markets.

We believe we have taken and continue to take the proper steps to maximize the opportunity presented by the QPP and other new payment programs. However, given the effects the laws are having on our clients, there can be no assurance that they will result in significant new orders for us in the near term, and if they do, that we will have the capacity to meet the additional market demand in a timely fashion.

Additionally, other public laws to reform the United States healthcare system contain various provisions that may impact us and our clients. The previous Trump Administration and several state governments took steps to alter aspects of the PPACA, including through litigation being reviewed by the United States Supreme Court, which continues to create uncertainty for us and for our clients. We expect that the new Biden Administration will take a different approach to the PPACA, including attempting to expand the number of citizens covered by health insurance, which would be favorable for our clients. Some laws currently in place may have a positive impact by requiring the expanded use of EHRs, quality measurement, prescription drug monitoring and analytics tools to participate in certain federal, state or private sector programs. Others, such as laws or regulations mandating reductions in reimbursement for certain types of providers, restrictions on "surprise billing" for certain services and by certain provider types, or increasing regulatory oversight of our products or our business practices, may have a negative impact by reducing the resources available to purchase our products. Increases in fraud and abuse enforcement and payment adjustments for non-participation in certain programs or overpayment of certain incentive payments may also adversely affect participants in the healthcare sector, including us.

Allscripts continues to see increased opportunities stemming from the large stores of patient data accumulated from our industry-leading client base and partnerships with other EHR companies, including NextGen Healthcare Inc., a leading provider of ambulatory-focused healthcare technology solutions. Through collaboration with researchers and life sciences companies, we believe Allscripts may play a role in the study of real-world evidence as it relates to post-market surveillance of new medicines or the study of therapeutics related to COVID-19, as examples. We continue to closely monitor regulations and/or guidance from HHS, the CDC and the FDA, as well as any new laws that take shape in Congress that may touch third-party uses of patient data and/or any related privacy implications for patient consent.

Congressional focus on addressing the opioid epidemic in part through technological applications and reducing clinician burden is likely to continue. Further, CMS has finalized changes to the Evaluation & Management coding structure that ties closely to our clients' requirements to document the care they are delivering prior to payment. We expect these changes may have a positive effect on clinician satisfaction with our EHRs, though the fundamentals of payment will remain in transition to value-based payment models.

New payment and delivery system reform programs, including those modeled after those of the Medicare program, are increasingly being rolled out at the state level through Medicaid administrators, as well as through the private sector, presenting additional opportunities for us to provide software and services to our clients who participate. We also must take steps to comply with state-specific laws and regulations governing companies in the health information technology space.

Impacts of COVID-19

The global outbreak of COVID-19 has severely restricted the level of economic activity around the world and the degrees of any economic recovery in various jurisdictions have not been linear. We have been carefully monitoring the COVID-19 pandemic and its impact on our global operations and the demand for our products. We are conducting business with certain modifications to employee travel, employee work locations, and cost reduction initiatives, among other modifications. We will continue to actively monitor the situation and may take further actions that alter our business operations as may be required by federal, state or local authorities or that we determine are in the best interests of our employees, customers, partners and stockholders.

Allscripts, as is true of other health IT vendors, has been asked by the White House, HHS, the CDC, and state and local governments to support public health efforts to contain the pandemic by expanding COVID-19 reporting options available to our clients. Our technology has been instrumental to the provision of high-quality care, aiding not only public health surveillance, including tracking which patients have received a vaccine, but also in clinical decision support interventions to aid in triage, diagnosis and treatment; information exchange as patients are moved from site to site; predictive analytics based on local data for surge anticipation; and patient transitions as they leave the acute care environment for post-acute rehabilitative care.

The COVID-19 pandemic negatively impacted revenue for the year ended December 31, 2020, as we saw delays in deals with upfront software revenue and professional services implementations across our inpatient and outpatient base. We also experienced lower revenue from our clients as patient volumes were lower for most of our clients. During 2020, we implemented cost reduction actions across all functional disciplines of the Company, including headcount reductions and temporary salary measures. We believe our cost reduction actions and current liquidity provide us with operating and financial flexibility to assist us in navigating through this uncertain environment.

The extent to which the COVID-19 pandemic will continue to impact the Company's results of operations and financial condition will depend on future developments that are highly uncertain and cannot be predicted. Future developments include new information that may emerge concerning the duration and severity of the COVID-19 pandemic, resurgences or additional "waves" of outbreaks of COVID-19 in various jurisdictions (including new strains or mutations of the virus), the impact of COVID-19 on economic activity, the actions taken by health authorities and policy makers to contain its impacts on public health and the global economy and the availability and effectiveness of vaccines. See Part I, Item 1A, Risk Factors, for an additional discussion of risks related to COVID-19.

Summary of Results

During 2020, we continued to make progress on our key strategic, financial and operational imperatives aimed at driving higher client satisfaction, improving our competitive positioning by expanding the depth and breadth of our products and, ultimately, positioning the Company for sustainable long-term growth both domestically and globally. In that regard, we had success across the below key areas:

- U.S. Core Solutions and Services: During 2020, we extended our engagement with our largest customer, Northwell Health, along with PIH Health Inc., Medway NHS Foundation Trust, Hospital Corporation of America and others. We also extended our long-standing strategic alliance with Microsoft to enable the expanded development and delivery of cloud-based health IT solutions. The five-year extension with Microsoft will support our cloud-based Sunrise™ electronic health record, making Microsoft the cloud provider for the solution and opening up co-innovation opportunities to help transform healthcare with smarter, more scalable technology.

- Value-based Care: During 2020, we introduced innovative solutions to our clients to help them manage through the COVID-19 pandemic. Our innovative solutions consisted of the rapid deployment of FollowMyHealth telehealth, COVID-19 specific workflows for our Sunrise™ solution, capacity surveillance, regulatory reporting and vaccine administration tasks within our EHRs and IT services staffing to supplement our client teams.

- Capital Deployment and Operational Efficiency: During 2020, we significantly improved our leverage profile by divesting two businesses, CarePort and EPSi, for $1.35 billion and $365.0 million, respectively. The net proceeds from these divestitures will allow us to reduce debt, invest in growth for our solutions and support significant share repurchases. During 2020, we also implemented cost reduction initiatives across all functional disciplines of the Company to reduce low-value operating costs, align our cost base with the COVID-19 impact on revenues and improve our margins.

Total revenue for the year ended December 31, 2020 was $1.5 billion, a decrease of 8% compared with the year ended December 31, 2019. Software delivery, support and maintenance revenue totaled $915 million in the year ended December 31, 2020, a decrease of 9% compared to the prior year. Client services revenue totaled $588 million in the year ended December 31, 2020, a decrease of 6% compared to the prior year.

Gross profit decreased during 2020 compared to 2019, primarily due to a decrease in revenues and higher amortization of software development costs. The decrease was partially offset by the impact of the cost reduction initiatives. Gross margin slightly increased by 0.2% to 37.6% compared with the prior year period gross margin of 37.4%, primarily due to the previously mentioned cost reduction initiatives.

Our contract backlog as of both December 31, 2020 and December 31, 2019 was $4.1 billion, respectively.

Revenues and Expenses

Revenues are derived primarily from sales of our proprietary software (either under a perpetual or term license delivery model), subscription-based software sales, post-contract client support and maintenance services, and managed services solutions, such as outsourcing, private cloud hosting and revenue cycle management.

Cost of revenue consists primarily of salaries, incentive compensation and benefits for our billable professionals, third-party software costs, third-party transaction processing and consultant costs, amortization of acquired proprietary technology and capitalized software development costs, depreciation and other direct engagement costs.

Selling, general and administrative expenses consist primarily of salaries, incentive compensation and benefits for management and administrative personnel, sales commissions and marketing expenses, facilities costs, depreciation and amortization and other general operating expenses.

Research and development expenses consist primarily of salaries, incentive compensation and benefits for our development personnel, third-party contractor costs and other costs directly or indirectly related to development of new products and upgrading and enhancing existing products.

Asset impairment charges consist primarily of non-cash charges related to the retirement of hosting assets, the abandonment of a lease, our decision to discontinue several software development projects and the impairment of several intangible assets.

Goodwill impairment charges incurred related to our Hospital and Health System business and to the acquisition of the patient/provider engagement solutions business from NantHealth during the years ended December 31, 2019 and 2018, respectively.

Amortization of intangible and acquisition-related assets consists of amortization of customer relationships, tradenames and other intangibles acquired through business combinations recorded under the purchase method of accounting.

Interest expense consists primarily of interest on the 0.875% Convertible Senior Notes (the “0.875% Notes”), on the 1.25% Cash Convertible Senior Notes (the “1.25% Notes”) and on the outstanding debt under our senior secured credit facility, including the amortization of debt discounts and debt issuance costs. On July 1, 2020, the 1.25% Notes matured and were paid in full.

Other income (loss), net included a settlement with the Department of Justice related to our Practice Fusion business.

Gain on sale of businesses, net consists of net gains from the divestitures during 2018 of the OneContent and Strategic Sourcing businesses, both of which had been acquired in the fourth quarter of 2017 with the EIS Business.

Impairment of long-term investments primarily consists of other-than-temporary and realized losses associated with our available for sale marketable securities.

Equity in net income of unconsolidated investments represents our share of the equity earnings of our investments in third parties accounted for under the equity method, including a gain on the sale of a third-party equity-method investment and the amortization of cost basis adjustments.

Income from discontinued operations during the years ended December 31, 2020, 2019 and 2018 includes activity associated with CarePort and EPSi. Income from discontinued operations during the year ended December 31, 2018 includes activity associated with Netsmart LLC ("Netsmart") and of two solutions acquired with the EIS Business, which were sunset in 2018.

Gain on sale of discontinued operations consists of net gains from the divestitures of EPSi and CarePort during 2020 and our investment in Netsmart during 2018.

Critical Accounting Policies and Estimates

The preparation of our consolidated financial statements in accordance with GAAP requires management to make estimates and assumptions that affect the amounts reported and disclosed in our consolidated financial statements and the accompanying notes. The accounting policies and estimates discussed in this section are those that we consider to be particularly critical to an understanding of our consolidated financial statements because their application involves significant judgment regarding the effect of inherently uncertain matters on our financial results. Actual results could differ materially from these estimates under different assumptions or conditions.

Revenue Recognition

Refer to Note 2, "Revenue from Contracts with Customers" to our consolidated financial statements included in Part II, Item 8, "Financial Statements and Supplementary Data" of this Form 10-K for a detailed discussion about our revenue recognition accounting policies.

Credit Loss for Contracts Assets

Refer to Note 2, "Revenue from Contracts with Customers" to our consolidated financial statements included in Part II, Item 8, "Financial Statements and Supplementary Data" of this Form 10-K for a detailed discussion about our credit loss accounting policy related to contract assets.

Credit Loss for Trade Accounts Receivable

Refer to Note 3, "Accounts Receivable" to our consolidated financial statements included in Part II, Item 8, "Financial Statements and Supplementary Data" of this Form 10-K for a detailed discussion about our credit loss accounting policy related to trade accounts receivable.

Business Combinations

Goodwill as of the acquisition date is measured as the excess of consideration transferred over the net of the acquisition date fair values of the assets acquired and the liabilities assumed. While we use our best estimates and assumptions as a part of the purchase price allocation process to accurately value assets acquired, including intangible assets, and the liabilities assumed at the acquisition date, our estimates are inherently uncertain and subject to refinement. As a result, during the measurement period, which may be up to one year from the acquisition date, we may record adjustments to the fair values of the assets acquired and the liabilities assumed, with a corresponding offset to goodwill. Upon the conclusion of the measurement period or final determination of the values of assets acquired or the liabilities assumed, whichever comes first, any subsequent adjustments are reflected in our consolidated statement of operations.

Goodwill and Intangible Assets

Goodwill and intangible assets acquired in a business combination and determined to have an indefinite useful life are not amortized but are tested for impairment annually or between annual tests when an impairment indicator exists. If an optional qualitative goodwill impairment assessment is not performed, we are required to determine the fair value of each reporting unit. If a reporting unit's fair value is lower than its carrying value, an impairment loss equal to the excess will be recorded not to exceed the carrying amount of goodwill assigned to the reporting unit. The recoverability of indefinite-lived intangible assets is assessed by comparison of the carrying value of an asset to its estimated fair value. If we determine that the carrying value of an asset exceeds its estimated fair value, an impairment loss equal to the excess will be recorded.

The determination of the fair value of our reporting units is based on a combination of a market approach, which considers benchmark company market multiples, and an income approach, which utilizes discounted cash flows for each reporting unit and other Level 3 inputs. Under the income approach, we determine fair value based on the present value of the most recent cash flow projections for each reporting unit as of the date of the analysis, and calculate a terminal value utilizing a terminal growth rate. The significant assumptions under this approach include, among others: income projections, which are dependent on sales to new and existing clients, new product introductions, client behavior, competitor pricing, operating expenses, the discount rate and the terminal growth rate. The cash flows used to determine fair value are dependent on a number of significant management assumptions such as our expectations of future performance and the expected economic environment, which are partly based on our historical experience. Our estimates are subject to change given the inherent uncertainty in predicting future results. Additionally, the discount rate and the terminal growth rate are based on our judgment of the rates that would be utilized by a hypothetical market participant. As part of the goodwill impairment testing, we also consider our market capitalization in assessing the reasonableness of the fair values estimated for our reporting units.

During 2020, we made organizational changes that affected our reportable segments. Refer to Note 19, “Business Segments” to our consolidated financial statements included in Part II, Item 8, “Financial Statements and Supplementary Data” of this Form 10-K for detailed discussion about these changes.

We performed our 2020 goodwill impairment test as of October 1, 2020. The fair value of each of our reporting units substantially exceeded its carrying value and no indicators of impairment were identified as a result of the annual impairment test. If future anticipated cash flows from our reporting units are significantly lower or materialize at a later time than projected, our goodwill could be impaired, which could result in significant charges to earnings.

We performed our 2019 goodwill impairment test as of October 1, 2019. As a result of this test, we concluded that the carrying value of the Hospitals and Health Systems (“HHS”) reporting unit, which is now reported within the Core Clinical and Financial Solutions reporting unit, exceeded its fair value. As a result, we recognized a goodwill impairment charge of $25.7 million. This goodwill impairment charge is reflected on the “Goodwill impairment charge” line in our consolidated statements of operations. The fair values of all other reporting units substantially exceeded their carrying values. As of December 31, 2019, the goodwill allocated to the HHS reporting unit was $485.5 million.

We performed our 2018 goodwill impairment test as of October 1, 2018. We concluded that the carrying value of the NantHealth reporting unit exceeded its fair value as a result of this test. Our latest available financial forecasts at the time of the annual goodwill impairment test reflected that projected future operating costs exceeded projected revenues resulting in negative operating margins for the NantHealth reporting unit. As a result, we recognized a goodwill impairment charge of $13.5 million, representing the entire goodwill balance assigned to the NantHealth reporting unit.

In accordance with GAAP, definite-lived intangible assets are required to be amortized over their respective estimated useful lives and reviewed for impairment whenever events or changes in circumstances indicate that their carrying amounts may not be recoverable. We estimate the useful lives of our intangible assets and ratably amortize the value over the estimated useful lives of those assets. If the estimates of the useful lives should change, we will amortize the remaining book value over the remaining useful lives or, if an asset is deemed to be impaired, a write-down of the value of the asset may be required at such time.

Software Development Costs

We capitalize purchased software upon acquisition if it is accounted for as internal-use or if it meets the future alternative use criteria. For software to be sold, we capitalize incurred labor costs for software development from the time technological feasibility of the software is established, or when the preliminary project phase is completed in the case of internal use software, until the software is available for general release. Research and development costs and other computer software maintenance costs related to software development are expensed as incurred. We estimate the useful life of our capitalized software and amortize its value over that estimated life. If the actual useful life is shorter than our estimated useful life, we will amortize the remaining book value over the remaining useful life or the asset may be deemed to be impaired and, accordingly, a write-down of the value of the asset may be recorded as a charge to earnings.

The carrying value of capitalized software is dependent on the ability to recover its value through future revenue from the sale of the software. At each balance sheet date, the unamortized capitalized costs of a software product are compared with the net realizable value of that product. The net realizable value is the estimated future gross revenues from that product reduced by the estimated future costs of completing and disposing of that product, including the costs of performing maintenance and client support required to satisfy our responsibility at the time of sale. The amount by which the unamortized capitalized costs of a software product exceed the net realizable value of that asset is written off. If we determine that the value of the capitalized software could not be recovered, a write-down of the value of the capitalized software to its recoverable value is recorded as a charge to earnings.

Income Taxes

We account for income taxes using the liability method, which requires the recognition of deferred tax assets or liabilities for the tax-effected temporary differences between the financial reporting and tax bases of our assets and liabilities and for net operating loss and tax credit carryforwards. The objectives of accounting for income taxes are to recognize the amount of taxes payable or refundable for the current year and deferred tax liabilities and assets for the future tax consequences of events that have been recognized in an entity's financial statements or tax returns. Judgment is required in addressing the future tax consequences of events that have been recognized in our consolidated financial statements or tax returns. The deferred tax assets are recorded net of a valuation allowance when, based on the weight of available evidence, we believe it is more likely than not that some portion or all of the recorded deferred tax assets will not be realized in future periods. We consider many factors when assessing the likelihood of future realization of our deferred tax assets, including recent cumulative earnings experience, expectations of future taxable income, the ability to carryback losses and other relevant factors.

In addition, we are subject to the continuous examination of our income tax returns by the Internal Revenue Service and other tax authorities. A change in the assessment of the outcomes of such matters could materially impact our consolidated financial statements.

The calculation of tax liabilities involves dealing with uncertainties in the application of complex tax regulations. We recognize liabilities for anticipated tax audit issues based on our estimate of whether, and the extent to which, additional taxes may be required. If we ultimately determine that payment of these amounts is unnecessary, then we reverse the liability and recognize a tax benefit during the period in which we determine that the liability is no longer necessary. We also recognize tax benefits to the extent that it is more likely than not that our positions will be sustained if challenged by the taxing authorities. To the extent we prevail in matters for which liabilities have been established, or are required to pay amounts in excess of our liabilities, our effective tax rate in a given period may be materially affected. An unfavorable tax settlement would require cash payments and may result in an increase in our effective tax rate in the year of resolution. A favorable tax settlement would be recognized as a reduction in our effective tax rate in the year of resolution. We report interest and penalties related to uncertain income tax positions in the income tax (provision) benefit line of our consolidated statements of operations.

We file income tax returns in the United States federal jurisdiction, numerous states in the United States and multiple countries outside of the United States.

Fair Value Measurements

Fair value measurements are based upon observable and unobservable inputs. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect our view of market participant assumptions in the absence of observable market information. We utilize valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs. The fair values of assets and liabilities required to be measured at fair value are categorized based upon the level of judgment associated with the inputs used to measure their value in one of three categories (Levels 1 to 3). The values of assets and liabilities assigned to Level 3 require the most judgement and are based unobservable inputs or prices for which little or no market data exists. Therefore, Level 3 values can be susceptible to significant fluctuations, both positive and negative, from changes in the underlying assumption used by management. Refer to Note 6, "Fair Value Measurements and Other Investments" to our consolidated financial statements included in Part II, Item 8, "Financial Statements and Supplementary Data" of this Form 10-K for detailed information about financial assets and liabilities measured at fair value on a recurring basis.

Recent Accounting Pronouncements

For information with respect to recent accounting pronouncements and the impact of these pronouncements on our consolidated financial statements, refer to Note 1, "Basis of Presentation and Significant Accounting Policies" to our consolidated financial statements included in Part II, Item 8, "Financial Statements and Supplementary Data" of this Form 10-K.

Overview of Consolidated Results

(In thousands)	Year Ended December 31, 2020	2019	2018	2020 % Change from 2019	2019 % Change from 2018
Revenue:					
Software delivery, support and maintenance	$ 914,662	$ 1,004,195	$ 1,011,624	(8.9%)	(0.7%)
Client services	588,038	628,416	606,217	(6.4%)	3.7%
Total revenue	1,502,700	1,632,611	1,617,841	(8.0%)	0.9%
Cost of revenue:					
Software delivery, support and maintenance	287,954	319,140	315,102	(9.8%)	1.3%
Client services	530,652	595,310	584,666	(10.9%)	1.8%
Amortization of software development and acquisition-related assets	118,399	107,874	96,682	9.8%	11.6%
Total cost of revenue	937,005	1,022,324	996,450	(8.3%)	2.6%
Gross profit	565,695	610,287	621,391	(7.3%)	(1.8%)
Gross margin %	37.6%	37.4%	38.4%		
Selling, general and administrative expenses	389,941	400,808	432,849	(2.7%)	(7.4%)
Research and development	206,061	245,443	258,736	(16.0%)	(5.1%)
Asset impairment charges	74,969	10,837	58,166	NM	(81.4%)
Goodwill impairment charge	0	25,700	13,466	(100.0%)	90.9%
Amortization of intangible and acquisition-related assets	25,604	27,188	26,558	(5.8%)	2.4%
Loss from operations	(130,880)	(99,689)	(168,384)	31.3%	(40.8%)
Interest expense	(34,104)	(43,172)	(50,914)	(21.0%)	(15.2%)
Other income (loss), net	54	(138,904)	69	(100.0%)	NM
Gain on sale of businesses, net	0	0	172,258	NM	(100.0%)
Impairment of long-term investments	(1,575)	(651)	(15,487)	141.9%	(95.8%)
Equity in net income of unconsolidated investments	17,194	665	259	NM	156.8%
Loss from continuing operations before income taxes	(149,311)	(281,751)	(62,199)	(47.0%)	NM
Income tax benefit	16,692	43,340	18,983	(61.5%)	128.3%
Effective tax rate	11.2%	15.4%	30.5%		
Loss from continuing operations, net of tax	(132,619)	(238,411)	(43,216)	(44.4%)	NM
Income from discontinued operations	71,448	75,235	2,501	(5.0%)	NM
Gain on sale of discontinued operations	1,156,504	0	500,471	NM	(100.0%)
Income tax effect on discontinued operations	(394,926)	(19,426)	(51,949)	NM	(62.6%)
Income from discontinued operations, net of tax	833,026	55,809	451,023	NM	(87.6%)
Net income (loss)	700,407	(182,602)	407,807	NM	(144.8%)
Net loss attributable to non-controlling interests	0	424	4,527	(100.0%)	(90.6%)
Accretion of redemption preference on redeemable convertible non-controlling interest - discontinued operations	0	0	(48,594)	NM	(100.0%)
Net income (loss) attributable to Allscripts Healthcare Solutions, Inc. stockholders	$ 700,407	$ (182,178)	$ 363,740	NM	(150.1%)

NM—We define “NM” as not meaningful for increases or decreases greater than 200%.

Revenue

Recurring revenue consists of subscription-based software sales, support and maintenance revenue, recurring transactions revenue and recurring revenue from managed services solutions, such as outsourcing, private cloud hosting and revenue cycle management. Non-recurring revenue consists of perpetual software licenses sales, hardware resale and non-recurring transactions revenue, and project-based client services revenue.

(In thousands)	Year Ended December 31, 2020	2019	2018	2020 % Change from 2019	2019 % Change from 2018
Revenue:					
Recurring revenue	$ 1,222,731	$ 1,278,456	$ 1,313,281	(4.4%)	(2.7%)
Non-recurring revenue	279,969	354,155	304,560	(20.9%)	16.3%
Total revenue	$ 1,502,700	$ 1,632,611	$ 1,617,841	(8.0%)	0.9%

Year Ended December 31, 2020 Compared with the Year Ended December 31, 2019

Recurring revenue decreased during the year ended December 31, 2020 compared to prior year due to attrition. The decrease was partially offset by an increase in subscription revenue. Non-recurring revenue decreased due to lower upfront software revenues and project delays that impacted client services revenue. The decrease was partially offset by new deals in upfront software revenue.

The percentage of recurring and non-recurring revenue of our total revenue was 81% and 19%, respectively, during the year ended December 31, 2020 and 78% and 22%, respectively, during the year ended December 31, 2019.

Year Ended December 31, 2019 Compared with the Year Ended December 31, 2018

Recurring revenue decreased during the year ended December 31, 2019 compared to prior year due to attrition within the EIS and other businesses partially offset with growth in subscription revenue. The sale of the OneContent business on April 2, 2018 also contributed to the decline in recurring revenue. The OneContent business was acquired as part of the EIS Business acquisition on October 2, 2017, and it contributed $13 million of recurring revenue during the first quarter of 2018, including $1 million of amortization of acquisition-related deferred revenue adjustments. Non-recurring revenue increased due to higher sales of perpetual software licenses for our acute solutions and hardware in 2019 compared to 2018, partially offset by lower client services revenue related to the timing of software activations.

The percentage of recurring and non-recurring revenue of our total revenue was 78% and 22%, respectively, during the year ended December 31, 2019, compared with 81% and 19%, respectively, during the year ended December 31, 2018.

Gross Profit

(In thousands)	Year Ended December 31, 2020	2019	2018	2020 % Change from 2019	2019 % Change from 2018
Total cost of revenue	$ 937,005	$ 1,022,324	$ 996,450	(8.3%)	2.6%
Gross profit	$ 565,695	$ 610,287	$ 621,391	(7.3%)	(1.8%)
Gross margin %	37.6%	37.4%	38.4%		

Year Ended December 31, 2020 Compared with the Year Ended December 31, 2019

Gross profit decreased during the year ended December 31, 2020 compared to prior year primarily due to attrition, revenue mix, project delays and higher amortization of software development costs. The decrease was partially offset by new business in software subscription revenues and cost reduction initiatives.

Gross margin slightly increased during the year ended December 31, 2020 compared to prior year primarily due to cost reduction initiatives.

Year Ended December 31, 2019 Compared with the Year Ended December 31, 2018

Gross profit and margin decreased during the year ended December 31, 2019 compared to prior year primarily due to an increase in hosting migration costs, higher amortization of software development, recognition of previously deferred costs and the sale of the OneContent business on April 2, 2018, which carried a higher gross margin compared with our other businesses. These were partially offset with an increase in organic sales for Veradigm™ and our acute solutions in 2019.

Selling, General and Administrative Expenses

(In thousands)	Year Ended December 31, 2020	2019	2018	2020 % Change from 2019	2019 % Change from 2018
Selling, general and administrative expenses	$ 389,941	$ 400,808	$ 432,849	(2.7%)	(7.4%)

Year Ended December 31, 2020 Compared with the Year Ended December 31, 2019

Selling, general and administrative expenses decreased during the year ended December 31, 2020 compared with the prior year, primarily due to the impact of cost reduction initiatives.

Year Ended December 31, 2019 Compared with the Year Ended December 31, 2018

Selling, general and administrative expenses decreased during the year ended December 31, 2019 compared with the prior year, primarily due to headcount reduction actions taken during 2018 as part of the integration of EIS, Practice Fusion and Health Grid acquisitions. The sale of OneContent in 2018 also contributed to the decrease because there were one-time incentive compensation expenses. These decreases were partially offset with an increase in legal costs.

Research and Development

(In thousands)	Year Ended December 31, 2020	2019	2018	2020 % Change from 2019	2019 % Change from 2018
Research and development	$ 206,061	$ 245,443	$ 258,736	(16.0%)	(5.1%)

Year Ended December 31, 2020 Compared with the Year Ended December 31, 2019

Research and development expenses decreased during the year ended December 31, 2020 compared with the prior year, primarily due to the impact of cost reduction initiatives.

Year Ended December 31, 2019 Compared with the Year Ended December 31, 2018

Research and development expenses decreased during the year ended December 31, 2019 compared with prior year. This decrease was primarily due to the sale of OneContent on April 2, 2018, as there were $10 million of one-time incentive compensation costs recorded within Research and development expense as a result of the sale.

Asset Impairment Charges

(In thousands)	Year Ended December 31, 2020	2019	2018	2020 % Change from 2019	2019 % Change from 2018
Asset impairment charges	$ 74,969	$ 10,837	$ 58,166	NM	(81.4%)

Year Ended December 31, 2020 Compared with the Year Ended December 31, 2019

Asset impairment charges increased during the year ended December 31, 2020 compared with the prior year. We recorded a non-cash asset impairment charge of $23.1 million related to the write-off of the remaining Health Grid acquired customer relationship intangible balance. This was partially offset by the write-off of $13.9 million related to the Health Grid contingent consideration accrual. We recorded $31.2 million of non-cash asset impairment charges related to the write-off of capitalized software due to the asset values exceeding the product’s net realizable value. The write-off was primarily related to one product in which we determined it would no longer be placed into service. We also recorded a $34.3 million non-cash asset impairment charge due to the write-off of deferred costs related to our private cloud hosting operations. The write-off was driven by the expectation of improved efficiencies in the utilization of our contract compared with historical deferred costs, which was identified through our broader cost reduction initiatives. Asset impairment charges for the year ended December 31, 2019 were primarily the result of impairing the remaining NantHealth acquired customer relationship intangible balance of $8.1 million. We also recognized non-cash impairment charges of $2.7 million on the retirement of certain hosting assets due to data center migrations.

Year Ended December 31, 2019 Compared with the Year Ended December 31, 2018

Asset impairment charges for the year ended December 31, 2019 were primarily the result of impairing the remaining NantHealth acquired customer relationship intangible balance of $8.1 million. We also recognized non-cash impairment charges of $2.7 million on the retirement of certain hosting assets due to data center migrations. We incurred non-cash asset impairment charges during the year ended December 31, 2018 of $33.2 million related to the write-off of capitalized software as a result of our decision to discontinue several software development projects. We also recognized $22.9 million of non-cash asset impairment charges in 2018 related to our acquisition of the patient/provider engagement solutions business from NantHealth in 2017, which included the write-downs of $2.2 million of acquired technology and $20.7 million, representing the unamortized value assigned to the modification of our existing commercial agreement with NantHealth, as we no longer expect to recover the value assigned to these assets. The remaining $2.1 million of non-cash asset impairment charges recorded during the year ended December 31, 2018 relate to the disposal of fixed assets as a result of relocating and consolidating business functions and locations from recent acquisitions.

Goodwill Impairment Charge

(In thousands)	Year Ended December 31, 2020	2019	2018	2020 % Change from 2019	2019 % Change from 2018
Goodwill impairment charge	$ 0	$ 25,700	$ 13,466	(100.0%)	90.9%

Year Ended December 31, 2020 Compared with the Years Ended December 31, 2019 and 2018

We recorded a goodwill impairment charge of $25.7 million related to our Hospitals and Health Systems reporting unit during the year ended December 31, 2019. We impaired all of the goodwill previously recognized as part of the acquisition of NantHealth’s patient/provider engagement solutions business following the completion of our annual goodwill impairment during the year ended December 31, 2018. Refer to Note 8, “Goodwill and Intangible Assets” to our consolidated financial statements included in Part II, Item 8, “Financial Statements and Supplementary Data” of this Form 10-K for further information regarding these impairments.

Amortization of Intangible and Acquisition-Related Assets

(In thousands)	Year Ended December 31, 2020	2019	2018	2020 % Change from 2019	2019 % Change from 2018
Amortization of intangible and acquisition-related assets	$ 25,604	$ 27,188	$ 26,558	(5.8%)	2.4%

Year Ended December 31, 2020 Compared with the Year Ended December 31, 2019

The decrease in amortization expense for the year ended December 31, 2020 compared with the prior year was due to normal amortization expense in 2020 and certain intangible assets being fully amortized in 2019.

Year Ended December 31, 2019 Compared with the Year Ended December 31, 2018

The slight increase in amortization expense for the year ended December 31, 2019 compared with the prior year was due to incremental amortization expense associated with intangible assets as part of business combinations completed during 2018.

Interest Expense

(In thousands)	Year Ended December 31, 2020	2019	2018	2020 % Change from 2019	2019 % Change from 2018
Interest expense	$ 34,104	$ 43,172	$ 50,914	(21.0%)	(15.2%)

Year Ended December 31, 2020 Compared with the Year Ended December 31, 2019

The decrease in interest expense for the year ended December 31, 2020 compared with the prior year was primarily due to a decline in the effective interest rates on outstanding debt, along with allocating a portion of interest expense to discontinued operations related to the required paydown of outstanding debt as a result of sale of CarePort and EPSi. The decrease was partially offset by the increase in debt discounts and issuance cost amortization related to the early retirement of the senior secured term loan.

Year Ended December 31, 2019 Compared with the Year Ended December 31, 2018

Interest expense during the year ended December 31, 2019 decreased compared to the prior year due to lower average outstanding borrowings partially offset by higher interest rates.

Other income (loss), net

(In thousands)	Year Ended December 31, 2020	2019	2018	2020 % Change from 2019	2019 % Change from 2018
Other income (loss), net	$ 54	$ (138,904)	$ 69	(100.0%)	NM

Year Ended December 31, 2020 Compared with the Years Ended December 31, 2019 and 2018

Other income (loss), net for the year ended December 31, 2019 consisted of a $145 million settlement with the DOJ related to the Company's civil and criminal investigations of Practice Fusion. Refer to Note 22, "Contingencies" to our consolidated financial statements included in Part II, Item 8, "Financial Statements and Supplementary Data" of this Form 10-K for further information regarding the investigations. This was partially offset by a $5 million reversal of an earnout related to a prior acquisition. Other income (loss), net also consists of a combination of interest income and miscellaneous receipts and expenses.

Gain on Sale of Businesses, Net

(In thousands)	Year Ended December 31, 2020	2019	2018	2020 % Change from 2019	2019 % Change from 2018
Gain on sale of businesses, net	$ 0	$ 0	$ 172,258	NM	(100.0%)

Year Ended December 31, 2020 Compared with the Years Ended December 31, 2019 and 2018

Gain on sale of businesses, net for the year ended December 31, 2018 consists of a gain of $177.9 million and a loss of $5.6 million from the divestitures of the OneContent and Strategic Sourcing businesses, respectively, both of which were acquired as part of the EIS Business acquisition during the fourth quarter of 2017.

Impairment of Long-term Investments

(In thousands)	Year Ended December 31, 2020	2019	2018	2020 % Change from 2019	2019 % Change from 2018
Impairment of long-term investments	$ (1,575)	$ (651)	$ (15,487)	141.9%	(95.8%)

Year Ended December 31, 2020 Compared with the Years Ended December 31, 2019 and 2018

Impairment of long-term investments during the year ended December 31, 2020 consisted of $1.6 million, which included $1.0 million related to one of our cost-method investments and $0.6 million related to one of our third-party equity-method investments. Impairment of long-term investments during the year ended December 31, 2019 consisted of an impairment of $1.7 million associated with one of our long-term equity investments. The impairment was partially offset with a $1.0 million recovery of a long-term equity investment that had previously been impaired. During the year ended December 31, 2018, we recognized non-cash charges on two of our cost-method equity investments and a related note receivable. These charges equaled the cost bases of the investments and the related note receivable prior to the impairment.

Equity in Net Income of Unconsolidated Investments

(In thousands)	Year Ended December 31, 2020	2019	2018	2020 % Change from 2019	2019 % Change from 2018
Equity in net income of unconsolidated investments	$ 17,194	$ 665	$ 259	NM	156.8%

Year Ended December 31, 2020 Compared with the Years Ended December 31, 2019 and 2018

Equity in net income of unconsolidated investments represents our share of the equity earnings (losses) of our investments in third parties accounted for under the equity method of accounting based on one quarter lag. During the year ended December 31, 2020, we recorded a $16.8 million gain from the sale of a third-party equity-method investment.

Income Tax Benefit

(In thousands)	Year Ended December 31, 2020	2019	2018	2020 % Change from 2019	2019 % Change from 2018
Income tax benefit	$ 16,692	$ 43,340	$ 18,983	(61.5%)	128.3%
Effective tax rate	11.2%	15.4%	30.5%		

Year Ended December 31, 2020 Compared with the Year Ended December 31, 2019

Our provision for income taxes differs from the tax computed at the U.S. federal statutory income tax rate due primarily to valuation allowance, permanent differences, income attributable to foreign jurisdictions taxed at rates different from the United States federal statutory income tax rate, state taxes, tax credits and certain discrete items. Our effective tax rate for the year ended December 31, 2020, compared with the prior year, differs primarily due to the non-deductible portion of the Department of Justice settlement recorded in the year ended December 31, 2019 and the valuation allowance of $16.9 million recorded in the year ended December 31, 2020, compared to the $0.9 million valuation allowance recorded in the year ended December 31, 2019. In evaluating our ability to recover our deferred tax assets within the jurisdictions from which they arise, we consider all available evidence, including scheduled reversals of deferred tax liabilities, tax-planning strategies, and results of recent operations. In evaluating the objective evidence that historical results provide, we consider three years of cumulative operating income (loss). In the year ended December 31, 2020, we recorded $16.9 million of valuation allowance, primarily against foreign deferred tax assets.

Year Ended December 31, 2019 Compared with the Year Ended December 31, 2018

The United States Tax Cuts and Jobs Act (the “Tax Act”) was enacted on December 22, 2017 and introduced significant changes to the income tax law in the United States. Effective in 2018, the Tax Act reduced the United States statutory tax rate from 35% to 21% and created new taxes on certain foreign-sourced earnings and certain related-party payments, which are referred to as the Global Intangible Low-taxed Income ("GILTI") tax and Base Erosion and Anti-Abuse Tax (“BEAT”) rules, respectively. In addition, in 2017 we were subject to a one-time transition tax on accumulated foreign subsidiary earnings not previously subject to income tax in the United States.

Our provision for income taxes differs from the tax computed at the U.S. federal statutory income tax rate due primarily to valuation allowance, permanent differences, income attributable to foreign jurisdictions taxed at rates different from the United States federal statutory income tax rate, state taxes, tax credits and certain discrete items. Our effective tax rate for the year ended December 31, 2019, compared with the prior year, differs primarily due to the fact that the permanent items, credits and the impact of foreign earnings had a greater impact on the pre-tax income of $13.1 million in the year ended December 31, 2018, compared to the impacts of these items on a pre-tax loss of $206.5 million for the year ended December 31, 2019. In evaluating our ability to recover our deferred tax assets within the jurisdictions from which they arise, we consider all available evidence, including scheduled reversals of deferred tax liabilities, tax-planning strategies, and results of recent operations. In evaluating the objective evidence that historical results provide, we consider three years of cumulative operating income (loss). In the year ended December 31, 2019, we recorded $0.9 million of valuation allowance, mostly against foreign deferred tax assets.

Discontinued Operations

(In thousands)	Year Ended December 31, 2020	2019	2018	2020 % Change from 2019	2019 % Change from 2018
Income from discontinued operations	$ 71,448	$ 75,235	$ 2,501	(5.0%)	NM
Gain on sale of discontinued operations	1,156,504	0	500,471	NM	(100.0%)
Income tax effect on discontinued operations	(394,926)	(19,426)	(51,949)	NM	(62.6%)
Income from discontinued operations, net of tax	$ 833,026	$ 55,809	$ 451,023	NM	(87.6%)

Year Ended December 31, 2020 Compared with the Years Ended December 31, 2019 and 2018

During 2020, we implemented a strategic initiative to sell two of our businesses, EPSi and CarePort. Since both businesses were part of the same strategic initiative and were sold within the same period, the combined sale of EPSi and CarePort represents a strategic shift that had a major effect on our operations and financial results. These businesses are now reported together as discontinued operations for all periods presented. On October 15, 2020, we completed the sale of the EPSi business. Prior to the sale, EPSi was part of the Unallocated category as it did not meet the requirements to be a reportable segment nor the criteria to be aggregated into our two reportable segments. On its own, the divestiture of the EPSi business did not represent a strategic shift that had a major effect on our operations and financial results. However, the combined sale of EPSi and CarePort represented a strategic shift that had a major effect on our operations and financial results. Therefore, EPSi is treated as a discontinued operation. On December 31, 2020, we completed the sale of the CarePort business. Prior to the sale, CarePort was part of the Data, Analytics and Care Coordination reportable segment. On its own, the divestiture of the CarePort business represents a strategic shift that had a major effect on our operations and financial results. Refer to Note 18, “Discontinued Operations” to our consolidated financial statements included in Part II, Item 8, “Financial Statements and Supplementary Data” of this Form 10-K for additional information regarding discontinued operations.

On December 31, 2018, we sold all of the Class A Common Units of Netsmart owned by the Company. Prior to the sale, Netsmart comprised a separate reportable segment, which due to its significance to our historical consolidated financial statements and results of operations, is now reported as a discontinued operation as a result of the sale for all periods presented. The loss from discontinued operations represents the net of losses incurred by Netsmart for the year ended December 31, 2018 partly offset by earnings attributable to two solutions acquired during the fourth quarter of 2017 as part of the EIS Business that we no longer support effective as of March 31, 2018. Refer to Note 18, “Discontinued Operations” to our consolidated financial statements included in Part II, Item 8, “Financial Statements and Supplementary Data” of this Form 10-K for additional information regarding discontinued operations.

Non-Controlling Interests

(In thousands)	Year Ended December 31, 2020	2019	2018	2020 % Change from 2019	2019 % Change from 2018
Net loss attributable to non-controlling interests	$ 0	$ 424	$ 4,527	(100.0%)	(90.6%)
Accretion of redemption preference on redeemable convertible non-controlling interest - discontinued operations	$ 0	$ 0	$ (48,594)	NM	(100.0%)

Year Ended December 31, 2020 Compared with the Years Ended December 31, 2019 and 2018

The net loss attributable to non-controlling interest represents the share of earnings of consolidated affiliates that is attributable to the affiliates’ common stock that is not owned by us for each of the periods presented. The remaining minority interest of Pulse8 was purchased during the first quarter of 2019. We have no remaining non-controlling interest activities to report. The accretion of redemption preference on redeemable convertible non-controlling interest represents the accretion of liquidation preference at 11% per annum to the value of the preferred units of Netsmart, prior to the sale of our investment in Netsmart on December 31, 2018.

Segment Operations

Overview of Segment Results

(In thousands)	Year Ended December 31, 2020	2019	2018	2020 % Change from 2019	2019 % Change from 2018
Revenue:					
Core Clinical and Financial Solutions	$ 1,254,249	$ 1,377,147	$ 1,379,499	(8.9%)	(0.2%)
Data, Analytics and Care Coordination	261,321	262,664	246,718	(0.5%)	6.5%
Unallocated Amounts	(12,870)	(7,200)	(8,376)	78.8%	(14.0%)
Total revenue	$ 1,502,700	$ 1,632,611	$ 1,617,841	(8.0%)	0.9%
Gross Profit:					
Core Clinical and Financial Solutions	$ 434,288	$ 473,033	$ 491,421	(8.2%)	(3.7%)
Data, Analytics and Care Coordination	131,407	137,254	129,970	(4.3%)	5.6%
Unallocated Amounts	0	0	0	NM	NM
Total gross profit	$ 565,695	$ 610,287	$ 621,391	(7.3%)	(1.8%)
Loss from operations:					
Core Clinical and Financial Solutions	$ (116,139)	$ (80,465)	$ (158,440)	44.3%	(49.2%)
Data, Analytics and Care Coordination	(14,741)	(19,224)	(9,944)	(23.3%)	93.3%
Unallocated Amounts	0	0	0	NM	NM
Total loss from operations	$ (130,880)	$ (99,689)	$ (168,384)	31.3%	(40.8%)

The results for the years ended December 31, 2019 and 2018 have been recast to conform to the current year presentation, which reflects several changes made to our organizational and reporting structure during the year ended December 31, 2020. Refer to Note 19, “Business Segments” to our consolidated financial statements included in Part II, Item 8, “Financial Statements and Supplementary Data” of this Form 10-K for detailed discussion about these changes to our segments.

Core Clinical and Financial Solutions

Our Core Clinical and Financial Solutions segment derives its revenue from the sale of software applications for patient engagement, integrated clinical and financial management solutions, which primarily include EHR-related software, financial and practice management software, related installation, support and maintenance, outsourcing, private cloud hosting, and revenue cycle management.

(In thousands)	Year Ended December 31, 2020	2019	2018	2020 % Change from 2019	2019 % Change from 2018
Revenue	$ 1,254,249	$ 1,377,147	$ 1,379,499	(8.9%)	(0.2%)
Gross profit	$ 434,288	$ 473,033	$ 491,421	(8.2%)	(3.7%)
Gross margin %	34.6%	34.3%	35.6%		
Loss from operations	$ (116,139)	$ (80,465)	$ (158,440)	44.3%	(49.2%)
Operating margin %	(9.3%)	(5.8%)	(11.5%)		

Year Ended December 31, 2020 Compared with the Year Ended December 31, 2019

Core Clinical and Financial Solutions revenue decreased during the year ended December 31, 2020, compared with the prior year due to attrition, lower upfront software revenues and project delays that impacted client services revenue. The decrease was partly offset by an increase in hardware revenues. In 2019, hardware revenues were included within “Unallocated Amounts”, but in 2020 we began to allocate hardware revenues between the operating segments.

Gross profit decreased during the year ended December 31, 2020 compared with the prior year primarily due to the previously mentioned attrition, revenue profile and project delays. The decrease was partially offset by cost reduction initiatives. Gross margin increased slightly during the year ended December 31, 2020 compared with the prior year primarily due to cost reduction initiatives.

Loss from operations increased during the year ended December 31, 2020 compared with the prior year due to a decline in gross profit. The decrease was partially offset by cost reduction initiatives.

Year Ended December 31, 2019 Compared with the Year Ended December 31, 2018

Core Clinical and Financial Solutions revenue decreased during the year ended December 31, 2019, compared with the prior year due to attrition within the EIS and other businesses and the sale of the OneContent and Strategic Sourcing businesses on March 15, 2018 and on April 2, 2018, respectively. These businesses were acquired as part of the EIS business acquisition on October 2, 2017 and contributed $16 million of revenue during the first quarter of 2018, including $1 million of amortization of acquisition-related deferred revenue adjustments. These decreases were partly offset by higher sales of perpetual software licenses for our acute solutions in 2019 compared to 2018 and additional revenue from the 2018 acquisition of Health Grid.

Gross profit and margin decreased during the year ended December 31, 2019 compared with the prior year primarily due to the previously mentioned attrition and increased hosting migration costs. These were partially offset with lower costs due to the decline in sales. The sale of OneContent, which had higher overall profitability, compared with our other Core Clinical and Financials Solutions businesses, contributed to the decline of gross profit and margin.

Loss from operations decreased during the year ended December 31, 2019 compared with prior year, primarily due to the result of (i) lower asset impairment and goodwill charges, (ii) lower net transaction-related severance and (iii) lower personnel costs from the headcount reduction actions taken along with the one-time incentive compensation expenses related to the One-Content sale in 2018. Operating margin increased during the year ended December 31, 2019 compared with prior year, as the decline in gross profit was offset by the previously mentioned items that attributed to the decline in loss from operations.

Data, Analytics and Care Coordination

Our Data, Analytics and Care Coordination segment derives its revenue from the sale of practice reimbursement and payer and life sciences solutions, which are mainly targeted at physician practices, payers, life sciences companies and other key healthcare stakeholders. These solutions enable clients to transition, analyze, coordinate care and improve the quality, efficiency and value of healthcare delivery across the entire care community.

(In thousands)	Year Ended December 31, 2020	2019	2018	2020 % Change from 2019	2019 % Change from 2018
Revenue	$ 261,321	$ 262,664	$ 246,718	(0.5%)	6.5%
Gross profit	$ 131,407	$ 137,254	$ 129,970	(4.3%)	5.6%
Gross margin %	50.3%	52.3%	52.7%		
Loss from operations	$ (14,741)	$ (19,224)	$ (9,944)	(23.3%)	93.3%
Operating margin %	(5.6%)	(7.3%)	(4.0%)		

Year Ended December 31, 2020 Compared with the Year Ended December 31, 2019

Data, Analytics and Care Coordination revenue decreased slightly during the year ended December 31, 2020 compared with the prior year, primarily due to decreases in outsourcing and transaction-related revenues. The decrease was partially offset by an increase in subscription revenue.

Gross profit and margin decreased during the year ended December 31, 2020 compared with the prior year, primarily due to the previously mentioned decreases in revenue and an increase in transfer pricing costs.

Loss from operations decreased during the year ended December 31, 2020 compared with the prior year, primarily due to lower selling, general and administrative, and research and development expenses driven by cost reduction initiatives. Operating margin increased during the year ended December 31, 2020 compared with the prior year, as the decline in gross profit was offset by cost reduction initiatives.

Year Ended December 31, 2019 Compared with the Year Ended December 31, 2018

Data, Analytics and Care Coordination revenue increased during the year ended December 31, 2019 compared with the prior year due to an increase in organic sales. Gross profit increased during the year ended December 31, 2019 due to an increase in organic sales and cost reductions partially offset with headcount growth and hosting migration costs. The acquisition of Practice Fusion during the first quarter of 2018 also contributed to the increases.

Gross margin and operating margin decreased during the year ended December 31, 2019, compared with the prior year, primarily due to (i) an increase in hosting migration costs, (ii) costs associated with recent acquisitions, (iii) headcount growth and (iv) partially offset with other cost reductions.

Unallocated Amounts

The EPSi operating segment was included in the "Unallocated Amounts" category until it was sold on October 15, 2020. Prior to the sale, EPSi did not meet the requirements to be a reportable segment nor the criteria to be aggregated into the two reportable segments. Following the sale of EPSi, the "Unallocated Amounts" category consists of transfer pricing revenues.

(In thousands)	Year Ended December 31, 2020	Year Ended December 31, 2019	Year Ended December 31, 2018	2020 % Change from 2019	2019 % Change from 2018
Revenue	$ (12,870)	$ (7,200)	$ (8,376)	78.8%	(14.0%)
Gross profit	$ 0	$ 0	$ 0	NM	NM
Gross margin %	0.0%	0.0%	0.0%		
Income from operations	$ 0	$ 0	$ 0	NM	NM
Operating margin %	0.0%	0.0%	0.0%		

Year Ended December 31, 2020 Compared with the Year Ended December 31, 2019

Revenue decreased during the year ended December 31, 2020 compared to the prior year due to an increase in transfer pricing revenues.

Year Ended December 31, 2019 Compared with the Year Ended December 31, 2018

Revenue increased during the year ended December 31, 2019 compared to the prior year due to a decrease in transfer pricing revenues.

Contract Backlog

Contract backlog represents the value of bookings and support and maintenance contracts that have not yet been recognized as revenue. A summary of contract backlog by revenue category is as follows:

(In millions)	As of December 31, 2020	As of December 31, 2019	% Change
Software delivery, support and maintenance	$ 2,153	$ 2,239	(3.8%)
Client services	1,918	1,811	5.9%
Total contract backlog	$ 4,071	$ 4,050	0.5%

Total contract backlog as of December 31, 2020 increased compared with December 31, 2019. Total contract backlog can fluctuate between periods based on the level of revenue and bookings as well as the timing and mix of renewal activity and periodic revalidations.

We estimate that the aggregate contract backlog as of December 31, 2020 will be recognized as revenue in future years as follows:

Year Ended December 31,	(Percentage of Total Backlog)
2021	35%
2022	19%
2023	15%
2024	11%
2025	8%
Thereafter	12%
Total	100%

Liquidity and Capital Resources

The primary factors that influence our liquidity include, but are not limited to, the amount and timing of our revenues, cash collections from our clients, capital expenditures and investments in research and development efforts, including investments in or acquisitions of third parties, and divestitures. Our liquidity was influenced by the COVID-19 pandemic during the year ended December 31, 2020. We increased cash on hand through additional credit facility borrowings to provide financial flexibility and enhance our ability to address potential future uncertainties regarding the impact of the COVID-19 pandemic. As of December 31, 2020, our principal sources of liquidity consisted of cash and cash equivalents of $538 million and available borrowing capacity of $899 million under our senior secured revolving facility ("Revolving Facility"). The change in our cash and cash equivalents balance is reflective of the following:

Operating Cash Flow Activities

(In thousands)	Year Ended December 31, 2020	2019	2018	2020 $ Change from 2019	2019 $ Change from 2018
Net income (loss)	$ 700,407	$ (182,602)	$ 407,807	$ 883,009	$ (590,409)
Less: Income from discontinued operations	833,026	55,809	451,023	777,217	(395,214)
Loss from continuing operations	(132,619)	(238,411)	(43,216)	105,792	(195,195)
Non-cash adjustments to net income (loss)	297,200	267,685	128,662	29,515	139,023
Cash impact of changes in operating assets and liabilities	(152,248)	(13,879)	(87,238)	(138,369)	73,359
Net cash provided by (used in) operating activities - continuing operations	12,333	15,395	(1,792)	(3,062)	17,187
Net cash (used in) provided by operating activities - discontinued operations	(119,048)	30,859	69,683	(149,907)	(38,824)
Net cash (used in) provided by operating activities	$ (106,715)	$ 46,254	$ 67,891	$ (152,969)	$ (21,637)

Year Ended December 31, 2020 Compared with the Year Ended December 31, 2019

Net cash provided by operating activities – continuing operations increased during the year ended December 31, 2020, compared with the prior year. The decrease in loss from operations and the increase from non-cash adjustments to net income in 2020 is partially related to the absence of a goodwill impairment charge. The increase in non-cash adjustments to net income in 2020 is primarily related to an increase in asset impairment charges and an increase in deferred taxes, which were partially offset by lower depreciation and the amortization of right-of-use assets, the sale of a third-party equity-method investment and a decrease in stock-based compensation expenses. The net income and the cash impact of changes in operating assets and liabilities during 2020 reflects $147 million of payments and interests related to the settlement with the DOJ in connection with the Practice Fusion investigations.

Net cash used in operating activities – discontinued operations during the year ended December 31, 2020 reflects transaction expenses and the additional tax provision related to the gain from the sales of EPSi and CarePort on October 15, 2020 and December 31, 2020, respectively.

Year Ended December 31, 2019 Compared with the Year Ended December 31, 2018

During the year ended December 31, 2019, we had net cash provided by operating activities – continuing operations compared to net use of cash from operating activities – continuing operations during the year ended December 31, 2018. The increase in loss from operations and in non-cash adjustments to net loss in 2019 partially related to the absence in the gains on sale of divestitures, such as OneContent in 2018. The increase in non-cash adjustments to net loss in 2019 also related to higher depreciation and the amortization of right-of-use assets. The net loss and the cash impact of changes in operating assets and liabilities during 2019 reflects the $145 million settlement with the DOJ in connection with the Practice Fusion investigations.

Net cash provided by operating activities – discontinued operations decreased during the year ended December 31, 2019 compared to the prior year, primarily due to the advance income tax payment related to the gain realized on the sale of our investment in Netsmart on December 31, 2018.

Investing Cash Flow Activities

(In thousands)	Year Ended December 31, 2020	2019	2018	2020 $ Change from 2019	2019 $ Change from 2018
Capital expenditures	$ (17,025)	$ (16,450)	$ (30,345)	$ (575)	$ 13,895
Capitalized software	(87,993)	(103,317)	(103,454)	15,324	137
Cash paid for business acquisitions, net of cash acquired	0	(23,443)	(177,233)	23,443	153,790
Cash received from sale of businesses, net of cash divested	1,710,000	0	807,764	1,710,000	(807,764)
Purchases of equity securities, other investments and related intangible assets, net	(7,097)	(8,235)	(16,934)	1,138	8,699
Sale of other investments	24,967	1,044	0	23,923	1,044
Other proceeds from investing activities	0	14	54	(14)	(40)
Net cash provided by (used in) investing activities - continuing operations	1,622,852	(150,387)	479,852	1,773,239	(630,239)
Net cash used in investing activities - discontinued operations	(7,664)	(10,669)	(231,839)	3,005	221,170
Net cash provided by (used in) investing activities	$ 1,615,188	$ (161,056)	$ 248,013	$ 1,776,244	$ (409,069)

Year Ended December 31, 2020 Compared with the Year Ended December 31, 2019

Net cash provided by investing activities – continuing operations during the year ended December 31, 2020 primarily resulted from the cash received from the sales of EPSi and CarePort on October 15, 2020 and December 31, 2020, respectively.

Net cash used in investing activities – discontinuing operations decreased during the year ended December 31, 2020 compared to the prior year, primarily due to a decrease in capitalized software costs for EPSi and CarePort.

Year Ended December 31, 2019 Compared with the Year Ended December 31, 2018

Net cash used in investing activities – continuing operations during the year ended December 31, 2019 resulted from the absence of the sale of businesses compared to prior year. The sale of Netsmart and OneContent produced significant investing cash inflows during 2018, which was partially offset with cash paid for the acquisitions of Practice Fusion and Health Grid. Capital expenditures also decreased in 2019 compared with prior year.

Net cash used in investing activities – discontinued operations decreased during the year ended December 31, 2019 compared to the prior year, primarily due to the sale of our investment in Netsmart on December 31, 2018.

Financing Cash Flow Activities

(In thousands)	Year Ended December 31, 2020	2019	2018	2020 $ Change from 2019	2019 $ Change from 2018
Proceeds from sale or issuance of common stock	$ 0	$ 0	$ 1,283	$ 0	$ (1,283)
Taxes paid related to net share settlement of equity awards	(6,033)	(7,286)	(9,466)	1,253	2,180
Proceeds from issuance of 0.875% Convertible Senior Notes	0	218,000	0	(218,000)	218,000
Payments for issuance costs on 0.875% Convertible Senior Notes	(758)	(5,445)	0	4,687	(5,445)
Payments for capped call transaction on 0.875% Convertible Senior Notes	0	(17,222)	0	17,222	(17,222)
Repayment of Convertible Senior Notes	(352,361)	0	0	(352,361)	0
Credit facility payments	(1,315,000)	(220,000)	(713,751)	(1,095,000)	493,751
Credit facility borrowings, net of issuance costs	903,625	279,241	430,843	624,384	(151,602)
Repurchase of common stock	(134,863)	(111,460)	(138,928)	(23,403)	27,468
Accelerated share repurchase program	(200,000)	0	0	(200,000)	0
Payment of acquisition and other financing obligations	(4,369)	(14,685)	(5,198)	10,316	(9,487)
Purchases of subsidiary shares owned by non-controlling interest	0	(53,800)	(7,198)	53,800	(46,602)
Net cash (used in) provided by financing activities - continuing operations	(1,109,759)	67,343	(442,415)	(1,177,102)	509,758
Net cash provided by financing activities - discontinued operations	0	0	149,432	0	(149,432)
Net cash (used in) provided by financing activities	$ (1,109,759)	$ 67,343	$ (292,983)	$ (1,177,102)	$ 360,326

Year Ended December 31, 2020 Compared with the Year Ended December 31, 2019

Net cash used in financing activities – continuing operations increased during the year ended December 31, 2020 primarily due to (i) the repayment of debt under our senior secured credit facility, (ii) the absence of issuance of new debt, (iii) the repayment of certain convertible senior notes and (iv) the payment made to the accelerated share purchase program. This was partially offset by credit facility borrowings in 2020 and the absence of purchasing the remaining minority interest in Pulse8.

Year Ended December 31, 2019 Compared with the Year Ended December 31, 2018

Net cash provided by financing activities – continuing operations increased during the year ended December 31, 2019 primarily due to inflows resulting from (i) the issuance of the 0.875% Convertible Senior Notes, (ii) lower credit facility payments, which were partially offset by less credit facility borrowings, and (iii) a decrease in the repurchase of common stock. The inflows were partially offset by the purchase of the remaining minority interest in Pulse8 during 2019.

Net cash provided by financing activities – discontinued operations during the year ended December 31, 2018 resulted from borrowings by Netsmart used to finance business acquisitions.

Future Capital Requirements

The following table summarizes future payments under our 0.875% Convertible Senior Notes and Revolving Facility as of December 31, 2020:

(In thousands)	Total	2021	2022	2023	2024	2025	Thereafter
Principal payments:							
0.875% Convertible Senior Notes [1]	$ 207,911	$ 0	$ 0	$ 0	$ 0	$ 0	$ 207,911
Total principal payments	207,911	0	0	0	0	0	207,911
Interest payments:							
0.875% Convertible Senior Notes	12,904	2,898	1,820	1,819	1,819	1,819	2,729
Revolving Facility [2]	5,056	2,247	2,247	562	0	0	0
Total interest payments	17,960	5,145	4,067	2,381	1,819	1,819	2,729
Total future debt payments	$ 225,871	$ 5,145	$ 4,067	$ 2,381	$ 1,819	$ 1,819	$ 210,640

(1) Amount represents the face value of the 0.875% Convertible Senior Notes, which includes both the liability and equity portions.

(2) Assumes no additional borrowings after December 31, 2020 and that all drawn amounts are repaid upon maturity. However, amounts represent unused fees related to the available borrowing capacity on the Revolving Facility.

Revolving Credit Facilities

We have a $900 million Revolving Facility that expires on February 15, 2023. A total of up to $50 million of the Revolving Facility is available for the issuance of letters of credit, up to $10 million of the Revolving Facility is available for swingline loans, and up to $100 million of the Revolving Facility could be borrowed under certain foreign currencies. We had no borrowings and $1.1 million of letters of credit outstanding under the Revolving Facility as of December 31, 2020. We had $899 million available, net of outstanding letters of credit, under the Revolving Facility as of December 31, 2020. There can be no assurance that we will be able to draw on the full available balance of the Revolving Facility if the financial institutions that have extended such credit commitments become unwilling or unable to fund such borrowings. Refer to Note 10, “Debt” to our consolidated financial statements included in Part II, Item 8, “Financial Statements and Supplementary Data” of this Form 10-K for further information.

Other Matters Affecting Future Capital Requirements

Our total investment in research and development efforts during 2020 decreased compared to 2019, as the Company implemented cost reduction initiatives. Our total spending consists of research and development costs directly recorded to expense, which are offset by the capitalization of eligible development costs.

We believe that our cash and cash equivalents of $538 million as of December 31, 2020, our future cash flows, our borrowing capacity under our Revolving Facility and access to capital markets, taken together, provide adequate resources to meet future operating needs as well as scheduled payments of short and long-term debt. We cannot provide assurance that our actual cash requirements will not be greater than we expect as of the date of this Form 10-K. We will, from time to time, consider the acquisition of, or investment in, complementary businesses, products, services and technologies, and the repurchase of our common stock under our stock repurchase program, each of which might impact our liquidity requirements or cause us to borrow under our Revolving Facility or issue additional equity or debt securities.

If sources of liquidity are not available or if we cannot generate sufficient cash flow from operations during the next twelve months, we might be required to obtain additional sources of funds through additional operating improvements, capital market transactions, asset sales or financing from third parties, a combination thereof or otherwise. We cannot provide assurance that these additional sources of funds will be available or, if available, would have reasonable terms.

Contractual Obligations and Commitments

We enter into obligations with third parties in the ordinary course of business. The following table summarizes our significant contractual obligations as of December 31, 2020 and the effect such obligations are expected to have on our liquidity and cash in future periods, assuming all obligations reach maturity. We do not believe that our cash flow requirements can be assessed based upon this analysis of these obligations as the funding of these future cash obligations will be from future cash flows from the sale of our products and services that are not reflected in the following table.

		Payments due by period					
(In thousands)	**Total**	**2021**	**2022**	**2023**	**2024**	**2025**	**Thereafter**
Balance sheet obligations: (1)							
Debt:							
Principal payments	$ 207,911	$ 0	$ 0	$ 0	$ 0	$ 0	$ 207,911
Interest payments	17,960	5,145	4,067	2,381	1,819	1,819	2,729
Other obligations: (2)							
Non-cancelable operating leases	127,727	26,090	24,501	22,752	17,388	14,927	22,069
Purchase obligations (3)	75,542	36,727	24,273	8,155	4,508	1,879	0
Agreement with Atos	350,318	85,601	80,895	74,788	73,168	35,866	0
Letters of credit	1,061	1,061	0	0	0	0	0
Total contractual obligations	$ 780,519	$ 154,624	$ 133,736	$ 108,076	$ 96,883	$ 54,491	$ 232,709

(1) Our liability for uncertain tax positions was $29 million as of December 31, 2020. Liabilities that may result from this exposure have been excluded from the table above since we cannot predict, with reasonable reliability, the outcome of discussions with the respective taxing jurisdictions, which may or may not result in cash settlements. We have also excluded net deferred tax liabilities of $12 million from the amounts presented in the table as the future amounts that will be settled in cash are uncertain.

(2) We have no off-balance sheet arrangements as defined in Item 303 of Regulation S-K as of December 31, 2020. We have obligations to pay contingent consideration associated with acquisitions of $1.0 million as of December 31, 2020. Such contingent consideration obligations are excluded from the above table since their payment is based on future financial objectives, the achievement of which we cannot predict.

(3) Purchase obligations consist of minimum purchase commitments for telecommunication services, computer equipment, maintenance, consulting and other commitments.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

We are exposed to interest rate risk, primarily changes in United States interest rates and changes in LIBOR (including the transition away from LIBOR), and primarily due to our borrowing under the Senior Secured Credit Facility. As of December 31, 2020, we had no debt outstanding under the Senior Secured Credit Facility, which minimizes our exposure to interest rate risk.

We have global operations; therefore, we are exposed to risks related to foreign currency fluctuations. Foreign currency fluctuations through December 31, 2020 have not had a material impact on our financial position or operating results. We believe most of our global operations are naturally hedged for foreign currency risk as our foreign subsidiaries invoice their clients and satisfy their obligations primarily in their local currencies. Exceptions to this are our development and shared services center in India and our local operations in Israel, where we are required to make payments in local currency but which we fund in United States dollars. We have entered into non-deliverable forward foreign currency exchange contracts with reputable banking counterparties in order to hedge a portion of our forecasted future Indian Rupee-denominated ("INR") expenses against foreign currency fluctuations between the United States dollar and the INR. These forward contracts cover a percentage of forecasted monthly INR expenses over time. As of December 31, 2020, there were six forward contracts outstanding that were staggered to mature monthly starting in January 2021 and ending in June 2021. In the future, we may enter into additional forward contracts to increase the amount of hedged monthly INR expenses or initiate hedges for monthly periods beyond June 2021. As of December 31, 2020, the notional amount for each of the outstanding forward contracts was 225 million INR, or the equivalent of $3.1 million, based on the exchange rate between the United States dollar and the INR in effect as of December 31, 2020. These amounts also approximate the forecasted future INR expenses we target to hedge in any one month in the future. The forward contracts resulted in net gains of $0.6 million and $0.3 million during the years ended December 31, 2020 and 2019, respectively.

We continually monitor our exposure to foreign currency fluctuations and may use additional derivative financial instruments and hedging transactions in the future if, in our judgment, circumstances warrant. There can be no guarantee that the impact of foreign currency fluctuations in the future will not be significant and will not have a material impact on our financial position or results of operations.

Item 8. Financial Statements and Supplementary Data

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Board of Directors and Shareholders
Allscripts Healthcare Solutions, Inc.

Opinion on the financial statements

We have audited the accompanying consolidated balance sheets of Allscripts Healthcare Solutions, Inc., a Delaware corporation, and subsidiaries (the "Company") as of December 31, 2020 and 2019, the related consolidated statements of operations, comprehensive income, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2020, and the related notes and financial statement schedules included under Item 15(a) (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020, in conformity with accounting principles generally accepted in the United States of America.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the Company's internal control over financial reporting as of December 31, 2020, based on criteria established in the 2013 *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"), and our report dated February 26, 2021 expressed an unqualified opinion.

Change in accounting principle

As discussed in Note 1 to the consolidated financial statements, the Company has changed its method of accounting for measurement of credit losses on financial instruments in 2020 due to the adoption of FASB Accounting Standards Codification (Topic 326), *Financial Instruments – Credit Losses*.

Basis for opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical audit matter

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Revenue Recognition - *Determination of distinct performance obligations and application of stand-alone selling prices.*

As discussed in Note 2 to the consolidated financial statements, the Company enters into contracts with customers that often include multiple promises to transfer products and services including sales of proprietary software, support and maintenance, as well as client services including managed services solutions, such as private cloud hosting, outsourcing and revenue cycle management, as well as other client services or project-based revenue from implementation, training, consulting, and outsourced IT services. Given the nature and volume of the Company's product and service offerings included in a single contract, there is complexity related to the determination of which of these promises result in distinct performance obligations within the context of the contract. Judgment is required by management to determine the various performance obligations and to allocate the transaction price in each contract to these distinct performance obligations using relative stand-alone selling prices as well as a residual allocation approach for certain software licenses. We identified the determination of distinct performance obligations and application of stand-alone selling prices as a critical audit matter.

The principal consideration for our determination that the identification of distinct performance obligations and the application of stand-alone selling prices is a critical audit matter is the especially challenging auditor judgment required when evaluating the determination of distinct performance obligations and execution of the allocation of transaction price using stand-alone selling prices due to the mix and volume of products and services offered with terms that are specific to each contract. The range of prices used to establish the stand-alone selling price for the undelivered performance obligations directly affect the amount of product license revenue recognized using a residual approach.

Our audit procedures related to the identification of distinct performance obligations and the application of stand-alone selling prices included the following, among others:

- We evaluated the design and tested the operating effectiveness of controls relating to the identification of performance obligations, the determination of stand-alone selling prices and the allocation of the contractual transaction price to each distinct performance obligation.
- We inspected a selection of contracts with customers and performed the following procedures:
  - Obtained and read all selected contracts, contract amendments and sales orders for each selected arrangement and tested the identification of significant terms;
  - Evaluated management's identification of all distinct performance obligations in each arrangement and recalculated management's allocation of the contract's transaction price to each distinct performance obligation;
  - Evaluated management's estimate of stand-alone selling prices by testing a historical analysis of stand-alone sales of the performance obligations and testing the completeness and accuracy of the data used in the development of the stand-alone selling prices; and
  - Evaluated the timing of revenue recognition for each performance obligation and tested the accuracy of management's computations of revenue recognized in the financial statements.

/s/ GRANT THORNTON LLP

We have served as the Company's auditor since 2014.

Raleigh, North Carolina
February 26, 2021

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Board of Directors and Shareholders
Allscripts Healthcare Solutions, Inc.

Opinion on internal control over financial reporting

We have audited the internal control over financial reporting of Allscripts Healthcare Solutions, Inc., a Delaware corporation, and subsidiaries (the "Company") as of December 31, 2020, based on criteria established in the 2013 *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2020, based on criteria established in the 2013 *Internal Control—Integrated Framework* issued by COSO.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the consolidated financial statements of the Company as of and for the year ended December 31, 2020, and our report dated February 26, 2021 expressed an unqualified opinion on those financial statements.

Basis for opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting ("Management's Report"). Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and limitations of internal control over financial reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ GRANT THORNTON LLP

Raleigh, North Carolina
February 26, 2021

ALLSCRIPTS HEALTHCARE SOLUTIONS, INC.
CONSOLIDATED BALANCE SHEETS

(In thousands, except per share amounts)	December 31, 2020	December 31, 2019
ASSETS		
Current assets:		
Cash and cash equivalents	$ 531,104	$ 129,668
Restricted cash	6,361	7,871
Accounts receivable, net of allowance of $31,596 and $22,005 as of December 31, 2020 and December 31, 2019, respectively	347,355	424,415
Contract assets, net of allowance of $1,068 and $0 as of December 31, 2020 and December 31, 2019, respectively	106,717	93,292
Income tax receivable	25,421	0
Prepaid expenses and other current assets	136,264	144,145
Current assets attributable to discontinued operations	0	41,871
Total current assets	1,153,222	841,262
Fixed assets, net	72,162	87,953
Software development costs, net	193,202	222,692
Intangible assets, net	286,602	367,128
Goodwill	974,729	974,110
Deferred taxes, net	5,790	5,704
Contract assets - long-term, net of allowance of $4,273 and $0 as of December 31, 2020 and December 31, 2019, respectively	43,682	63,525
Right-of-use assets - operating leases	96,601	95,757
Other assets	91,628	119,587
Long-term assets attributable to discontinued operations	0	428,021
Total assets	$ 2,917,618	$ 3,205,739

ALLSCRIPTS HEALTHCARE SOLUTIONS, INC.
CONSOLIDATED BALANCE SHEETS (CONTINUED)

(In thousands, except per share amounts)	December 31, 2020	December 31, 2019
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 35,905	$ 102,823
Accrued expenses	100,262	270,281
Accrued compensation and benefits	118,771	65,782
Deferred revenue	334,764	335,619
Current maturities of long-term debt	0	364,465
Current operating lease liabilities	22,264	22,328
Current liabilities attributable to discontinued operations	322,811	49,392
Total current liabilities	934,777	1,210,690
Long-term debt	167,587	551,004
Deferred revenue	3,471	11,068
Deferred taxes, net	18,186	21,038
Long-term operating lease liabilities	93,463	93,588
Other liabilities	33,891	30,320
Long-term liabilities attributable to discontinued operations	0	2,843
Total liabilities	1,251,375	1,920,551
Commitments and contingencies		
Stockholders' equity:		
Preferred stock: $0.01 par value, 1,000 shares authorized, no shares issued and outstanding as of December 31, 2020 and December 31, 2019	0	0
Common stock: $0.01 par value, 349,000 shares authorized as of December 31, 2020 and December 31, 2019; 274,558 and 139,942 shares issued and outstanding as of December 31, 2020, respectively; 272,609 and 162,475 shares issued and outstanding as of December 31, 2019, respectively	2,745	2,725
Treasury stock: at cost, 134,616 and 110,134 shares as of December 31, 2020 and December 31, 2019, respectively	(870,558)	(571,157)
Additional paid-in capital	1,902,776	1,907,348
Retained earnings (accumulated deficit)	633,118	(49,336)
Accumulated other comprehensive loss	(1,838)	(4,392)
Total stockholders' equity	1,666,243	1,285,188
Total liabilities and stockholders' equity	$ 2,917,618	$ 3,205,739

The accompanying notes are an integral part of these consolidated financial statements.

ALLSCRIPTS HEALTHCARE SOLUTIONS, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS

(In thousands, except per share amounts)	Year Ended December 31, 2020	2019	2018
Revenue:			
Software delivery, support and maintenance	$ 914,662	$ 1,004,195	$ 1,011,624
Client services	588,038	628,416	606,217
Total revenue	1,502,700	1,632,611	1,617,841
Cost of revenue:			
Software delivery, support and maintenance	287,954	319,140	315,102
Client services	530,652	595,310	584,666
Amortization of software development and acquisition-related assets	118,399	107,874	96,682
Total cost of revenue	937,005	1,022,324	996,450
Gross profit	565,695	610,287	621,391
Selling, general and administrative expenses	389,941	400,808	432,849
Research and development	206,061	245,443	258,736
Asset impairment charges	74,969	10,837	58,166
Goodwill impairment charge	0	25,700	13,466
Amortization of intangible and acquisition-related assets	25,604	27,188	26,558
Loss from operations	(130,880)	(99,689)	(168,384)
Interest expense	(34,104)	(43,172)	(50,914)
Other income (loss), net	54	(138,904)	69
Gain on sale of businesses, net	0	0	172,258
Impairment of long-term investments	(1,575)	(651)	(15,487)
Equity in net income of unconsolidated investments	17,194	665	259
Loss before income taxes	(149,311)	(281,751)	(62,199)
Income tax benefit	16,692	43,340	18,983
Loss from continuing operations, net of tax	(132,619)	(238,411)	(43,216)
Income from discontinued operations	71,448	75,235	2,501
Gain on sale of discontinued operations	1,156,504	0	500,471
Income tax effect on discontinued operations	(394,926)	(19,426)	(51,949)
Income from discontinued operations, net of tax	833,026	55,809	451,023
Net income (loss)	700,407	(182,602)	407,807
Net loss attributable to non-controlling interests	0	424	4,527
Accretion of redemption preference on redeemable convertible non-controlling interest - discontinued operations	0	0	(48,594)
Net income (loss) attributable to Allscripts Healthcare Solutions, Inc. stockholders	$ 700,407	$ (182,178)	$ 363,740
Net income (loss) attributable to Allscripts Healthcare Solutions, Inc. stockholders per share:			
Basic			
Continuing operations	$ (0.83)	$ (1.43)	$ (0.22)
Discontinued operations	5.23	0.33	2.29
Net income (loss) attributable to Allscripts Healthcare Solutions, Inc. stockholders per share	$ 4.40	$ (1.10)	$ 2.07
Diluted			
Continuing operations	$ (0.83)	$ (1.43)	$ (0.22)
Discontinued operations	5.23	0.33	2.29
Net income (loss) attributable to Allscripts Healthcare Solutions, Inc. stockholders per share	$ 4.40	$ (1.10)	$ 2.07

The accompanying notes are an integral part of these consolidated financial statements.

ALLSCRIPTS HEALTHCARE SOLUTIONS, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(In thousands)	Year Ended December 31, 2020	2019	2018
Net income (loss)	$ 700,407	$ (182,602)	$ 407,807
Other comprehensive income (loss):			
Foreign currency translation adjustments	1,435	1,192	(2,908)
Change in fair value of derivatives qualifying as cash flow hedges	1,509	(262)	(873)
Other comprehensive income (loss) before income tax (expense) benefit	2,944	930	(3,781)
Income tax (expense) benefit related to items in other comprehensive income (loss)	(390)	67	377
Total other comprehensive income (loss)	2,554	997	(3,404)
Comprehensive income (loss)	702,961	(181,605)	404,403
Comprehensive loss attributable to non-controlling interests	0	424	4,527
Comprehensive income (loss), net	$ 702,961	$ (181,181)	$ 408,930

The accompanying notes are an integral part of these consolidated financial statements.

ALLSCRIPTS HEALTHCARE SOLUTIONS, INC.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

(In thousands)	Year Ended December 31, 2020	2019	2018
Number of common shares			
Balance at beginning of year	272,609	270,955	269,335
Common stock issued under stock compensation plans, net of shares withheld for employee taxes	1,949	1,654	1,620
Balance at end of year	274,558	272,609	270,955
Common stock			
Balance at beginning of year	$ 2,725	$ 2,709	$ 2,693
Common stock issued under stock compensation plans, net of shares withheld for employee taxes	20	16	16
Balance at end of year	$ 2,745	$ 2,725	$ 2,709
Number of treasury stock shares			
Balance at beginning of year	(110,134)	(99,731)	(88,504)
Issuance of treasury stock	198	61	76
Purchase of treasury stock	(12,984)	(10,464)	(11,303)
Accelerated share repurchase program	(11,696)	0	0
Balance at end of year	(134,616)	(110,134)	(99,731)
Treasury stock			
Balance at beginning of year	$ (571,157)	$ (460,543)	$ (322,735)
Issuance of treasury stock	1,193	846	1,121
Purchase of treasury stock	(134,863)	(111,460)	(138,929)
Accelerated share repurchase program	(165,731)	0	0
Balance at end of year	$ (870,558)	$ (571,157)	$ (460,543)
Additional paid-in capital			
Balance at beginning of year	$ 1,907,348	$ 1,881,494	$ 1,781,059
Stock-based compensation	34,036	38,713	34,638
Common stock issued under stock compensation plans, net of shares withheld for employee taxes	(6,059)	(7,227)	(8,197)
Issuance of 0.875% Convertible Senior Notes	0	40,058	0
Capped call transactions	797	(17,222)	0
Allocation of discounts and debt issuance costs for issuance of 0.875% Convertible Senior Notes	0	(1,140)	0
Accretion of redemption preference on redeemable convertible non-controlling interest -discontinued operations	0	0	72,386
Subsidiary issuance of common stock	0	0	0
Accelerated share repurchase program	(34,269)	0	0
Issuance of treasury stock	(440)	(144)	(61)
Warrants issued	1,363	2,729	2,729
Acquisition of non-controlling interest	0	(29,913)	(1,060)
Balance at end of year	$ 1,902,776	$ 1,907,348	$ 1,881,494
Retained earnings (accumulated deficit)			
Balance at beginning of year	$ (49,336)	$ 132,842	$ (338,150)
Net income (loss) less net loss attributable to non-controlling interests	700,407	(182,178)	412,334
ASU 2016-13 implementation adjustments	(17,953)	0	0
ASC 606 implementation adjustments	0	0	58,658
Balance at end of year	$ 633,118	$ (49,336)	$ 132,842
Accumulated other comprehensive loss			
Balance at beginning of year	$ (4,392)	$ (5,389)	$ (1,985)
Foreign currency translation adjustments, net	1,435	1,192	(2,908)
Unrecognized gain (loss) on derivatives qualifying as cash flow hedges, net of tax	1,119	(195)	(496)
Unrecognized gain on available for sale securities, net of tax	0	0	0
Balance at end of year	$ (1,838)	$ (4,392)	$ (5,389)
Non-controlling interest			
Balance at beginning of year	$ 0	$ 29,314	$ 39,190
Acquisition of non-controlling interest	0	(28,890)	(5,349)
Net loss attributable to non-controlling interests	0	(424)	(4,527)
Balance at end of year	$ 0	$ 0	$ 29,314
Total Stockholders' Equity at beginning of year	$ 1,285,188	$ 1,580,427	$ 1,160,072
Total Stockholders' Equity at end of year	$ 1,666,243	$ 1,285,188	$ 1,580,427

The accompanying notes are an integral part of these consolidated financial statements.

ALLSCRIPTS HEALTHCARE SOLUTIONS, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS

(In thousands)	Year Ended December 31, 2020	2019	2018
Cash flows from operating activities:			
Net income (loss)	$ 700,407	$ (182,602)	$ 407,807
Less: Income from discontinued operations	833,026	55,809	451,023
Loss from continuing operations	(132,619)	(238,411)	(43,216)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:			
Depreciation and amortization	192,269	198,226	184,357
Operating right-of-use asset amortization	20,720	21,882	0
Stock-based compensation expense	34,036	38,982	34,638
Deferred taxes	(3,275)	(37,970)	4,144
Asset impairment charges	74,969	10,837	58,166
Goodwill impairment charge	0	25,700	13,466
Impairment of long-term investments	1,575	651	15,487
Equity in net income of unconsolidated investments	(17,194)	(665)	(259)
Gain on sale of businesses, net	0	0	(172,258)
Other (income) loss, net	(5,900)	10,042	(9,079)
Changes in operating assets and liabilities (net of businesses acquired):			
Accounts receivable and contract assets, net	35,163	(9,430)	(120,522)
Prepaid expenses and other assets	(34,418)	(16,251)	(96,701)
Accounts payable	(66,987)	27,552	(10,809)
Accrued expenses	(3,064)	(3,894)	43,424
Accrued compensation and benefits	49,492	(32,764)	20,441
Deferred revenue	28,667	(92,067)	65,029
Other liabilities	5,334	(7,555)	11,900
Operating leases	(19,266)	(24,470)	0
Accrued DOJ settlement	(147,169)	145,000	0
Net cash provided by (used in) operating activities - continuing operations	12,333	15,395	(1,792)
Net cash (used in) provided by operating activities - discontinued operations	(119,048)	30,859	69,683
Net cash (used in) provided by operating activities	(106,715)	46,254	67,891
Cash flows from investing activities:			
Capital expenditures	(17,025)	(16,450)	(30,345)
Capitalized software	(87,993)	(103,317)	(103,454)
Cash paid for business acquisitions, net of cash acquired	0	(23,443)	(177,233)
Cash received from sale of businesses, net of cash divested	1,710,000	0	807,764
Purchases of equity securities, other investments and related intangible assets, net	(7,097)	(8,235)	(16,934)
Sale of other investments	24,967	1,044	0
Other proceeds from investing activities	0	14	54
Net cash provided by (used in) investing activities - continuing operations	1,622,852	(150,387)	479,852
Net cash used in investing activities - discontinued operations	(7,664)	(10,669)	(231,839)
Net cash provided by (used in) investing activities	1,615,188	(161,056)	248,013
Cash flows from financing activities:			
Proceeds from sale or issuance of common stock	0	0	1,283
Taxes paid related to net share settlement of equity awards	(6,033)	(7,286)	(9,466)
Proceeds from issuance of 0.875% Convertible Senior Notes	0	218,000	0
Payments for issuance costs on 0.875% Convertible Senior Notes	(758)	(5,445)	0
Payments for capped call transaction on 0.875% Convertible Senior Notes	0	(17,222)	0
Repayment of Convertible Senior Notes	(352,361)	0	0
Credit facility payments	(1,315,000)	(220,000)	(713,751)
Credit facility borrowings, net of issuance costs	903,625	279,241	430,843
Repurchase of common stock	(134,863)	(111,460)	(138,928)
Accelerated share repurchase program	(200,000)	0	0
Payment of acquisition and other financing obligations	(4,369)	(14,685)	(5,198)
Purchases of subsidiary shares owned by non-controlling interest	0	(53,800)	(7,198)
Net cash (used in) provided by financing activities - continuing operations	(1,109,759)	67,343	(442,415)
Net cash provided by financing activities - discontinued operations	0	0	149,432
Net cash (used in) provided by financing activities	(1,109,759)	67,343	(292,983)
Effect of exchange rate changes on cash and cash equivalents	1,212	203	(624)
Net increase (decrease) in cash and cash equivalents	399,926	(47,256)	22,297
Cash, cash equivalents and restricted cash, beginning of period	137,539	184,795	162,498
Cash, cash equivalents and restricted cash, end of period	$ 537,465	$ 137,539	$ 184,795

The accompanying notes are an integral part of these consolidated financial statements.

1. Basis of Presentation and Significant Accounting Policies

Principles of Consolidation

The consolidated financial statements include the accounts of Allscripts Healthcare Solutions, Inc. (“Allscripts”) and its wholly-owned subsidiaries and controlled affiliates. All significant intercompany balances and transactions have been eliminated. Each of the terms “we,” “us,” “our” or the “Company” as used herein refers collectively to Allscripts Healthcare Solutions, Inc. and its wholly-owned subsidiaries and controlled affiliates, unless otherwise stated.

Use of Estimates

The preparation of consolidated financial statements in accordance with generally accepted accounting principles in the United States of America (“GAAP”) requires us to make estimates and assumptions that affect the amounts reported and disclosed in the consolidated financial statements and the accompanying notes. Our estimates and assumptions consider the economic implications of COVID-19 on our critical and significant accounting estimates. Actual results could differ materially from these estimates.

Change in Presentation

During the first quarter of 2020, we changed our reportable segments from Provider, Veradigm and Unallocated to Core Clinical and Financial Solutions, Data, Analytics and Care Coordination, and Unallocated. The business units reported within the historical segments have been reallocated into the new segments. Refer to Note 19 “Business Segments” for further discussion on the impact of the change.

Certain reclassifications were made to prior period amounts in order to conform to the current period presentation. These reclassifications had no impact on the reported consolidated prior period financial results.

Cash and Cash Equivalents

We consider all highly liquid investments with an original maturity of three months or less, when purchased, to be cash equivalents. The fair values of these investments approximate their carrying values.

Other Financial Assets and Liabilities

We have investments in equity instruments for which it is not practicable to estimate fair value primarily because of their illiquidity and restricted marketability. Such investments are recorded initially at cost, less impairment and changes resulting from observable price changes and equity methods of accounting. Refer to Note 6, “Fair Value Measurements and Other Investments” for additional information about these investments.

Our long-term financial liabilities include amounts outstanding under our Senior Secured Credit Facility (as defined in Note 10, “Debt”), with carrying values that approximate fair value since the interest rates approximate current market rates. As of December 31, 2019, the carrying amount of the 1.25% Notes (as defined in Note 10, “Debt”) approximated fair value since the effective interest rate on the 1.25% Notes approximated current market rates. On July 1, 2020, the 1.25% Notes matured and were paid in full. See Note 10, “Debt” for further information regarding our long-term financial liabilities.

Derivative Financial Instruments

Derivative instruments are recognized as either assets or liabilities and are measured at fair value. The accounting for changes in the fair value of a derivative depends on the intended use of the derivative and the resulting designation. See Note 16, “Derivative Financial Instruments” for information regarding gains and losses from derivative instruments during the years ended December 31, 2020, 2019 and 2018.

Trade Accounts Receivable

Accounts receivable are recorded at the invoiced amounts and do not bear interest.

Contingent Liabilities

A liability is contingent if the amount is not presently known but may become known in the future as a result of the occurrence of some uncertain future event. We accrue a liability for an estimated loss if we determine that the potential loss is probable of occurring and the amount can be reasonably estimated. Significant judgment is required in both the determination of probability and the determination as to whether the amount of an exposure is reasonably estimable, and accruals are based only on the information available to our management at the time the judgment is made.

The assessment of contingent liabilities, including legal and income tax contingencies, involves the use of estimates, assumptions and judgments. Our estimates are based on our belief that future events will validate the current assumptions regarding the ultimate outcome of these exposures. However, there can be no assurance that future events, such as court decisions or Internal Revenue Service ("IRS") positions, will not differ from our assessments.

Fixed Assets

Fixed assets are stated at cost. Depreciation and amortization are computed under the straight-line method over the estimated useful lives of the related assets. The depreciable life of leasehold improvements is the shorter of the lease term or the useful life. Upon asset retirement or other disposition, the fixed asset cost and the related accumulated depreciation or amortization are removed from the accounts, and any gain or loss is included in the consolidated statements of operations. Amounts incurred for repairs and maintenance are expensed as incurred.

Business Combinations

Goodwill as of the acquisition date is measured as the excess of consideration transferred over the net of the acquisition date fair values of the assets acquired and the liabilities assumed. While we use our best estimates and assumptions as a part of the purchase price allocation process to accurately value the assets acquired, including intangible assets, and the liabilities assumed at the acquisition date, our estimates are inherently uncertain and subject to refinement. As a result, during the measurement period, which may be up to one year from the acquisition date, we may record adjustments to the fair values of the assets acquired and the liabilities assumed, with a corresponding offset to goodwill. Upon the conclusion of the measurement period or final determination of the values of assets acquired or the liabilities assumed, whichever comes first, any subsequent adjustments are reflected in our consolidated statements of operations.

Goodwill and Intangible Assets

Goodwill and intangible assets acquired in a business combination and determined to have an indefinite useful life are not amortized but are tested for impairment annually or between annual tests when an impairment indicator exists. If an optional qualitative goodwill impairment assessment is not performed, we are required to determine the fair value of each reporting unit. If a reporting unit's fair value is lower than the carrying value, an impairment loss equal to the excess will be recorded not to exceed the carrying amount of goodwill assigned to the reporting unit. The recoverability of indefinite-lived intangible assets is assessed by comparison of the carrying value of an asset to its estimated fair value. If we determine that the carrying value of an asset exceeds its estimated fair value, an impairment loss equal to the excess will be recorded.

The determination of the fair value of our reporting units is based on a combination of a market approach, which considers benchmark company market multiples, and an income approach, which utilizes discounted cash flows for each reporting unit and other Level 3 inputs. Under the income approach, we determine fair value based on the present value of the most recent cash flow projections for each reporting unit as of the date of the analysis and calculate a terminal value utilizing a terminal growth rate. The significant assumptions under this approach include, among others: income projections, which are dependent on sales to new and existing clients, new product introductions, client behavior, competitor pricing, operating expenses, the discount rate, and the terminal growth rate. The cash flows used to determine fair value are dependent on a number of significant management assumptions such as our expectations of future performance and the expected future economic environment, which are partly based upon our historical experience. Our estimates are subject to change given the inherent uncertainty in predicting future results. Additionally, the discount rate and the terminal growth rate are based on our judgment of the rates that would be utilized by a hypothetical market participant. As part of the goodwill impairment testing, we also consider our market capitalization in assessing the reasonableness of the combined fair values estimated for our reporting units.

In accordance with GAAP, definite-lived intangible assets are required to be amortized over their respective estimated useful lives and reviewed for impairment whenever events or changes in circumstances indicate that their carrying amounts may not be recoverable. We estimate the useful lives of our intangible assets and ratably amortize their value over the estimated useful lives of those assets. If the estimates of the useful lives should change, we will amortize the remaining book value over the remaining useful lives or, if an asset is deemed to be impaired, a write-down of the value of the asset may be required at such time.

Long-Lived Assets and Long-Lived Assets to Be Disposed Of

We review our long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to future net cash flows expected to be generated by the asset. If assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds the fair value of the assets.

Software Development Costs

We capitalize purchased software upon acquisition if it is accounted for as internal-use software or if it meets the future alternative use criteria. For software to be sold, we capitalize incurred labor costs for software development from the time technological feasibility of the software is established, or when the preliminary project phase is completed in the case of internal-use software, until the software is available for general release. Research and development costs and other computer software maintenance costs related to software development are expensed as incurred. We estimate the useful life of our capitalized software and amortize its value over that estimated life. If the actual useful life is determined to be shorter than our estimated useful life, we will amortize the remaining book value over the remaining useful life or the asset may be deemed to be impaired and, accordingly, a write-down of the value of the asset may be recorded as a charge to earnings. Upon the availability for general release, we commence amortization of the capitalized software costs on a product by product basis. Amortization of capitalized software is recorded using the greater of (i) the ratio of current revenues to total and anticipated future revenues for the applicable product or (ii) the straight-line method over the remaining estimated economic life, which is estimated to be three to five years.

At each balance sheet date, the unamortized capitalized costs of a software product are compared with the net realizable value of that product. The net realizable value is the estimated future gross revenues from that product reduced by the estimated future costs of completing and disposing of that product, including the costs of performing maintenance and client support required to satisfy our responsibility set forth at the time of sale. The amount by which the unamortized capitalized costs of a software product exceed the net realizable value of that asset is written off. If we determine that the value of the capitalized software could not be recovered, a write-down of the value of the capitalized software to its recoverable value is recorded as a charge to earnings.

The unamortized balances of capitalized software were as follows:

	December 31,	
(In thousands)	**2020**	**2019**
Software development costs	$ 327,519	$ 393,728
Less: accumulated amortization	(134,317)	(171,036)
Software development costs, net	$ 193,202	$ 222,692

Capitalized software development costs, write-offs included in asset impairment changes and amortization of capitalized software development costs included in cost of revenue are illustrated in the following table:

	Year Ended December 31,		
(In thousands)	**2020**	**2019**	**2018**
Capitalized software development costs	$ 87,993	$ 103,317	$ 103,454
Write-offs and divestitures of capitalized software development costs	$ 31,214	$ 0	$ 34,083
Amortization of capitalized software development costs	$ 86,269	$ 72,840	$ 59,653

Income Taxes

We account for income taxes using the liability method, which requires the recognition of deferred tax assets or liabilities for the tax-effected temporary differences between the financial reporting and tax bases of our assets and liabilities and for net operating loss and tax credit carryforwards. The objectives of accounting for income taxes are to recognize the amount of taxes payable or refundable for the current year and deferred tax liabilities and assets for the future tax consequences of events that have been recognized in an entity's financial statements or tax returns. Judgment is required in addressing the future tax consequences of events that have been recognized in our consolidated financial statements or tax returns. The deferred tax assets are recorded net of a valuation allowance when, based on the weight of available evidence, we believe it is more likely than not that some portion or all of the recorded deferred tax assets will not be realized in future periods. We consider many factors when assessing the likelihood of future realization of our deferred tax assets, including recent cumulative earnings experience, expectations of future taxable income, the ability to carryback losses and other relevant factors.

In addition, we are subject to the continuous examination of our income tax returns by the IRS and other tax authorities. A change in the assessment of the outcomes of such matters could materially impact our consolidated financial statements.

The calculation of tax liabilities involves dealing with uncertainties in the application of complex tax regulations. We recognize liabilities for anticipated tax audit issues based on our estimate of whether, and the extent to which, additional taxes may be required. If we ultimately determine that payment of these amounts is unnecessary, then we reverse the liability and recognize a tax benefit during the period in which we determine that the liability is no longer necessary. We also recognize tax benefits to the extent that it is more likely than not that our positions will be sustained if challenged by the taxing authorities. To the extent we prevail in matters for which liabilities have been established or are required to pay amounts in excess of our liabilities, our effective tax rate in a given period may be materially affected. An unfavorable tax settlement would require cash payments and may result in an increase in our effective tax rate in the year of resolution. A favorable tax settlement would be recognized as a reduction in our effective tax rate in the year of resolution. We report interest and penalties related to uncertain income tax positions in the income tax (provision) benefit line of our consolidated statements of operations.

We file income tax returns in the United States federal jurisdiction, numerous states in the United States and multiple countries outside of the United States.

Stock-Based Compensation

We account for stock-based compensation in accordance with GAAP, which requires the measurement and recognition of compensation expense for all share-based payment awards made to employees and non-employee directors based on their estimated fair value. We measure stock-based compensation cost at the grant date based on the fair value of the award and recognize the expense over the requisite service period typically on a straight-line basis, net of estimated forfeitures. We recognize stock-based compensation cost for awards with performance conditions if and when we conclude that it is probable that the performance conditions will be achieved. The fair value of service-based restricted stock units and restricted stock awards is measured at their underlying closing share price on the date of grant. The fair value of market-based restricted stock units is measured using the Monte Carlo pricing model. The net proceeds from stock-based compensation activities are reflected as a financing activity within the accompanying consolidated statements of cash flows. We settle employee stock option exercises and stock awards with newly issued common shares. Refer to Note 12, "Stock Award Plan" for detailed discussion about our stock-based incentive plan.

Employee Benefit Plans

We provide employees with defined contribution savings plans. We recognize expense for our contributions to the savings plans at the time employees make contributions to the plans and we contributed the following amounts to these plans:

	Year Ended December 31,		
(In thousands)	**2020**	**2019**	**2018**
Company contributions to employee benefit plans	$ 21,143	$ 23,998	$ 28,803

Foreign Currency

The determination of the functional currency of our foreign subsidiaries is made based on the appropriate economic and management indicators. Our foreign subsidiaries use the local currency of their respective countries as the functional currency, with the exception of our operating subsidiaries in India and Israel which use the United States dollar as a functional currency. The assets and liabilities of foreign subsidiaries whose functional currency is the local currency are translated into United States dollars at the exchange rates in effect at the consolidated balance sheet date, while revenues and expenses are translated at the average rates of exchange during the year. Translation gains and losses are not included in determining net income or loss but are included as a separate component of accumulated other comprehensive loss. Gains and losses resulting from foreign currency transactions are included in determining net income or loss and have not been material in any years presented in the accompanying consolidated statements of operations. We periodically enter into non-deliverable forward foreign currency exchange contracts in order to hedge a portion of our forecasted future Indian Rupee-denominated ("INR") expenses against foreign currency fluctuations between the United States dollar and the INR. See Note 16, "Derivative Financial Instruments," for information regarding these foreign currency exchange contracts.

Concentrations of Credit Risk

Financial instruments that potentially subject us to a concentration of credit risk consist of cash, cash equivalents, marketable securities and trade receivables. We primarily maintain our cash balances with one major commercial bank domestically and several commercial banks internationally.

We sell our products and services to healthcare providers. Credit risk with respect to trade receivables is generally diversified due to the large number of clients and their geographic dispersion. To reduce credit risk, we perform ongoing credit evaluations of significant clients and their payment histories. In general, we do not require collateral from our clients, but we do enter into advance deposit agreements, if appropriate.

The majority of our revenue is derived from clients located in the United States. The majority of long-lived assets are also located in the United States. For the year ended December 31, 2020, we had one client that accounted for 12% of our revenue. Other than this one client, no single client accounted for more than 10% of our revenue in the years ended December 31, 2020, 2019 and 2018. No client represented more than 10% of accounts receivable as of December 31, 2020 and 2019.

Recently Adopted Accounting Pronouncements

We adopted Accounting Standards Update No. 2016-13, "*Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*" ("ASU 2016-13") on January 1, 2020 using the cumulative-effect adjustment transition method. The guidance in ASU 2016-13 replaces the previous GAAP incurred loss impairment methodology. The new impairment model requires immediate recognition of estimated credit losses expected to occur for most financial assets and certain other instruments. For available-for-sale debt securities with unrealized losses, the losses are recognized as allowances rather than reductions in the amortized cost of the securities. ASU 2016-13 is effective for annual periods beginning after December 15, 2019, and interim periods within those annual periods. Refer to Note 2 "Revenue from Contracts with Customers" and Note 3 "Accounts Receivable" for further discussion on the impact of adoption.

In August 2018, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update No. 2018-13, *"Fair Value Measurement (Topic 820) – Disclosure Framework – Changes to the Disclosure Requirements for Fair Value Measurement"* ("ASU 2018-13"), which eliminates, adds and modifies certain disclosure requirements for fair value measurements. Entities will no longer be required to disclose the amount of and reasons for transfers between Level 1 and Level 2 of the fair value hierarchy, but public companies will be required to disclose the range and weighted-average of significant unobservable inputs used to develop Level 3 fair value measurements. ASU 2018-13 is effective for all entities for interim and annual periods beginning after December 15, 2019, with early adoption permitted. We adopted ASU 2018-13 on January 1, 2020, and the adoption had no impact on our consolidated financial statements.

In March 2020, the FASB issued Accounting Standards Update No. 2020-04, *"Reference Rate Reform (Topic 848) – Facilitation of the Effects of Reference Rate Reform on Financial Reporting"* ("ASU 2020-04"), which provides optional expedients and exceptions for applying GAAP to contracts, hedging relationships, and other transactions affected by reference rate reform if certain criteria are met. The amendments in ASU 2020-04 apply only to contracts, hedging relationships, and other transactions that reference LIBOR or another reference rate expected to be discontinued because of reference rate reform. ASU 2020-04 is effective for all entities as of March 12, 2020 through December 31, 2022. We adopted ASU 2020-04 on March 12, 2020, and the adoption had no impact on our consolidated financial statements.

Accounting Pronouncements Not Yet Adopted

In December 2019, the FASB issued Accounting Standards Update No. 2019-12, "*Income Taxes (Topic 740)*" ("ASU 2019-12"), which is part of the FASB's overall simplification initiative to reduce the costs and complexity of applying accounting standards while maintaining or improving the usefulness of the information provided to users of financial statements. ASU 2019-12 simplifies accounting guidance for intraperiod allocations, deferred tax liabilities, year-to-date losses in interim periods, franchise taxes, step-up in tax basis of goodwill, separate entity financial statements and interim recognition of tax laws or rate changes. ASU 2019-12 is effective for public business entities for annual reporting periods beginning after December 15, 2020, with early adoption permitted. The adoption of this guidance is not expected to have a significant impact on our consolidated financial statements.

In August 2020, the FASB issued Accounting Standards Update No. 2020-06, "*Debt—Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging—Contracts in Entity's Own Equity (Subtopic 815-40): Accounting for Convertible Instruments and Contracts in an Entity's Own Equity"* ("ASU 2020-06"). The amendments in ASU 2020-06 simplify the accounting for convertible instruments by removing major separation models required under current GAAP. ASU 2020-06 removes certain settlement conditions that are required for equity contracts to qualify for the derivative scope exceptions and also simplifies the diluted earnings per share calculation in certain areas. The standard is effective for public business entities, excluding entities eligible to be smaller reporting companies as defined by the SEC, for fiscal years and interim periods within those fiscal years, beginning after December 15, 2021. Early adoption is permitted, but no earlier than fiscal years beginning after December 15, 2020, and adoption must be as of the beginning of the fiscal year. We are currently evaluating the impact of this accounting guidance.

2. Revenue from Contracts with Customers

Our two primary revenue streams are (i) software delivery, support and maintenance and (ii) client services. Software delivery, support and maintenance revenue consists of all of our proprietary software sales (either under a perpetual or term license delivery model), subscription-based software sales, transaction-related revenue, the resale of hardware and third-party software and revenue from post-contract client support and maintenance services, which include telephone support services, maintaining and upgrading software and ongoing enhanced maintenance. Client services revenue consists of revenue from managed services solutions, such as private cloud hosting, outsourcing and revenue cycle management, as well as other client services and project-based revenue from implementation, training and consulting services. For other clients, we offer an outsourced service in which we assume partial to total responsibility for a healthcare organization's IT operations using our employees.

Costs to Obtain or Fulfill a Contract

Capitalized costs to obtain or fulfill a contract are amortized over periods ranging from two to six years which represent the initial contract term or a longer period, if renewals are expected and the renewal commission, if any, is not commensurate with the initial commission. We classify such capitalized costs as current or non-current based on the expected timing of expense recognition. The current and non-current portions are included in Prepaid expenses and other current assets, and Other assets, respectively, in our consolidated balance sheets.

At December 31, 2020 and 2019, we had capitalized costs to obtain or fulfill a contract of $16.8 million and $18.4 million, respectively, in Prepaid and other current assets and $27.9 million and $28.9 million, respectively, in Other assets. During the year ended December 31, 2020 and 2019, we recognized $23.6 million and $30.5 million, respectively, of amortization expense related to such capitalized costs, which is included in selling, general and administrative expenses.

Contract Balances

The timing of revenue recognition, billings and cash collections results in billed and unbilled accounts receivables, contract assets and customer advances and deposits. Accounts receivable, net includes both billed and unbilled amounts where the right to receive payment is unconditional and only subject to the passage of time. Contract assets include amounts where revenue recognized exceeds the amount billed to the customer and the right to payment is not solely subject to the passage of time. Deferred revenue includes advanced payments and billings in excess of revenue recognized. Our contract assets and deferred revenue are reported in a net position on an individual contract basis at the end of each reporting period. Contract assets are classified as current or long-term based on the timing of when we expect to complete the related performance obligations and bill the customer. Deferred revenue is classified as current or long-term based on the timing of when we expect to recognize revenue.

In general, with the exception of fixed fee project-based client service offerings (such as implementation services), we sell our software solutions on date-based milestone events where control transfers and use of the software occurs on the delivery date but the associated payments for the software license occur on future milestone dates. In such instances, unbilled amounts are included in contract assets since our right to receive payment is conditional upon the continued functionality of the software and the provision of ongoing support and maintenance. Our fixed fee project-based client service offerings typically require us to provide the services with either a significant portion or all amounts due prior to service completion. Since our right to payment is not unconditional, amounts associated with work prior to the completion date are also deemed to be contract assets.

Performance Obligations

A performance obligation is a promise in a contract to transfer a distinct product or service to a customer and is the unit of account under the FASB Accounting Standards Codification 606, Revenue from Contracts with Customers (“ASC 606”). A performance obligation is considered distinct when both (i) a customer can benefit from the product or service either on its own or together with other resources that are readily available to the customer and (ii) the promised product or service is separately identifiable from other promises in the contract. Activities related to the fulfillment of a contract that do not transfer products or services to a customer, such as contract preparation or legal review of contract terms, are not deemed to be performance obligations.

We generally sell our solutions through contracts with multiple performance obligations where we provide the customer with (1) software licenses, (2) support and maintenance, (3) embedded content such as third-party software and (4) client services. Incremental solutions, such as hardware and managed services are also provided based upon a customer’s preferences and requirements. We deem that a customer is typically able to benefit from a product or service on its own or together with readily available resources when we sell such product or service on a standalone basis. We have historically sold the majority of our performance obligations, with the exception of software licenses, on a standalone basis. Incremental solutions, such as hardware, client services and managed services, are often negotiated and fulfilled on an independent sales order basis as customer needs and requirements change over the course of a relationship period. In addition, support and maintenance and embedded content are provided on a stand-alone basis through the renewal process.

One of the product offerings under our *CareInMotion*™ platform requires significant client service customization to enable the functionality of the software before the customer can obtain benefit from using the product. The significant customization cannot be performed by a third party. Software products and client services are separately identifiable in these contracts, but the performance obligations are not considered distinct in the context of the contract. Therefore, these products and services are treated as a combined performance obligation.

Our support and maintenance obligations include multiple discrete performance obligations, with the two largest being unspecified product upgrades or enhancements, and technical support, which can be offered at various points during a contract period. We believe that the multiple discrete performance obligations within our overall support and maintenance obligations can be viewed as a single performance obligation since both the unspecified product upgrades and technical support are activities to fulfill the maintenance performance obligation and are rendered concurrently.

The breakdown of revenue recognized based on the origination of performance obligations and elected accounting expedients is presented in the table below:

(In thousands)	Three Months Ended March 31, 2020	Three Months Ended June 30, 2020	Three Months Ended September 30, 2020	Three Months Ended December 31, 2020
Revenue related to deferred revenue balance at beginning of period	$ 105,366	$ 119,545	$ 118,300	$ 138,279
Revenue related to new performance obligations satisfied during the period	216,580	195,308	192,658	182,690
Revenue recognized under "right-to-invoice" expedient	58,059	54,082	54,313	65,108
Reimbursed travel expenses, shipping and other revenue	1,359	369	347	337
Total revenue	$ 381,364	$ 369,304	$ 365,618	$ 386,414

(In thousands)	Three Months Ended March 31, 2019	Three Months Ended June 30, 2019	Three Months Ended September 30, 2019	Three Months Ended December 31, 2019
Revenue related to deferred revenue balance at beginning of period	$ 93,602	$ 113,288	$ 116,812	$ 136,460
Revenue related to new performance obligations satisfied during the period	248,126	233,293	227,954	214,952
Revenue recognized under "right-to-invoice" expedient	55,923	62,245	61,814	60,826
Reimbursed travel expenses, shipping and other revenue	1,467	2,057	1,700	2,092
Total revenue	$ 399,118	$ 410,883	$ 408,280	$ 414,330

The aggregate amount of contract transaction price related to remaining unsatisfied performance obligations (commonly referred to as “backlog”) represents contracted revenue that has not yet been recognized and includes both deferred revenue and amounts that will be invoiced and recognized as revenue in future periods. Total backlog equaled $4.1 billion as of December 31, 2020, of which we expect to recognize approximately 35% over the next 12 months, and the remaining 65% thereafter.

Transaction price and allocation

Our contracts with customers often include multiple distinct performance obligations such as software licenses, software support and maintenance, hardware, client services, private cloud hosting and Software-as-a-Service. We adjust the transaction price on a contract-by-contract basis for (i) the effect of the time value of money when a contract has a significant financing component and/or (ii) customer discounts and incentives deemed to be variable consideration. We then allocate the contract transaction price to the distinct performance obligations in the contract. Such allocation is based on the stand-alone selling price (“SSP”) of each distinct performance obligation. The transaction price allocated to each distinct performance obligation is adjusted for discounts offered to customers that are outside of the Company’s established sufficiently narrow ranges for distinct performance obligations’ SSPs on a relative SSP basis.

We use observable stand-alone pricing to determine the SSP for each distinct performance obligation. Such observable SSPs are based upon our listed sales prices and consider discounts offered to customers. In instances where SSP is not directly observable because we do not sell the product or service separately, we determine the SSP through the residual approach or cost-plus margin models using information that includes market conditions and other observable inputs. Such instances primarily relate to sales of new products and service offerings and our acute suite of software licenses. Our acute suite of software licenses is sold to a diverse set of customers for a broad range of amounts and, therefore, SSP is not discernible from past transactions due to the high variability of selling prices.

Our products and services are generally not sold with a right of return, except for certain hardware sales, which are not material to our consolidated revenue. We may provide credits or incentives on a contract-by-contract basis which are accounted for either as a material right or as variable consideration, respectively, when allocating the transaction price. Such credits and incentives have historically not been significant. We do not provide additional warranties to clients above and beyond warranties that the solutions purchased will perform in accordance with the agreed-upon specifications. On rare occasions, when additional warranties are granted, we evaluate on a case-by-case basis whether the additional warranty granted represents a separate performance obligation.

Accounting Policy Elections and Practical Expedients

We have elected to exclude from the measurement of the transaction price all taxes (e.g., sales, use, value-added) assessed by government authorities and collected from a customer. Therefore, revenue is recognized net of such taxes.

We contract with customers to deliver and ship tangible products within the normal course of business, such as computer hardware. The control of the products transfers to the customer when the product reaches the shipper based on free on board (FOB) shipping clauses in these situations. We have elected to use the practical expedient allowed under ASC 606 to account for shipping and handling activities that occur after the customer has obtained control of a promised good as fulfillment costs rather than as an additional promised service and, therefore, we do not allocate a portion of the transaction price to a shipping service obligation. We record as revenue any amounts billed to customers for shipping and handling costs and record as cost of revenue the actual shipping costs incurred.

Our standard contract terms allow for the reimbursement by a customer for certain travel expenses necessary to provide on-site services to the customer, such as implementation and training. Such reimbursed travel expenses are reported on a gross basis. Since such reimbursed travel expenses do not represent a distinct good or service nor incremental value provided to a customer, a performance obligation is deemed not to exist. In certain situations, however, when the allowable reimbursable expenses amount is capped, we believe that such cap represents the most likely amount of variable consideration and the capped amount is included in the total contract transaction price.

In accordance with ASC 606, if an entity has a right to consideration from a customer in an amount that corresponds directly with the value to the customer of the entity's performance completed to date, the entity may recognize revenue in the amount to which the entity has a right to invoice ("right-to-invoice" practical expedient). We have elected to utilize this expedient as it relates to transaction-based services (such as revenue cycle management) and electronic data interchange transactions.

Revenue Recognition

We recognize revenue only when we satisfy an identified performance obligation (or bundle of obligations) by transferring control of a promised product or service to a customer. We consider a product or service to be transferred when a customer obtains control because a customer has sole possession of the right to use (or the right to direct the use of) the product or service for the remainder of its economic life or to consume the product or service in its own operations. We evaluate the transfer of control primarily from the customer's perspective as this reduces the risk that revenue is recognized for activities that do not transfer control to the customer.

The majority of our revenue is recognized over time because a customer continuously and simultaneously receives and consumes the benefits of our performance. The exceptions to this pattern are our sales of perpetual and term software licenses, and hardware, where we determined that a customer obtains control of the asset upon granting of access, delivery or shipment. The following table summarizes the pattern of revenue recognition for our most significant performance obligations:

Performance Obligation	**Revenue Type**	**Recurring or Non-recurring Nature**	**Revenue Recognition Pattern**	**Measure of progress**
Support and maintenance ("SMA")	Software delivery, support and maintenance	Recurring	Over time	Output method (time elapsed) – revenue is recognized ratably over the contract term
Software as a service ("SaaS")	Software delivery, support and maintenance	Recurring	Over time	Output method (time elapsed) – revenue is recognized ratably over the contract term
Private cloud hosting	Client services	Recurring	Over time	Output method (time elapsed) – revenue is recognized ratably over the contract term
Client/Education services	Client services	Non-recurring	Over time	Input method (cost to cost) – revenue is recognized proportionally over the service implementation based on hours
Outsourcing services	Client services	Recurring	Over time	Input method (cost to cost) – revenue is recognized proportionally over the outsourcing period
Payerpath (transaction volume)	Software delivery, support and maintenance	Recurring	Over time	Output method ("right-to-invoice" practical expedient) – value transferred to the customer is reflected on invoicing.
Software licenses	Software delivery, support and maintenance	Non-recurring	Point in time	Upon electronic delivery
Hardware	Software delivery, support and maintenance	Non-recurring	Point in time	Upon shipment

Recurring software delivery, support and maintenance revenue consists of recurring subscription-based software sales, support and maintenance revenue, and recurring transaction-related revenue. Non-recurring software delivery, support and maintenance revenue consists of perpetual software licenses sales, resale of hardware and non-recurring transaction-related revenue. Recurring client services revenue consists of revenue from managed services solutions, such as outsourcing, private cloud hosting and revenue cycle management. Non-recurring client services revenue consists of project-based client services revenue.

SMA, SaaS and private cloud hosting performance obligations are deemed to be performance obligations satisfied evenly over time as these are fulfilled as stand-ready obligations to perform. Client services, such as those relating to implementation, consulting, training or education, are generally not fulfilled evenly over the contract period, but rather over a shorter timeline where work effort can increase, or decline based upon stages of the project work effort. These client services are typically quoted to a customer as a fixed fee amount that covers the implementation effort. Delivery progress for these services is measured by establishing an approved cost budget with labor hour inputs utilized to gauge percentage of completion of the work effort. Therefore, revenue for our client, education and outsourcing services is recognized proportionally with the progress of the implementation work effort.

Payerpath transaction volume and other transaction-based service obligations, such as revenue cycle management services, are fulfilled over time but are not provided evenly over the contract period and reliable inputs are not available to track progress of completion. We determined that value is provided to the customer throughout the contract period and the pricing charged to the customer varies on a monthly basis, based upon the volume of the customer's transactions processed in that respective period. The invoiced amount to the customer represents this value and, accordingly, the practical expedient to recognize revenue based upon invoicing is most appropriate.

We considered the specific implementation guidance for accounting for licenses of intellectual property ("IP") to determine if point in time or over time recognition was more appropriate. The first step in the licensing framework is to determine whether the license is distinct or combined with other goods and services. For most of our software licensing products, the licenses are distinct, with the exception of one of our product offerings under our *CareInMotion*™ platform, which requires a significant client service customization. In all instances, we determined that we are offering functional IP as compared with a symbolic IP. Functional IP is a right to use IP because the IP has standalone functionality and a customer can use the IP as it exists at a point in time.

Disaggregation of Revenue

We disaggregate our revenue from contracts with customers based on the type of revenue and nature of revenue stream, as we believe those categories best depict how the nature, amount, timing and uncertainty of our revenue and cash flows are affected by economic factors. The below tables summarize revenue by type and nature of revenue stream as well as by our reportable segments:

	Year Ended December 31,		
(In thousands)	**2020**	**2019**	**2018**
Revenue:			
Recurring revenue	$ 1,222,731	$ 1,278,456	$ 1,313,281
Non-recurring revenue	279,969	354,155	304,560
Total revenue	$ 1,502,700	$ 1,632,611	$ 1,617,841

	Year Ended December 31, 2020			
(In thousands)	**Core Clinical and Financial Solutions**	**Data, Analytics and Care Coordination**	**Unallocated Amounts**	**Total**
Software delivery, support and maintenance	$ 676,655	$ 250,877	$ (12,870)	$ 914,662
Client services	577,594	10,444	0	588,038
Total revenue	$ 1,254,249	$ 261,321	$ (12,870)	$ 1,502,700

	Year Ended December 31, 2019			
(In thousands)	**Core Clinical and Financial Solutions**	**Data, Analytics and Care Coordination**	**Unallocated Amounts**	**Total**
Software delivery, support and maintenance	$ 761,836	$ 249,561	$ (7,202)	$ 1,004,195
Client services	615,311	13,103	2	628,416
Total revenue	$ 1,377,147	$ 262,664	$ (7,200)	$ 1,632,611

	Year Ended December 31, 2018			
(In thousands)	**Core Clinical and Financial Solutions**	**Data, Analytics and Care Coordination**	**Unallocated Amounts**	**Total**
Software delivery, support and maintenance	$ 791,417	$ 237,320	$ (17,113)	$ 1,011,624
Client services	588,082	9,398	8,737	606,217
Total revenue	$ 1,379,499	$ 246,718	$ (8,376)	$ 1,617,841

Contract Assets – Estimate of Credit Losses

We adopted ASU 2016-13 on January 1, 2020 using the cumulative-effect adjustment transition method. The new guidance required the recognition of lifetime estimated credit losses expected to occur for contract assets. The guidance also required that we pool assets with similar risk characteristics and consider current economic conditions when estimating losses. The adoption of ASU 2016-13 for contract assets was recorded as a debit to retained earnings of $5.3 million as of January 1, 2020.

At adoption, we segmented the contract asset population into pools based on their risk assessment. Risks related to contract assets are a customer's inability to pay or bankruptcy. Each pool was defined by their internal credit assessment, and business size. The pools were aligned with management's review of financial performance. In the fourth quarter of 2020, we used each customer's primary business unit in our pooling determination. This assessment provides additional information of the customer including size, segment and industry. Using this perspective, we added one new pool. We reallocated pools and loss rates accordingly and noted slight shifts in each pool. The new pools are aligned with management's review of financial performance. As of December 31, 2020, no other adjustments to the pools were necessary.

We utilized a loss-rate method to measure expected credit loss for each pool. The loss rate is calculated using a twenty-four-month lookback period of credit memos and adjustments divided by the average contract asset balance for each pool during that period. We considered current economic conditions, including how the COVID-19 pandemic is impacting the global economy, internal forecasts, cash collection and credit memos written during the current period when assessing loss rates. We reviewed these factors and concluded that no adjustments should be made to the historical loss rate data. The December 31, 2020 analysis resulted in no change in the ending estimate of credit losses.

Changes in the estimate of credit losses for contract assets are presented in the table below.

(In thousands)		Total
Balance at January 1, 2020	$	5,341
Current period provision		0
Balance at December 31, 2020	$	5,341
Less: Contract assets, short-term		1,068
Total contract assets, long-term	$	4,273

3. Accounts Receivable

Trade Accounts Receivable – Estimate of Credit Losses

We adopted ASU 2016-13 on January 1, 2020 using the cumulative-effect adjustment transition method. The new guidance required the recognition of lifetime estimated credit losses expected to occur for trade accounts receivable. The guidance also required that we pool assets with similar risk characteristics and consider current economic conditions when estimating losses. The adoption of ASU 2016-13 for trade accounts receivable was recorded as a debit to retained earnings of $12.6 million as of January 1, 2020.

At adoption, we segmented the accounts receivable population into pools based on their risk assessment. Risks related to trade accounts receivable are a customer's inability to pay or bankruptcy. Each pool was defined by their internal credit assessment, and business size. The pools were aligned with management's review of financial performance. In the fourth quarter of 2020, we used each customer's primary business unit in our pooling determination. This assessment provides additional information of the customer including size, segment and industry. Using this perspective, we added one new pool. We reallocated pools and loss rates accordingly and noted slight shifts in each pool. The new pools are aligned with management's review of financial performance. As of December 31, 2020, no other adjustments to the pools were necessary.

We utilized a loss-rate method to measure expected credit loss for each pool. The loss rate is calculated using a twelve-month lookback period of credit memos and adjustments divided by the average accounts receivable balance for each pool during that period. We considered current economic conditions, including how the COVID-19 pandemic is impacting the global economy, internal forecasts, cash collection and credit memos written during the current period when assessing loss rates. We reviewed these factors and concluded that no adjustments should be made to the historical loss rate data.

Changes in the estimate of credit losses for trade accounts receivable are presented in the tables below.

(In thousands)	Total
Balance at January 1, 2020	$ 33,256
Current period provision	8,726
Write-offs	(10,484)
Recoveries	98
Balance at December 31, 2020	$ 31,596

4. Leases

We determine whether an arrangement is a lease at inception. Assets leased under an operating lease arrangement are recorded in Right-of-use assets – operating leases, and the associated lease liabilities are included in Current operating lease liabilities and Long-term operating lease liabilities within the consolidated balance sheets. Assets leased under finance lease arrangements are recorded within fixed assets and the associated lease liabilities are recorded within Accrued expenses and Other liabilities within the consolidated balance sheets.

Right-of-use assets represent our right to use an underlying asset for the lease term and lease liabilities represent our obligation to make lease payments arising from the lease. Operating lease right-of-use assets and liabilities are recognized at commencement date based on the present value of lease payments over the expected lease term. Since our lease arrangements do not provide an implicit rate, we use our incremental borrowing rate in conjunction with the market swap rate for the expected remaining lease term at commencement date for new leases in determining the present value of future lease payments. Our expected lease terms may include options to extend or terminate the lease when it is reasonably certain that we will exercise that option. Operating lease expense is recognized on a straight-line basis over the lease term.

We have elected the group of practical expedients under ASU 2016-02 to forego assessing upon adoption: (1) whether any expired contracts are or contain leases; (2) the lease classification for any existing or expired leases and (3) any indirect costs that would have qualified for capitalization for any existing leases. We have lease agreements with lease and non-lease components, which are generally accounted for separately except for real estate and vehicle leases, which we have elected to combine through a practical expedient under ASU 2016-02. Non-lease components for our leases typically comprise of executory costs, which under the practical expedient allows for executory costs to be recorded as lease payments. Additionally, for certain equipment leases, we apply a portfolio approach to effectively record right-of-use assets and liabilities.

Our operating leases mainly include office leases and our finance leases include office and computer equipment leases. Our finance leases are not significant. Our leases have remaining lease terms up to 8 years, some of which include options to extend the leases for up to 5 years, which may include options to terminate the leases within 1 year. Operating costs associated with leased assets are as follows:

(In thousands)	Year Ended December 31, 2020	Year Ended December 31, 2019
Operating lease cost (1)	$ 25,394	$ 27,235
Less: Sublease income	(1,121)	(3,265)
Total operating lease costs	$ 24,273	$ 23,970

(1) Operating lease costs are recognized on a straight-line basis and are included in Selling, general and administrative expenses within the consolidated statement of operations.

Supplemental information for operating leases is as follows:

(In thousands)	Year Ended December 31, 2020	Year Ended December 31, 2019
Operating cash flows from operating leases	$ 26,638	$ 29,348
Right-of-use assets obtained in exchange for operating lease obligations	$ 21,770	$ 141,787

The balance sheet location and balances for operating leases are as follows:

(In thousands, except lease term and discount rate)	December 31, 2020	December 31, 2019
Right-of-use assets - operating leases	$ 96,601	$ 95,757
Current operating lease liabilities	$ 22,264	$ 22,328
Long-term operating lease liabilities	$ 93,463	$ 93,588
Weighted average remaining lease term (in years)	6	6
Weighted average discount rate	3.6%	4.4%

The future maturities of our leasing arrangements including lease and non-lease components are shown in the below table. The maturities are calculated using foreign currency exchange rates in effect as of December 31, 2020.

(In thousands)	December 31, 2020 Operating Leases
2021	$ 26,090
2022	24,501
2023	22,752
2024	17,388
2025	14,927
Thereafter	22,069
Total lease liabilities	127,727
Less: Amount representing interest	(12,000)
Less: Short-term lease liabilities	(22,264)
Total long-term lease liabilities	$ 93,463

5. Business Combinations and Divestitures

2020 Divestitures

On December 31, 2020, we completed the sale of our CarePort business to a subsidiary of WellSky Corp., a Delaware corporation (“WellSky”), pursuant to a purchase agreement (the “CarePort Purchase Agreement”) by which WellSky purchased substantially all of the assets of the CarePort business. The total consideration for CarePort was $1.35 billion, which is subject to certain adjustments for liabilities assumed by WellSky and net working capital as described in the CarePort Purchase Agreement. We realized a pre-tax gain upon the sale of $933.9 million, which is included in the Gain on sale of discontinued operations line in our consolidated statements of operations for the year ended December 31, 2020. The divestiture is being treated as a discontinued operation as of December 31, 2020. Refer to Note 18, “Discontinued Operations” for further details regarding the historical assets, liabilities and results of operations of CarePort. On December 31, 2020, we repaid $161.0 million of the Term Loan (as defined below) as a result of the sale, which was a mandatory prepayment in accordance with the Second Amended Credit Agreement (as defined below).

On October 15, 2020, we completed the sale of our EPSi business to Strata Decision Technology LLC, an Illinois limited liability company (“Strata”), and Roper Technologies, Inc., a Delaware corporation pursuant to a purchase agreement (the “EPSi Purchase Agreement”) by which Strata purchased substantially all of the assets of the EPSi business. The total consideration for EPSi was $365.0 million, which is subject to certain adjustments for liabilities assumed by Strata and net working capital as described in the EPSi Purchase Agreement. We realized a pre-tax gain upon the sale of $222.6 million, which is included in the Gain on sale of discontinued operations line in our consolidated statements of operations for the year ended December 31, 2020. The divestiture is being treated as a discontinued operation as of December 31, 2020. Refer to Note 18, “Discontinued Operations” for further details regarding the historical assets, liabilities and results of operations of EPSi. On October 29, 2020, we repaid $19.0 million of the Term Loan as a result of the sale, which was a mandatory prepayment in accordance with the Second Amended Credit Agreement.

2019 Business Combinations

We acquired the Pinnacle and Diabetes Collaborative Registries from the American College of Cardiology (“ACC”) as part of our broader strategic partnership with the ACC on July 2, 2019. The total purchase price was $19.7 million, consisting of an initial payment of $11.7 million plus up to an aggregate of $8.0 million pending the attainment certain milestones over the next 18 months. The contingent consideration of up to $8.0 million was valued at $5.0 million at the time of closing. As part of this partnership, we operate Pinnacle and Diabetes Collaborative Registries, which extends our EHR-enabled ambulatory network to create a large-scale chronic disease network. The business is included in our Data, Analytics and Care Coordination business segment.

We acquired the assets of a business engaged in the development, implementation, customization, marketing, licensing and sale of a specialty prescription drug platform including software that collects, saves and transmits information required to fill a prescription on June 10, 2019. The drug platform and software will enable healthcare providers, pharmacists and payors to digitally interact with one another to fill a prescription. The business is included in our Data, Analytics and Care Coordination business segment.

We acquired all of the outstanding minority interest in Pulse8, Inc. on March 1, 2019 for $53.8 million (subject to adjustments for net working capital and a contingency holdback), plus up to a $5.0 million earnout based upon revenue targets through 2019. Pulse8, Inc. is a healthcare analytics and technology company that provides business intelligence software solutions for health plans and at-risk providers to enable them to analyze their risk adjustment and quality management programs. We initially acquired a controlling stake in Pulse 8, Inc. on September 8, 2016. This transaction was treated as an equity transaction, and the cash payment is reported as part of cash flow from financing activities in the consolidated statement of cash flows for the year ended December 31, 2019.

2018 Business Combinations and Divestitures

Acquisition of Health Grid

On May 18, 2018, we acquired all the capital stock of Health Grid Holding Company, a Delaware corporation (“Health Grid”), for a total price of $110.0 million, consisting of an initial payment of $60.0 million plus up to an aggregate of $50.0 million in future earnout payments based on Health Grid achieving certain revenue targets over the three years following the acquisition. At the time of closing, we pre-paid $10.0 million of the earnout payments and the remaining contingent consideration of up to $40.0 million was valued at $23.9 million. Health Grid is a patient engagement solutions provider that assists independent providers, hospitals and health systems to improve patient interactions and satisfaction. We have integrated the capabilities of Health Grid into our FollowMyHealth® platform. The consideration paid for Health Grid is shown below:

		(In thousands)
Aggregate purchase price	$	60,000
First earnout payment paid by Allscripts		10,000
Fair value of contingent consideration payment		23,915
Closing purchase price adjustments		2,009
Total consideration paid for Health Grid	$	95,924

The allocation of the fair value of the consideration transferred as of the acquisition date of May 18, 2018 is shown in the table below. The allocation of purchase price was finalized in the fourth quarter of 2018. The goodwill is not deductible for tax purposes.

		(In thousands)
Cash and cash equivalents	$	1,783
Accounts receivable, net		3,968
Prepaid expenses and other assets		185
Fixed assets		200
Intangible assets		41,000
Goodwill		53,953
Accounts payable and accrued expenses		(478)
Deferred revenue		(700)
Long-term deferred tax liability		(3,987)
Net assets acquired	$	95,924

The following table summarizes the preliminary fair values of the identifiable intangible assets and their estimated useful lives:

Description	Useful Life (In years)		Fair Value (In thousands)
Customer Relationships	15	$	28,000
Technology	8		13,000
		$	41,000

We incurred $0.5 million of acquisition costs which are included in selling, general and administrative expenses in the accompanying consolidated statement of operations for the year ended December 31, 2018. The results of operations of Health Grid were not material to our consolidated results of operations for the year ended December 31, 2018.

Acquisition of Practice Fusion, Inc.

On February 13, 2018, we completed the acquisition of Practice Fusion, Inc., a Delaware corporation ("Practice Fusion"), for aggregate consideration of $113.6 million paid in cash. Practice Fusion offers an affordable certified cloud-based electronic health record ("EHR") for traditionally hard-to-reach small, independent physician practices. The consideration paid for Practice Fusion is shown below:

	(In thousands)
Aggregate purchase price	$ 100,000
Add: Net working capital surplus	373
Add: Closing cash	14,951
Less: Adjustment to assumed indebtedness	(1,684)
Total consideration paid for Practice Fusion	$ 113,640

The allocation of the fair value of the consideration transferred as of the acquisition date of February 13, 2018 is shown in the table below. The allocation of the purchase price was finalized during the fourth quarter of 2018. The goodwill is not deductible for tax purposes.

	(In thousands)
Cash and cash equivalents	$ 14,951
Accounts receivable, net	13,328
Prepaid expenses and other current assets	809
Fixed assets	1,764
Intangible assets	67,100
Goodwill	35,092
Other assets	42
Accounts payable and accrued expenses	(7,378)
Deferred revenue	(2,400)
Long-term deferred tax liability	(8,853)
Other liabilities	(815)
Net assets acquired	$ 113,640

The following table summarizes the fair values of the identifiable intangible assets and their estimated useful lives:

Description	Useful Life (In years)	Fair Value (In thousands)
Customer Relationships - Physician Practices	15	$ 29,000
Customer Relationships - Pharmaceutical Partners	20	19,400
Technology	8	14,800
Tradenames	10	3,900
		$ 67,100

We incurred $1.2 million of acquisition costs which are included in selling, general and administrative expenses in the consolidated statement of operations for the year ended December 31, 2018. The results of operations of Practice Fusion were not material to our consolidated results of operations for the year ended December 31, 2018.

Netsmart LLC Divestiture

On December 31, 2018, we sold all of the Class A Common Units of Netsmart LLC, a Delaware limited liability company ("Netsmart"), owned by the Company in exchange for $566.6 million, plus a final settlement as determined following the closing pursuant to the terms of the sales agreement. Netsmart was originally acquired in April 2016, and we realized a pre-tax gain on sale of $500.5 million, which is included on the Gain on sale of discontinued operations line in our consolidated statements of operations for the year ended December 31, 2018. The divestiture of Netsmart is being treated as a discontinued operation as of December 31, 2018. Refer to Note 18, "Discontinued Operations" for further details regarding the historical assets, liabilities and results of operations of Netsmart.

Other Acquisitions and Divestitures

On June 15, 2018, we acquired all the outstanding minority interests in a third party for $6.9 million. We initially acquired a controlling interest in the third party in April 2015. Therefore, this transaction was treated as an equity transaction, and the cash payment is reported as part of cash flow from financing activities in the consolidated statement of cash flows for the year ended December 31, 2018.

On April 2, 2018, we sold substantially all of the assets of the Allscripts' business providing hospitals and health systems document and other content management software and services generally known as "OneContent" to Hyland Software, Inc., an Ohio corporation ("Hyland"). Allscripts acquired the OneContent business during the fourth quarter of 2017 through the acquisition of the EIS Business (as defined below). Certain assets of Allscripts relating to the OneContent business were excluded from the transaction and retained by Allscripts. In addition, Hyland assumed certain liabilities related to the OneContent business. The total consideration for the OneContent business was $260 million, which was subject to certain adjustments for liabilities assumed by Hyland and net working capital. We realized a pre-tax gain upon sale of $177.9 million which is included in the Gain on sales of businesses, net line in our consolidated statements of operations for the year ended December 31, 2018.

On March 15, 2018, we contributed certain assets and liabilities of our Strategic Sourcing business unit, acquired as part of the acquisition of the EIS Business in 2017, into a new entity together with $2.7 million of cash as additional consideration. In exchange for our contributions, we obtained a 35.7% interest in the new entity, which was valued at $4.0 million and is included in Other assets in our consolidated balance sheet as of December 31, 2018. This investment is accounted for under the equity method of accounting. As a result of this transaction, we recognized an initial pre-tax loss of $0.9 million and $4.7 million in additional losses due to measurement period adjustments upon the finalization of carve-out balances, mainly related to accounts receivable. These losses are included on the "Gain on sale of businesses, net" line in our consolidated statements of operations for the year ended December 31, 2018.

On February 6, 2018, we acquired all of the common stock of a cloud-based analytics software platform provider for a purchase price of $8.0 million in cash. The allocation of the consideration is as follows: $1.1 million of intangible assets related to technology; $0.6 million to customer relationships; $6.6 million of goodwill; $0.8 million to accounts receivable; deferred revenue of $0.6 million and $0.5 million of long-term deferred income tax liabilities. The allocation was finalized in the fourth quarter of 2018. The acquired intangible asset related to technology will be amortized over 8 years using a method that approximates the pattern of economic benefits to be gained from the intangible asset. The customer relationship was amortized over one year. The goodwill is not deductible for tax purposes. The results of operations of this acquisition were not material to our consolidated financial statements.

6. Fair Value Measurements and Other Investments

Fair value measurements are based upon observable and unobservable inputs. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect our view of market participant assumptions in the absence of observable market information. We utilize valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs. The fair values of assets and liabilities required to be measured at fair value are categorized based upon the level of judgment associated with the inputs used to measure their value in one of the following three categories:

Level 1: Inputs are unadjusted quoted prices in active markets for identical assets or liabilities. We held no Level 1 financial instruments at December 31, 2020 or 2019.

Level 2: Quoted prices for similar instruments in active markets with inputs that are observable, either directly or indirectly. Our Level 2 derivative financial instruments include foreign currency forward contracts valued based upon observable values of spot and forward foreign currency exchange rates. Refer to Note 16, "Derivative Financial Instruments," for further information regarding these derivative financial instruments.

Level 3: Unobservable inputs are significant to the fair value of the asset or liability, and include situations where there is little, if any, market activity for the asset or liability. Level 3 instruments include the estimated fair value of contingent consideration related to completed acquisitions. The fair values are based on discounted cash flow analyses reflecting the likelihood of achieving specified performance measures or events and captures the contractual nature of the contingencies, commercial risk or time value of money. Changes in fair value for contingent consideration adjustments are recorded in Other (loss) income, net in the consolidated statements of operations. Level 3 instruments also included the 1.25% Call Option asset and the 1.25% embedded cash conversion option liability (together the "1.25% Notes Call Spread Overlay" as further described in Note 10, "Debt") that are not actively traded. These derivative instruments were designed with the intent that changes in their fair values would substantially offset, with limited net impact to our earnings. The sensitivity of changes in the unobservable inputs to the valuation pricing model used to value these instruments is not material to our consolidated results of operations. On July 1, 2020, these instruments matured and were repaid in full.

The following table summarizes our financial assets and liabilities measured at fair value on a recurring basis as of the respective balance sheet dates:

(In thousands)	Balance Sheet Classifications	December 31, 2020				December 31, 2019			
		Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Foreign exchange derivative assets	Prepaid expenses and other current assets	$ 0	$ 1,509	$ 0	$ 1,509	$ 0	$ 0	$ 0	$ 0
1.25% Call Option	Other assets	0	0	0	0	0	0	84	84
Total assets		$ 0	$ 1,509	$ 0	$ 1,509	$ 0	$ 0	$ 84	$ 84
Contingent consideration - current	Accrued expenses	$ 0	$ 0	$ 1,011	$ 1,011	$ 0	$ 0	$ 17,100	$ 17,100
Contingent consideration - long-term	Other liabilities	0	0	0	0	0	0	2,415	2,415
1.25% Embedded cash conversion option	Other liabilities	0	0	0	0	0	0	185	185
Total liabilities		$ 0	$ 0	$ 1,011	$ 1,011	$ 0	$ 0	$ 19,700	$ 19,700

The changes in Level 3 assets and liabilities measured at fair value on a recurring basis at December 31, 2020 are summarized as follows:

(In thousands)	Contingent Consideration	1.25% Notes Call Spread Overlay
Balance at December 31, 2018	$ 25,624	$ (870)
Additions	12,073	0
Payments/write-downs(1)	(18,624)	0
Fair value adjustments	442	769
Balance at December 31, 2019	$ 19,515	$ (101)
Additions	770	0
Payments/write-downs(2)	(19,274)	0
Fair value adjustments	0	101
Balance at December 31, 2020	$ 1,011	$ 0

(1) Payments and write-downs for the year ended December 31, 2019 primarily consisted of $10.0 million in payments for the Health Grid earnout and a $5.0 million write-down related to the Pulse8 earnout.

(2) Payments and write-downs for the year ended December 31, 2020 primarily consisted of $4.0 million in payments for the ACC earnout and a $13.9 million write-down related to the Health Grid earnout.

The following table summarizes the quantitative information about our Level 3 fair value measurements at December 31, 2020:

(In thousands, except the discount rate)	December 31, 2020				
	Fair Value	Valuation Technique	Significant Unobservable Inputs	Ranges of Inputs	Weighted Average (1)
Financial instruments:					
Contingent consideration	$ 1,011	Probability Weighted Discounted cash flow	Discount rate	5.3% to 5.5%	5.4%
			Registry members	0 to 1,551	776
			Patient data volume	0 to 52,845	26,422
			Projected year of payment	2020 to 2021	
Total financial instruments	$ 1,011				

(1) The weighted average is calculated based upon the absolute fair value of the instruments.

Long-term Investments

The following table summarizes our other equity investments which are included in Other assets in the accompanying consolidated balance sheets:

(In thousands, except for number of investees)	Number of Investees at December 31, 2020	Original Cost	Carrying Value at December 31, 2020	Carrying Value at December 31, 2019
Equity method investments (1)	3	$ 7,099	$ 10,744	$ 11,332
Cost less impairment	8	37,568	25,059	32,462
Total long-term equity investments	11	$ 44,667	$ 35,803	$ 43,794

(1) Allscripts share of the earnings of our equity method investees is reported based on a one quarter lag.

During 2020, we recorded a $16.8 million gain from the sale of a third-party equity-method investment. The gain is recognized in the Equity in net income (loss) of unconsolidated investments line in the consolidated statements of operations.

During 2018, we acquired certain non-marketable equity securities of two third parties and entered into a commercial agreement with one of the third parties for total consideration of $11.7 million. During 2018, we also acquired a $1.8 million non-marketable convertible note of a third party. These investments are recorded in the Other asset caption within the consolidated balance sheets.

It is not practicable to estimate the fair value of our equity investments primarily because of their illiquidity and restricted marketability as of December 31, 2020. The factors we considered in trying to determine fair value include, but are not limited to, available financial information, the issuer’s ability to meet its current obligations, the issuer’s subsequent or planned raises of capital and observable price changes in orderly transactions.

Impairment and Recovery of Long-Term Investments

Management performs a quarterly assessment of each of our investments on an individual basis to determine if there are any declines in fair value. Based on our review in the third quarter of 2020, we recognized a $1.0 million non-cash impairment charge related to one of our cost-method investments, which equaled the cost basis of our initial investment. In the second quarter of 2020, we reached a settlement agreement with one of our third-party equity-method investments, which resulted in the recognition of a $0.6 million non-cash impairment charge. We recognized non-cash impairment charges of $1.7 million during 2019 related to one of our long-term investments. We also recovered $1.0 million from a third-party cost-method investment that we had previously impaired. The non-cash impairment charges and the amount recovered are recognized in the Impairment (recovery) of long-term investments line in the consolidated statements of operations for the year ended December 31, 2020 and 2019.

7. Fixed Assets

Fixed assets consist of the following:

(Dollar amounts in thousands)	Estimated Useful Life	December 31, 2020	December 31, 2019
Computer equipment and software	3 to 10 years	$ 329,564	$ 343,756
Facility furniture, fixtures and equipment	5 to 7 years	25,932	24,282
Leasehold improvements	Shorter of 7 years or life of lease	40,115	38,948
Assets under finance leases	1 to 3 years	524	524
Fixed assets, gross		396,135	407,510
Less: Accumulated depreciation and amortization		(323,973)	(319,557)
Fixed assets, net		$ 72,162	$ 87,953

Accumulated amortization for assets under finance leases totaled $0.5 million and $0.4 million as of December 31, 2020 and 2019, respectively.

(In thousands)	Year Ended December 31, 2020	2019	2018
Fixed assets depreciation and amortization expense, including finance leases	$ 32,324	$ 46,705	$ 46,951

8. Goodwill and Intangible Assets

Goodwill and intangible assets consist of the following:

	December 31, 2020			December 31, 2019		
(In thousands)	Gross Carrying Amount	Accumulated Amortization	Intangible Assets, Net	Gross Carrying Amount	Accumulated Amortization	Intangible Assets, Net
Intangibles subject to amortization:						
Proprietary technology	$ 535,092	$ (465,292)	$ 69,800	$ 534,873	$ (433,017)	$ 101,856
Customer contracts and relationships	674,336	(509,534)	164,802	701,805	(488,533)	213,272
Total	$ 1,209,428	$ (974,826)	$ 234,602	$ 1,236,678	$ (921,550)	$ 315,128
Intangibles not subject to amortization:						
Registered trademarks			$ 52,000			$ 52,000
Goodwill			974,729			974,110
Total			$ 1,026,729			$ 1,026,110

During the first quarter of 2020, we changed our reportable segments from Provider, Veradigm and Unallocated to Core Clinical and Financial Solutions, Data, Analytics and Care Coordination, and Unallocated. As a result of this change, our reporting units became Core Clinical and Financial Solutions, Data, Analytics and Care Coordination, and EPSi. Refer to Note 19, “Business Segments,” for further discussion on the impact of the change to our reportable segments. During the second quarter of 2020, we made two changes in our reporting units. We transferred the Follow My Health business, previously included in the Data, Analytics and Care Coordination reporting unit, to the Core Clinical and Financial Solutions reporting unit. We also transferred Payerpath, a portion of the Ambulatory business that was previously included in the Clinical and Financial Solutions reporting unit, to the Data, Analytics and Care Coordination reporting unit.

During 2020, as a result of these organizational changes, we performed interim goodwill impairment tests as of January 1, 2020 and April 1, 2020. The fair value of each reporting unit substantially exceeded its carrying value, and no indicators of impairment were identified.

We performed our annual 2020 goodwill impairment test as of October 1, 2020. The fair value of each reporting unit substantially exceeded its carrying value, and no indicators of impairment were identified.

We performed our 2019 goodwill impairment test as of October 1, 2019. As a result of this test, we concluded that the carrying value of the historical Hospitals and Health Systems (“HHS”) reporting unit exceeded its fair value. As a result, we recognized a goodwill impairment charge of $25.7 million. This goodwill impairment charge is reflected on the Goodwill impairment charge line in our consolidated statements of operations. The historical HHS reporting unit is now reported within the Core Clinical and Financial Solutions reporting unit. The fair values of all other reporting units substantially exceeded their carrying values. As of December 31, 2019, the goodwill allocated to the historical HHS reporting unit was $485.5 million.

We performed our 2018 goodwill impairment test as of October 1, 2018. We concluded that the carrying value of the historical NantHealth reporting unit exceeded its fair value as a result of this test. Our latest available financial forecasts at the time of the annual goodwill impairment test reflected that projected future operating costs exceeded projected revenues resulting in negative operating margins for the historical NantHealth reporting unit. We recognized a goodwill impairment charge of $13.5 million as a result, representing the entire goodwill balance assigned to the historical NantHealth reporting unit. This goodwill impairment charge is reflected on the Goodwill impairment charge line in our consolidated statements of operations for the year ended December 31, 2018.

The determination of the fair value of our reporting units is based on a combination of a market approach, which considers benchmark company market multiples, and an income approach, which utilizes discounted cash flows for each reporting unit and other Level 3 inputs. We determine fair value based on the present value of the most recent cash flow projections for each reporting unit as of the date of the analysis and calculate a terminal value utilizing a terminal growth rate under the income approach. The significant assumptions under this approach include, among others: income projections, which are dependent on sales to new and existing clients, new product introductions, client behavior, competitor pricing, operating expenses, the discount rate, and the terminal growth rate. The cash flows used to determine fair value are dependent on a number of significant management assumptions such as our expectations of future performance and the expected future economic environment, which are partly based upon our historical experience. Our estimates are subject to change given the inherent uncertainty in predicting future results. The discount rate and the terminal growth rate are based on our judgment of the rates that would be utilized by a hypothetical market participant. We also consider our market capitalization in assessing the reasonableness of the combined fair values estimated for our reporting units as part of goodwill impairment testing.

We recognized an intangible asset impairment charge of $23.1 million relating to Health Grid’s remaining customer relationship intangible balance during 2020. We also recognized an intangible asset impairment charge of $8.1 million relating to

NantHealth's remaining customer relationship intangible balance during 2019. In addition, we recognized an intangible asset impairment charge of $2.2 million during 2018 relating to NantHealth's acquired proprietary technology because the carrying value of this definite-lived intangible assets no longer appeared recoverable based on latest available financial forecasts at the time of the annual goodwill impairment test. These impairment charges are included in the Asset impairment charges line in our consolidated statements of operations for the years ended December 31, 2020, 2019 and 2018.

As of December 31, 2020, there were no accumulated impairment losses associated with goodwill. Accumulated impairment losses associated with goodwill totaled $39.2 million and $13.5 million as of December 31, 2019 and 2018, respectively. Changes in the carrying amounts of goodwill by reportable segment for the years ended December 31, 2020 and 2019 were as follows:

(In thousands)	Core Clinical and Financial Solutions	Data, Analytics and Care Coordination	Total
Balance as of December 31, 2018	$ 760,294	$ 225,543	$ 985,837
Additions	0	13,684	13,684
Goodwill impairment charge	(25,700)	0	(25,700)
Foreign exchange translation	289	0	289
Balance as of December 31, 2019	734,883	239,227	974,110
Goodwill impairment charge	0	0	0
Foreign exchange translation	619	0	619
Balance as of December 31, 2020	$ 735,502	$ 239,227	$ 974,729

Additions to goodwill in 2019 resulted from the purchase of the Pinnacle and Diabetes Collaborative Registries and a prescription drug software company. Refer to Note 5, "Business Combinations and Divestitures" for additional information regarding these transactions. As stated above, we also recognized a goodwill impairment charge in 2019 for $25.7 million related to the HHS reporting unit.

Intangible assets are being amortized over their estimated useful lives, and amortization expense related to intangible assets was as follows:

	Year Ended December 31,		
(In thousands)	2020	2019	2018
Proprietary technology amortization included in cost of revenue	$ 32,130	$ 35,034	$ 37,029
Intangible amortization included in operating expenses	25,604	27,188	26,558
Total intangible amortization expense	$ 57,734	$ 62,222	$ 63,587

Future amortization expense for the intangible assets as of December 31, 2020, based on foreign currency exchange rates in effect as of such date, is as follows:

Year Ended December 31,	(In thousands)
2021	$ 50,556
2022	44,155
2023	27,943
2024	23,799
2025	20,180
Thereafter	67,969
Total	$ 234,602

9. Asset Impairment Charges

During the year ended December 31, 2020, we recorded several non-cash asset impairment charges. We recorded a non-cash asset impairment charge of $23.1 million related to the write-off of the remaining Health Grid acquired customer relationship intangible balance. This was partially offset by the write-off of $13.9 million related to the Health Grid contingent consideration accrual. We recorded $31.2 million of non-cash asset impairment charges related to the write-off of capitalized software due to the asset values exceeding the product's net realizable value. The write-off was primarily related to one product in which we determined it would no longer be placed into service. We also recorded a $34.3 million non-cash asset impairment charge due to the write-off of deferred costs related to our private cloud hosting operations. The write-off was driven by the expectation of improved efficiencies in the utilization of our contract compared with historical deferred costs, which was identified through our broader cost reduction initiatives. Impairment of long-term investments during the year ended December 31, 2020 consisted of $1.6 million, which included $1.0 million related to one of our cost-method investments and $0.6 million related to one of our third-party equity-method investments. Refer to Note 6, "Fair Value Measurements and Other Investments" for further information regarding the long-term investment impairments.

Asset impairment charges incurred during the year ended December 31, 2019 were primarily the result of impairing the remaining NantHealth acquired customer relationship intangible balance of $8.1 million. We also recognized non-cash impairment charges of $2.7 million on the retirement of certain hosting assets due to data center migrations. Impairment of long-term investments during the year ended December 31, 2019 consisted of an impairment of $1.7 million associated with one of our long-term equity investments. We also recovered $1.0 million from one of our long-term equity investments that we had previously impaired. We also recorded a goodwill impairment charge of $25.7 million related to our HHS reporting unit. Refer to Note 8, "Goodwill and Intangible Assets" for further information regarding this impairment.

We incurred several non-cash asset impairment charges during the year ended December 31, 2018. We recorded non-cash asset impairment charges of $33.2 million related to the write-off of capitalized software as a result of our decision to discontinue several software development projects. We also recorded $22.9 million of non-cash asset impairment charges related to our acquisition of the patient/provider engagement solutions business from NantHealth in 2017, which included the write-downs of $2.2 million of acquired technology and $20.7 million, representing the unamortized value assigned to the modification of our existing commercial agreement with NantHealth, as we no longer expected to recover the value assigned to these assets. The remaining $2.1 million of non-cash asset impairment charges recorded during the year ended December 31, 2018 relate to the disposal of fixed assets as a result of relocating and consolidating business functions and locations from recent acquisitions.

We recorded a goodwill impairment charge of $13.5 million related to NantHealth during the year ended December 31, 2018. Refer to Note 8, "Goodwill and Intangible Assets" for further information regarding this impairment. We recognized non-cash impairment charges of $15.5 million in 2018 related to two of our cost-method equity investments and a related note receivable. These charges equaled the cost bases of the investments and the related note receivable prior to the impairment.

The following table summarizes the non-cash asset impairment charges recorded during the periods indicated and where they appear in the corresponding consolidated statements of operations:

	Year Ended December 31,		
(In thousands)	**2020**	**2019**	**2018**
Asset impairment charges	$ 74,969	$ 10,837	$ 58,166
Goodwill impairment charge	$ 0	$ 25,700	$ 13,466
Impairment of long-term investments	$ 1,575	$ 651	$ 15,487

10. Debt

Debt outstanding, excluding lease obligations, consisted of the following:

(In thousands)	December 31, 2020 Principal Balance	December 31, 2020 Unamortized Discount and Debt Issuance Costs	December 31, 2020 Net Carrying Amount	December 31, 2019 Principal Balance	December 31, 2019 Unamortized Discount and Debt Issuance Costs	December 31, 2019 Net Carrying Amount
0.875% Convertible Senior Notes [(1)]	$ 167,853	$ (3,166)	$ 171,019	$ 177,942	$ 4,697	$ 173,245
1.25% Cash Convertible Senior Notes	0	0	0	345,000	7,552	337,448
Senior Secured Credit Facility	0	3,432	(3,432)	410,000	5,224	404,776
Total debt	$ 167,853	$ 266	$ 167,587	$ 932,942	$ 17,473	$ 915,469
Less: Debt payable within one year	0	0	0	364,653	188	364,465
Total long-term debt, less current maturities	$ 167,853	$ 266	$ 167,587	$ 568,289	$ 17,285	$ 551,004

(1) Principal balance is $207,911 thousand; $167,853 thousand is recognized in debt and $40,058 thousand is recognized in additional paid-in capital.

Interest expense consisted of the following:

(In thousands)	Year Ended December 31, 2020	2019	2018
Interest expense	$ 18,113	$ 26,648	$ 35,366
Amortization of discounts and debt issuance costs	15,991	16,524	15,548
Total interest expense	$ 34,104	$ 43,172	$ 50,914

Interest expense related to the 0.875% Convertible Senior Notes and the 1.25% Cash Convertible Senior Notes, which is included in total interest expense above, consisted of the following:

(In thousands)	Year Ended December 31, 2020	2019	2018
Coupon interest	$ 4,016	$ 4,429	$ 4,312
Amortization of discounts and debt issuance costs	13,484	14,926	13,867
Total interest expense related to the convertible notes	$ 17,500	$ 19,355	$ 18,179

Allscripts 0.875% Convertible Senior Notes

On December 9, 2019, we issued $200.0 million aggregate principal amount of Allscripts’ 0.875% Convertible Senior Notes due 2027 (the “0.875% Notes”) in a private offering. The 0.875% Notes are Allscripts’ senior, unsecured obligations that bear interest at a rate of 0.875% per year, payable semiannually in arrears on January 1 and July 1 of each year, commencing on July 1, 2020. The 0.875% Notes will mature on January 1, 2027, unless earlier repurchased by us or converted in accordance with their terms prior to such date.

The 0.875% Notes are convertible at the option of the holders (in whole or in part) at any time prior to the close of business on the business day immediately preceding July 1, 2026 only under the following circumstances: (1) during any calendar quarter commencing after the calendar quarter ending on December 31, 2019 (and only during such calendar quarter), if the last reported sale price of Allscripts’ common stock for at least 20 trading days (whether or not consecutive) during the period of 30 consecutive trading days ending on and including the last trading day of the immediately preceding calendar quarter is greater than or equal to 130% of the conversion price on each applicable trading day; (2) during the five business day period after any five consecutive trading day period (the “measurement period”) in which the trading price per $1,000 principal amount of 0.875% Notes for each trading day of the measurement period was less than 98% of the product of the last reported sale price of Allscripts’ common stock and the conversion rate on each such trading day; or (3) upon the occurrence of certain corporate events as specified in the indenture governing the 0.875% Notes (the “0.875% Notes Indenture”). On or after July 1, 2026 until the close of business on the second scheduled trading day immediately preceding the maturity date, holders may convert all or any portion of their 0.875% Notes at any time, regardless of the foregoing conditions. Upon conversion, Allscripts will pay or deliver, as the case may be, cash, shares of Allscripts’ common stock, or a combination of cash and shares of Allscripts’ common stock, at Allscripts’ election, in amounts determined in the manner set forth in the 0.875% Notes Indenture.

The initial conversion rate for the 0.875% Notes will be 75.0962 shares of Allscripts' common stock per $1,000 principal amount of the 0.875% Notes, which is equivalent to an initial conversion price of approximately $13.32 per share of Allscripts' common stock. The initial conversion price of the 0.875% Notes represents a premium of approximately 32.5% to $10.05 per share last reported sale price of Allscripts' common stock on December 4, 2019. The conversion rate will be subject to adjustment upon the occurrence of certain specified events, but will not be adjusted for any accrued and unpaid interest. In addition, upon the occurrence of a "make-whole fundamental change" (as defined in Section 1.01 of the 0.875% Notes Indenture), Allscripts' will, in certain circumstances, increase the conversion rate by a number of additional shares of Allscripts' common stock for a holder that elects to convert its 0.875% Notes in connection with such make-whole fundamental change. We may not redeem the 0.875% Notes prior to the maturity date, and no sinking fund is provided for the 0.875% Notes.

Upon the occurrence of a "fundamental change" (as defined in Section 1.01 of the 0.875% Notes Indenture), holders of the 0.875% Notes may require us to repurchase all or any portion of their 0.875% Notes in principal amounts of $1,000 or an integral multiple thereof at a fundamental change repurchase price in cash equal to 100% of the principal amount of the 0.875% Notes to be repurchased, plus any accrued and unpaid interest, if any, to, but excluding, the fundamental change repurchase date.

The 0.875% Notes Indenture contains customary terms and covenants, including that upon certain events of default, including cross acceleration to certain other indebtedness of Allscripts and its subsidiaries, either the trustee under the 0.875% Notes Indenture or the holders of not less than 25% in aggregate principal amount of the 0.875% Notes then outstanding may declare the unpaid principal of the 0.875% Notes and accrued and unpaid interest, if any, thereon immediately due and payable.

In December 2019, in connection with the 0.875% Notes offering, we entered into privately negotiated capped call transactions with JPMorgan Chase Bank, National Association, New York Branch, Wells Fargo Bank, National Association, Bank of America, N.A. and Deutsche Bank AG, London Branch (the "option counterparties"). The capped call transactions are expected generally to reduce the potential dilution to Allscripts' common stock upon any conversion of 0.875% Notes and/or offset any cash payments Allscripts is required to make in excess of the principal amount of the converted 0.875% Notes upon conversion of the 0.875% Notes, as the case may be, in the event that the market price of Allscripts' common stock is greater than the strike price of the capped call transactions (which initially corresponds to the initial conversion price of the 0.875% Notes of approximately $13.32 per share of Allscripts' common stock and is subject to certain adjustments under the terms of the capped call transactions), with such reduction and/or offset subject to a cap based on the cap price of the capped call transactions. The cap price of the capped call transactions is initially $17.5875 per share, representing a premium of 75% above the last reported sale price of $10.05 per share of Allscripts' common stock on December 4, 2019, and is subject to certain adjustments under the terms of the capped call transactions. The capped call transactions cover, subject to anti-dilution adjustments substantially similar to those applicable to the 0.875% Notes, the number of shares of Allscripts' common stock that underlie the 0.875% Notes. The capped call transactions are not part of the terms of the 0.875% Notes and will not affect any holder's rights under the 0.875% Notes. Holders of the 0.875% Notes will not have any rights with respect to the capped call transactions.

The aggregate net proceeds of the 0.875% Notes were $195.0 million after deducting $5.0 million for the initial purchasers' discount but before deducting other estimated expenses. On December 9, 2019, we used $15.8 million of the net proceeds to pay the cost of the capped call transactions and the remainder of $179.2 million to repay outstanding borrowings under our senior secured revolving credit facility.

On December 18, 2019, the initial purchasers notified us of the partial exercise of their option to purchase additional 0.875% Notes. On December 20, 2019 we issued an additional $18.0 million in aggregate principal amount of the 0.875% Notes (the "Option Notes") pursuant to a partial exercise of the initial purchasers' option to purchase additional 0.875% Notes. The Option Notes have the same terms as the 0.875% Notes previously described and are issued pursuant to the same 0.875% Notes Indenture. The net proceeds from the sale of the Option Notes totaled $17.5 million after deducting $0.5 million in debt issuance costs. In connection with the initial purchasers' exercise of their option to purchase the Option Notes, we entered into additional privately negotiated capped call transactions (the "additional capped call transactions") with each of the option counterparties. On December 20, 2019, we used $1.4 million of the net proceeds to pay the cost of additional capped call transactions and the remainder to repay additional outstanding borrowings under our senior secured revolving credit facility.

The issuance in December 2019 of the combined $218.0 million aggregate purchase amount of the 0.875% Notes and the Option Notes (collectively, the "0.875% Convertible Senior Notes") incurred $0.7 million in debt issuance costs, which were paid in January 2020. We have separately recorded liability and equity components of the 0.875% Convertible Senior Notes including any discounts and issuance costs by allocating the proceeds from the issuance between the liability component and the embedded conversion option, or equity component. This allocation was completed by first estimating an interest rate at the time of issuance for similar notes that do not include an embedded conversion option. The semi-annual interest rate of 1.95% was used to compute the initial fair value of the liability component, which totaled $177.9 million at the time of issuance. The excess of the initial proceeds received from the 0.875% Convertible Senior Notes and the $177.9 million liability component was allocated to the equity component, which totaled $40.1 million at the time of issuance before deducting any paid capped call fees. The equity component of $40.1 million, the $17.2 million in paid capped call fees and an allocation of $1.1 million in combined discounts and issuance costs were recorded in Additional paid-in capital within the consolidated balance sheets in December 2019. These were recorded as a discount that will be accreted into interest expense through January 1, 2027 using the interest method.

In June 2020, we paid $7.7 million to repurchase $10.1 million of the aggregate principal amount of the 0.875% Convertible Senior Notes, which resulted in a $0.5 million gain. In connection with the repurchase, the capped call transaction was partially terminated, and we received $0.3 million, which resulted in a recognition of $0.8 million in equity to offset the capped call fees and a $0.5 million loss. The remaining principal amount of the 0.875% Convertible Senior Notes at December 31, 2020 totaled $207.9 million. The carrying value of the combined equity component, net of capped call fees, issuance costs and accretion, at December 31, 2020 totaled $16.1 million.

Allscripts Senior Secured Credit Facility

On February 15, 2018, Allscripts and Healthcare LLC entered into a Second Amended and Restated Credit Agreement (the "Second Amended Credit Agreement"), with JPMorgan Chase Bank, N.A., as administrative agent. The Second Amended Credit Agreement provides for a $400 million senior secured term loan (the "Term Loan") and a $900 million senior secured revolving facility (the "Revolving Facility"), each with a five-year term. Collectively, the Term Loan and the Revolving Facility are referred to herein as the "Senior Secured Credit Facility." The Term Loan is repayable in quarterly installments, which commenced on June 30, 2018. A total of up to $50 million of the Revolving Facility is available for the issuance of letters of credit, up to $10 million of the Revolving Facility is available for swingline loans, and up to $100 million of the Revolving Facility could be borrowed under certain foreign currencies.

On August 7, 2019, we entered into a First Amendment to the Second Amended Credit Agreement in order to remain compliant with the covenants of our Second Amended Credit Agreement. The First Amendment provides the financial flexibility to settle the U.S. Department of Justice's investigations as discussed in Note 22, "Contingencies" while maintaining our compliance with the covenants of our Second Amended Credit Agreement. None of the original terms of our Second Amended Credit Agreement relating to scheduled future principal payments, applicable interest rates and margins or borrowing capacity under our Revolving Facility were amended. In connection with this amendment, we incurred fees and other costs totaling $0.8 million, of which a majority was capitalized.

On July 20, 2020, we entered into a Second Amendment to the Second Amended Credit Agreement. None of the original terms of our Second Amended Credit Agreement relating to scheduled future principal payments, applicable interest rates and margins or borrowing capacity under our Revolving Facility were amended. In connection with this amendment, we incurred fees and other costs totaling $1.4 million, of which a majority was capitalized.

The proceeds of the Revolving Facility can be used to finance Allscripts' working capital needs and for general corporate purposes, including, without limitation, for financing permitted acquisitions, and for share repurchases. Allscripts is also permitted to add one or more incremental revolving and/or term loan facilities in an aggregate amount of up to $600 million, subject to certain conditions.

The initial applicable interest rate margin for Base Rate borrowings is 1.00%, and for Eurocurrency Rate borrowings is 2.00%. On and after December 31, 2020, the interest rate margins will be determined from a pricing table and will depend upon Allscripts' total leverage ratio. The applicable margins for Base Rate borrowings under the Second Amended Credit Agreement range from 0.50% to 1.25% depending on Allscripts' total leverage ratio range. The applicable margins for Eurocurrency Rate loans range from 1.50% to 2.25%, depending on Allscripts' total leverage ratio.

Subject to certain agreed upon exceptions, all obligations under the Senior Secured Credit Facility remain guaranteed by each of our existing and future direct and indirect material domestic subsidiaries other than Coniston Exchange LLC and certain domestic subsidiaries owned by our foreign subsidiaries (the "Guarantors") pursuant to a related Guarantee and Collateral Agreement among Allscripts Healthcare Solutions, Inc., Allscripts Healthcare, LLC, certain of our other subsidiaries, and JPMorgan Chase Bank, N.A., as administrative agent. Our obligations under the Senior Secured Credit Facility, any swap agreements and any cash management arrangements provided by any lender, remain secured, subject to permitted liens and other agreed upon exceptions, by a perfected first priority security interest in all of the tangible and intangible assets (including, without limitation, intellectual property, material owned real property and all of the capital stock of each Guarantor and, in the case of foreign subsidiaries, up to 65% of the capital stock of first tier material foreign subsidiaries) of Allscripts Healthcare Solutions, Inc. and certain of our subsidiary guarantors.

The Second Amended Credit Agreement requires us to maintain a minimum interest coverage ratio of 3.5 to 1.0 and a maximum total net leverage ratio of 4.25 to 1.0. The minimum interest coverage ratio is calculated by dividing earnings before interest expense, income tax expense, depreciation and amortization expense by cash interest expense, subject to various agreed upon adjustments. The total net leverage ratio is calculated by dividing total indebtedness reduced by a portion of domestic unrestricted cash, by earnings before interest expense, income tax expense, depreciation and amortization expense, subject to various agreed upon adjustments. The Second Amended Credit Agreement also provides that during the four-quarter period following permitted acquisitions that are financed in whole or in part with indebtedness and the consideration paid by us is $100 million or more, we are required to maintain a maximum total leverage ratio of 4.5 to 1.0. In addition, the Second Amended Credit Agreement requires mandatory prepayments of the debt outstanding under the Senior Secured Credit Facility in certain specific circumstances, and contains a number of covenants which, among other things, restrict our ability to incur additional indebtedness, engage in mergers, or declare dividends or other payments in respect of our capital stock.

The Second Amended Credit Agreement also contains certain customary events of default, including relating to non-payment, breach of covenants, cross-default, bankruptcy and change of control.

As of December 31, 2020, $1.1 million in letters of credit were outstanding under the Second Amended Credit Agreement. No amounts under the Term Loan or the Revolving Facility were outstanding under the Second Amended Credit Agreement.

As of December 31, 2020, the interest rate on the Senior Secured Credit Facility was LIBOR plus 2.00%, which totaled 2.15%. We were in compliance with all financial covenants under the Second Amended Credit Agreement as of December 31, 2020.

As of December 31, 2020, we had $898.9 million available borrowing capacity, net of outstanding letters of credit, under the Revolving Facility. There can be no assurance that we will be able to draw on the full available balance of the Revolving Facility if the financial institutions that have extended such credit commitments become unwilling or unable to fund such borrowings.

In connection with the sale of our EPSi business on October 15, 2020, which is further discussed in Note 5, "Business Combinations and Divestitures", the terms of our Second Amended and Restated Credit Agreement required us to make a mandatory prepayment of our Term Loan in the amount of $19.0 million on October 29, 2020.

In connection with the sale of our CarePort business on December 31, 2020, which is further discussed in Note 5, "Business Combinations and Divestitures", the terms of our Second Amended and Restated Credit Agreement required us to make a mandatory prepayment of our Term Loan in the amount of $161.0 million on December 31, 2020.

Allscripts 1.25% Cash Convertible Senior Notes

On June 18, 2013, we issued $345.0 million aggregate principal amount of Allscripts' 1.25% Cash Convertible Senior Notes due 2020 (the "1.25% Notes"). The aggregate net proceeds of the 1.25% Notes were $305.1 million, after payment of the net cost of the 1.25% Notes Call Spread Overlay (as described below) and transaction costs.

Interest on the 1.25% Notes was payable semiannually in arrears on January 1st and July 1st of each year, at a fixed annual rate of 1.25%. The 1.25% Notes were not repurchased or converted prior to maturing on July 1, 2020. The 1.25% Notes were repaid utilizing $345.0 million drawn against the Revolving Facility.

The 1.25% Notes were convertible only into cash, and not into shares of our common stock or any other securities. Holders could have converted their 1.25% Notes solely into cash at their option at any time prior to the close of business on the business day immediately preceding January 1, 2020 only under the following circumstances: (1) during any calendar quarter (and only during such calendar quarter), if the last reported sale price of our common stock for at least 20 trading days (whether or not consecutive) during a period of 30 consecutive trading days ending on the last trading day of the immediately preceding calendar quarter is greater than or equal to 130% of the conversion price on each applicable trading day; (2) during the five business day period immediately after any five consecutive trading day period in which the trading price per $1,000 principal amount of the 1.25% Notes for each trading day of the measurement period was less than 98% of the product of the last reported sale price of our common stock and the conversion rate on each such trading day; or (3) upon the occurrence of specified corporate events. On or after January 1, 2020 until the close of business on the second scheduled trading day immediately preceding the maturity date, holders could have converted their 1.25% Notes solely into cash at any time, regardless of the foregoing circumstances. Upon conversion, in lieu of receiving shares of our common stock, a holder would have received an amount in cash, per $1,000 principal amount of the 1.25% Notes, equal to the settlement amount, determined in the manner set forth in the indenture governing the 1.25% Notes (the "1.25% Notes Indenture").

The initial conversion rate was 58.1869 shares of our common stock per $1,000 principal amount of the 1.25% Notes (equivalent to an initial conversion price of approximately $17.19 per share of common stock). The conversion rate was subject to adjustment in some events but was not adjusted for any accrued and unpaid interest. In addition, in the event that certain corporate events had occurred prior to the maturity date, we would have paid a cash make-whole premium by increasing the conversion rate for a holder who elected to convert such holder's 1.25% Notes in connection with such a corporate event in certain circumstances. We did not redeem the 1.25% Notes prior to the maturity date, and no sinking fund was provided for the 1.25% Notes.

If we would have undergone a fundamental change (as defined in the 1.25% Notes Indenture), holders could have required us to repurchase for cash all or part of their 1.25% Notes at a repurchase price equal to 100% of the principal amount of the 1.25% Notes to be repurchased, plus accrued and unpaid interest to, but excluding, the fundamental change repurchase date. The 1.25% Notes Indenture provided for customary events of default, including cross acceleration to certain other indebtedness of ours, and our subsidiaries.

The 1.25% Notes were senior unsecured obligations, and ranked senior in right of payment to any of our indebtedness that was expressly subordinated in right of payment to the 1.25% Notes; equal in right of payment to any of our unsecured indebtedness that was not so subordinated; effectively junior in right of payment to any of our secured indebtedness to the extent of the value of the assets securing such indebtedness; and structurally junior to all indebtedness and other liabilities (including trade payables) of our subsidiaries.

The 1.25% Notes contained an embedded cash conversion option. We determined that the embedded cash conversion option was a derivative financial instrument, required to be separated from the 1.25% Notes and accounted for separately as a derivative liability, with changes in fair value reported in our consolidated statements of operations until the cash conversion option transaction settled or expired. The initial fair value liability of the embedded cash conversion option was $82.8 million, which simultaneously reduced the carrying value of the 1.25% Notes (effectively an original issuance discount). For further discussion of the derivative financial instruments relating to the 1.25% Notes, refer to Note 16, "Derivative Financial Instruments."

The reduced carrying value of the 1.25% Notes resulted in a debt discount that was amortized to the 1.25% Notes' principal amount through the recognition of non-cash interest expense over the expected term of the 1.25% Notes, which extended through their maturity date of July 1, 2020. This has resulted in our recognition of interest expense on the 1.25% Notes at an effective rate approximating what we would have incurred had nonconvertible debt with otherwise similar terms been issued. The effective interest rate of the 1.25% Notes at issuance was 5.4%, which was imputed based on the amortization of the fair value of the embedded cash conversion option over the remaining term of the 1.25% Notes. We recorded interest expense until the 1.25% Notes matured on July 1, 2020.

In connection with the settlement of the 1.25% Notes, we paid $8.4 million in transaction costs. Such costs were allocated to the 1.25% Notes, the 1.25% Call Option (as defined below) and the 1.25% Warrants (as defined below). The amount allocated to the 1.25% Notes, or $8.3 million, was capitalized and was amortized over the expected term of the 1.25% Notes.

1.25% Notes Call Spread Overlay

In June 2013, concurrent with the issuance of the 1.25% Notes, we entered into privately negotiated hedge transactions (collectively, the "1.25% Call Option") and warrant transactions (collectively, the "1.25% Warrants"), with certain of the initial purchasers of the 1.25% Notes (collectively, the "Call Spread Overlay"). Assuming full performance by the counterparties, the 1.25% Call Option was intended to offset cash payments in excess of the principal amount due upon any conversion of the 1.25% Notes. We used $82.8 million from the initial proceeds of the 1.25% Notes to pay for the 1.25% Call Option, and simultaneously received $51.2 million from the sale of the 1.25% Warrants, for a net cash outlay of $31.6 million for the Call Spread Overlay. The 1.25% Call Option was a derivative financial instrument and is discussed further in Note 16, "Derivative Financial Instruments." The 1.25% Warrants were equity instruments and are further discussed in Note 13, "Stockholders' Equity."

Future Debt Payments

The following table summarizes future debt payments as of December 31, 2020:

(In thousands)	Total	2021	2022	2023	2024	2025	Thereafter
0.875% Convertible Senior Notes [1]	$ 207,911	$ 0	$ 0	$ 0	$ 0	$ 0	$ 207,911
Total debt	$ 207,911	$ 0	$ 0	$ 0	$ 0	$ 0	$ 207,911

(1) Amount represents the face value of the 0.875% Convertible Senior Notes, which includes both the liability and equity portions.

11. Income Taxes

The following is a geographic breakdown of loss from continuing operations before income tax benefits:

	Year Ended December 31,		
(In thousands)	2020	2019	2018
United States	$ (148,174)	$ (287,088)	$ (61,292)
Foreign	(1,137)	5,337	(907)
Loss from continuing operations before income taxes	$ (149,311)	$ (281,751)	$ (62,199)

The following is a summary of the components of the benefit for income taxes:

	Year Ended December 31,		
(In thousands)	2020	2019	2018
Current tax provision			
Federal	$ (19,346)	$ (8,232)	$ (14,018)
State	(219)	(1,809)	(3,859)
Foreign	3,803	5,054	5,015
	(15,762)	(4,987)	(12,862)
Deferred tax provision			
Federal	2,931	(28,732)	(5,781)
State	(2,981)	(8,763)	236
Foreign	(880)	(858)	(576)
	(930)	(38,353)	(6,121)
Income tax benefit	$ (16,692)	$ (43,340)	$ (18,983)

Taxes computed at the statutory federal income tax rate of 21% for the years ended December 31, 2020, 2019 and 2018 are reconciled to the provision for income taxes as follows:

(In thousands)	Year Ended December 31, 2020	2019	2018
United States federal tax at statutory rate	$ (31,355)	$ (59,170)	$ (13,062)
Items affecting federal income tax rate			
Non-deductible acquisition and reorganization expenses	0	31	291
Non-deductible portion of Department of Justice Settlement	0	18,546	0
Research credits	(6,500)	(6,126)	(6,185)
Change in unrecognized tax benefits	3,204	1,046	3
State income taxes, net of federal benefit	(2,940)	(7,411)	(2,916)
Compensation	5,314	4,664	3,213
Meals and entertainment	118	549	616
Impact of foreign operations	1,443	3,079	3,627
Provision-to-Return adjustments	(2,362)	(383)	(2,140)
Deemed Dividends	352	473	373
Federal, state and local rate changes	0	(630)	0
US Tax reform impact	0	(2,972)	0
Goodwill impairment	0	5,397	0
Non-deductible items	28	43	34
Noncontrolling interest	0	0	951
True-up of prior year income of Consolidated Investment	0	0	913
Valuation allowance	16,949	922	(5,208)
Other	(943)	(1,398)	507
Income tax benefit	$ (16,692)	$ (43,340)	$ (18,983)

Significant components of our deferred tax assets and liabilities consist of the following:

(In thousands)	December 31, 2020	2019
Deferred tax assets		
Accruals and reserves, net	$ 18,260	$ 29,627
Allowance for doubtful accounts	9,571	11,507
Stock-based compensation, net	8,428	10,382
Deferred revenue	35,016	21,786
Operating and finance lease liabilities	22,902	22,085
Net operating loss carryforwards	35,695	37,717
Research and development tax credit	251	899
Other	4,519	7,488
Less: Valuation Allowance	(35,491)	(19,219)
Total deferred tax assets	99,151	122,272
Deferred tax liabilities		
Prepaid expense	(4,329)	(5,372)
Property and equipment, net	(2,062)	(3,695)
Acquired intangibles, net	(86,841)	(111,284)
Operating and finance right-of-use assets	(18,315)	(17,255)
Total deferred tax liabilities	(111,547)	(137,606)
Net deferred tax liabilities	$ (12,396)	$ (15,334)

The deferred tax assets (liabilities) are classified in the consolidated balance sheets as follows:

(In thousands)	December 31, 2020	2019
Non-current deferred tax assets, net	$ 5,790	$ 5,704
Non-current deferred tax liabilities, net	(18,186)	(21,038)
Non-current deferred tax liabilities, net	$ (12,396)	$ (15,334)

We had federal net operating loss ("NOL") carryforwards of $164 million and $174 million as of December 31, 2020, and 2019, respectively. The federal NOL carryforward includes U.S. NOL carryovers of $4.3 million and Israeli NOL carryovers of $49 million that do not expire. We also had state NOL carryforwards of $2.5 million for the years ended December 31, 2020 and 2019. The NOL carryforwards expire in various amounts starting in 2021 for both federal and state tax purposes. The utilization of the federal NOL carryforwards is subject to limitation under the rules regarding changes in stock ownership as determined by the Internal Revenue Code.

For federal purposes, 2017 to 2020 tax years remain subject to income tax examination by federal authorities. For our state tax jurisdictions, 2017 to 2020 tax years remain open to income tax examination by state tax authorities. Tax years remain open in various foreign jurisdictions beginning in 2015. We have a subsidiary in India that is entitled to a tax holiday that allows for tax-free operations during such tax holiday. This tax holiday for the subsidiary began to partially expire in 2012 and fully expired in 2017. Tax savings realized from this holiday totaled $0.4 million for the year ended December 31, 2017, which reduced our loss per share by less than $0.01 through 2017. There is a potential for a partial tax holiday for 5 years beginning on April 1, 2017, which is contingent upon a certain level of capital expenditure spending, among other conditions. Tax savings impact of $0.2 million has been recorded for this potential tax holiday for the year ended December 31, 2020, which impacted our diluted earnings per share by less than $0.01 in this year.

GAAP principles prescribe a threshold of more-likely-than-not to be sustained upon examination for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. These principles also provide guidance on de-recognition, classification, interest and penalties, accounting in interim periods, disclosure and transition.

Changes in the amounts of unrecognized tax benefits were as follows:

	Year Ended December 31,		
(In thousands)	**2020**	**2019**	**2018**
Beginning balance as of January 1	$ 20,604	$ 19,821	$ 10,939
Increases for tax positions related to the current year	8,053	1,240	8,977
Increases for tax positions related to prior years	427	95	367
Increases acquired in business acquisitions	0	0	540
Foreign currency translation	2	3	(5)
Reductions due to lapsed statute of limitations	(201)	(555)	(997)
Ending balance as of December 31	$ 28,885	$ 20,604	$ 19,821

We had gross unrecognized tax benefits of $28.9 million and $20.6 million as of December 31, 2020 and 2019, respectively. The main driver of the increase in the unrecognized tax benefits as of December 31, 2020 is $6.4 million related to the uncertain positions taken on the state tax treatment of the gains on the sales of our EPSi and CarePort businesses. If the current gross unrecognized tax benefits were recognized, the result would be an increase in our income tax benefit of $30.8 million and $20.7 million, for 2020 and 2019, respectively. These amounts are net of accrued interest and penalties relating to unrecognized tax benefits of $2.0 million and $0.4 million, respectively. We believe that it is reasonably possible that $0.2 million of our currently remaining unrecognized tax benefits may be recognized by the end of 2021, as a result of a lapse of the applicable statute of limitations.

We recognized interest and penalties related to uncertain tax positions in our consolidated statements of operations as follows:

	Year Ended December 31,		
(In thousands)	**2020**	**2019**	**2018**
Interest and penalties included in the provision for income taxes	$ 1,620	$ 229	$ 543

The amount of interest and penalties included in our consolidated balance sheets is as follows:

	December 31,	
(In thousands)	**2020**	**2019**
Interest and penalties included in the liability for uncertain tax positions	$ 2,048	$ 427

During the year ended December 31, 2020, we reversed valuation allowance of $1.0 million related to the unvested stock compensation of covered officers due to the potential deduction limitations under Section 162(m) provisions. We recorded $17.9 million against deferred tax assets of certain U.S. and foreign deferred tax assets. In evaluating our ability to recover our deferred tax assets within the jurisdiction from which they arise, we consider all available positive and negative evidence, including scheduled reversals of deferred tax liabilities, tax-planning strategies, and results of recent operations. In evaluating the objective evidence that historical results provide, we consider three years of cumulative operating income (loss). Using all available evidence, we determined that it was uncertain that we will realize the deferred tax asset for certain of these carryforwards within the carryforward period.

We file income tax returns in the United States federal jurisdiction, numerous states in the United States and multiple countries outside of the United States. We are subject to the continuous examination of our income tax returns by the IRS and other tax authorities. A change in the assessment of the outcomes of such matters could materially impact our consolidated financial statements.

We intend to indefinitely reinvest the undistributed earnings of our foreign subsidiaries as a general rule, as most of our foreign subsidiaries have third party customers, as well as formal sales proposals that could require significant resources. Specifically, our subsidiary in India may repatriate all current 2020 earnings at the discretion of management. As of December 31, 2020, we have no other plans to repatriate any other funds at this time. A Netherlands holding company currently holds all of our foreign subsidiaries. Our holding company makes it more efficient for us to share resources between the respective foreign subsidiaries. As we have determined that the earnings of these subsidiaries are not required as a source of funding for our U.S. operations, such earnings are not planned to be distributed to the United States in the foreseeable future. Determination of the amount of unrecognized income tax liability related to these undistributed foreign subsidiary earnings, if repatriated, is currently not practicable.

12. Stock Award Plan

Total recognized stock-based compensation expense is included in our consolidated statements of operations as shown in the table below. Stock-based compensation expense includes both non-cash expense related to grants of stock-based awards as well as cash expense related to the employee discount applied to purchases of our common stock under our employee stock purchase plan.

	Year Ended December 31,		
(In thousands)	**2020**	**2019**	**2018**
Cost of revenue:			
Software delivery, support and maintenance	$ 1,640	$ 2,075	$ 2,184
Client services	4,421	4,067	3,997
Total cost of revenue	6,061	6,142	6,181
Selling, general and administrative expenses	25,002	27,348	24,213
Research and development	7,827	9,200	8,937
Total stock-based compensation expense	$ 38,890	$ 42,690	$ 39,331

The estimated income tax benefit of stock-based compensation expense included in the provision for income taxes for the year ended December 31, 2020 is approximately $4.8 million. No stock-based compensation costs were capitalized during the years ended December 31, 2020, 2019 and 2018. The calculation of stock-based compensation expenses includes an estimate for forfeitures at the time of grant. This estimate can be revised in subsequent periods if actual forfeitures differ from those estimates, which are based on historical trends. Total unrecognized stock-based compensation expense related to non-vested awards and options was $51.3 million as of December 31, 2020, and this expense is expected to be recognized over a weighted-average period of 2.3 years.

Allscripts Long-Term Incentive Plan

Allscripts adopted the 2019 Stock Incentive Plan (the "Plan"), which became effective May 23, 2019. The Plan provides for the granting of stock options, service-based awards, performance-based share awards and market-based share awards, among other awards. The maximum number of shares available for awards under the Plan is 5.5 million, plus the number of available shares of common stock under the Amended and Restated 2011 Stock Incentive plan as of the effective date of the Plan. There were 8.2 million shares as of December 31, 2020 of common stock reserved for issuance under future share-based awards to be granted to any of Allscripts employees, officers, directors or independent consultants at terms and prices to be determined by our Board, and subject to the terms of the Plan.

We issue service-based, performance-based and market-based awards in the form of restricted stock units or stock options. A description of each category of awards is presented below.

Service-based Share Awards

Service-based share awards include stock options and restricted stock units, and typically vest over a four-year period commencing on the date of grant subject to continued service with the Company. Upon termination of an employee's employment, any unvested service-based share awards are forfeited unless otherwise provided in an employee's employment agreement. Share units are awarded to directors and vest within one year. We recognize the expense for service-based share awards over the requisite service period on a straight-line basis, net of estimated forfeitures.

There was $42.6 million of total estimated unrecognized stock-based compensation expense related to the service-based share awards as of December 31, 2020, which is expected to be recognized over a weighted-average period of 2.4 years.

Performance-based Share Awards

Performance-based share awards include restricted stock units. The purpose of such awards is to align management's compensation with our financial performance and other operational objectives and, in certain cases, to retain key employees over a specified performance period. Awards granted under this category are based on the achievement of various targeted financial measures as defined by the Plan. The awards are earned based on actual results achieved compared to targeted amounts. Stock-based compensation expense related to these awards is recognized over a three-year vesting period under the accelerated attribution method if and when we conclude that it is probable that the performance conditions will be achieved.

There was $2.4 million of total estimated unrecognized stock-based compensation expense as of December 31, 2020, assuming various target attainments related to the performance-based share awards, which is expected to be recognized over a weighted-average period of 2.2 years.

Market-based Share Awards

Market-based share awards include restricted stock units. The purpose of such awards is to align management's compensation with the performance of our common stock relative to the market. Awards granted under this category are dependent on our total shareholder returns relative to a specified peer group of companies over three-year performance periods with vesting based on three annual performance segments from the grant dates. Fair values of the awards were estimated at the date of the grants using the Monte Carlo pricing model. The Compensation Committee of our Board determines the number of awards that will vest considering overall performance over the three-year performance period following the completion of a performance period. Stock-based compensation expense related to these awards is recognized over the three-year vesting periods under the accelerated attribution method.

There was $6.3 million of total estimated unrecognized stock-based compensation expense as of December 31, 2020, which is expected to be recognized over a weighted-average period of 1.7 years.

Restricted Stock Units

The following table summarizes the activity for restricted stock units during the periods presented:

(In thousands, except per share amounts)	**Shares**	**Weighted-Average Grant Date Fair Value**
Unvested restricted stock units as of December 31, 2017	7,259	$ 12.57
Awarded	4,024	13.25
Vested	(2,222)	13.03
Forfeited	(1,111)	12.43
Unvested restricted stock units as of December 31, 2018	7,950	12.81
Awarded	4,777	10.15
Vested	(2,360)	12.62
Forfeited	(1,453)	12.20
Unvested restricted stock units as of December 31, 2019	8,914	11.53
Awarded	5,607	6.88
Vested	(2,756)	11.69
Forfeited	(2,097)	10.79
Unvested restricted stock units as of December 31, 2020	9,668	$ 8.95

Net Share-settlements

Upon vesting, restricted stock units are generally net share-settled upon vesting to cover the required withholding tax and the remaining amount is converted into an equivalent number of shares of common stock. The majority of restricted stock units that vested during the years ended December 31, 2020, 2019 and 2018 were net-share settled such that we withheld shares with value equivalent to the employees' minimum statutory tax obligations for the applicable income and other employment taxes and remitted the equivalent amount of cash to the appropriate taxing authorities. Total payments for the employees' minimum statutory tax obligations are reflected as a financing activity within the accompanying consolidated statements of cash flows. The total shares withheld during the years ended December 31, 2020, 2019 and 2018 were 808 thousand, 705 thousand and 695 thousand, respectively, and were based on the value of the restricted stock units on their vesting date as determined by our closing stock price. These net-share settlements had the effect of share repurchases by us as they reduced the number of shares that would have otherwise been issued at the vesting date.

Stock Options

The following table summarizes the status of stock options outstanding and the changes during the periods presented:

(In thousands, except per share amounts)	Options Outstanding	Weighted-Average Exercise Price	Options Exercisable	Weighted-Average Exercise Price
Balance as of December 31, 2017	1,635	$ 13.85	1,635	$ 13.85
Options granted	0	0.00		
Options exercised	(92)	14.01		
Options forfeited	(211)	14.74		
Balance as of December 31, 2018	1,332	13.69	1,332	13.69
Options granted	0	0		
Options exercised	0	0		
Options forfeited	(98)	14.01		
Balance as of December 31, 2019	1,234	13.67	1,234	13.67
Options granted	0	0		
Options exercised	0	0		
Options forfeited	(1,234)	13.67		
Balance as of December 31, 2020	0	$ 0.00	0	$ 0.00

We estimated the fair value of our service-based stock option awards on the date of grant using the Black-Scholes-Merton option-pricing model. Option valuation models, including the Black-Scholes-Merton option-pricing model, require the input of certain assumptions that involve judgment. Changes in the input assumptions can materially affect the fair value estimates and, ultimately, how much we recognize as stock-based compensation expense. Our stock options had a contractual term of 7 years.

The aggregate intrinsic value of stock options outstanding or exercisable as of December 31, 2020 was zero, as all outstanding stock options were forfeited as of December 31, 2020. The intrinsic value of stock options outstanding represents the amount that would have been received by the option holders had all option holders exercised their stock options as of that date.

The following activity occurred under the Plan:

	Year Ended December 31,		
(In thousands)	2020	2019	2018
Total intrinsic value of stock options exercised	$ 0	$ 0	$ 69
Total fair value of share awards vested	$ 32,218	$ 29,793	$ 28,954

Allscripts Employee Stock Purchase Plan

Our Employee Stock Purchase Plan (the "ESPP") allows eligible employees to authorize payroll deductions of up to 20% of their base salary to be applied toward the purchase of full shares of common stock on the last business day of each offering period. Offering periods under the ESPP are three months in duration and begin on each March 1st, June 1st, September 1st, and December 1st. Shares are purchased on the last day of each offering period at a discount of 15% to the fair market value of our common stock as reported on Nasdaq based on the lower of the closing price either on the first or last business day of each offering period. Employees are limited to purchasing shares under the ESPP having a collective fair market value no greater than $25,000 in any one calendar year. The shares available for purchase under the ESPP may be drawn from either authorized but previously unissued shares of common stock or from reacquired shares of common stock, including shares purchased by us in the open market and held as treasury shares.

We treat the ESPP as a compensatory plan in accordance with GAAP. For each of the years ended December 31, 2020 and 2019, there were 2.0 million shares purchased under the ESPP.

13. Stockholders' Equity

Stock Repurchases

On August 2, 2018, we announced that our Board approved a stock purchase program (the "2018 Program") under which we could repurchase up to $250 million of our common stock through December 31, 2020. During 2020, we repurchased 10.6 million shares of our common stock under the 2018 Program for a total of $102.0 million. During 2019, we repurchased 10.5 million shares of our common stock under the 2018 Program for a total of $111.5 million.

On November 18, 2020, we announced that our Board approved a new stock purchase program (the “2020 Program”) under which we may repurchase up to $300 million of our common stock through December 31, 2021. The 2020 Program replaced the 2018 Program. During the fourth quarter of 2020, we repurchased 14.1 million of our common stock under the 2020 Program. This is inclusive of shares repurchased through the accelerated share repurchase agreements noted below.

On November 30, 2020, we entered into separate Master Confirmations (each, a “Master Confirmation”) and Supplemental Confirmations (each, together with the related Master Confirmation, an “ASR Agreement”), with JPMorgan Chase Bank, National Association and Wells Fargo Bank, National Association (each, an “ASR Counterparty”, or collectively, “ASR Counterparties”), to purchase shares of our common stock for a total payment of $200.0 million (the “Prepayment Amount”). Under the terms of the ASR Agreements, on November 30, 2020, we paid the Prepayment Amount to the ASR Counterparties and received on December 2, 2020 an initial delivery of 11.7 million shares of our common stock, which is approximately 80% of the total number of shares that could be repurchased under the ASR Agreements if the final purchase price per share equaled the closing price of our common stock on November 30, 2020. These repurchased shares became treasury shares and were recorded as a $165.7 million reduction to shareholder’s equity. The remaining $34.3 million of the Prepayment Amount was recorded as a reduction to shareholders’ equity as an unsettled forward contract indexed to our common stock. We excluded the potential share impact of any remaining shares subject to repurchase from the computation of diluted earnings per share as these shares would be anti-dilutive for the year ended December 31, 2020. The approximate dollar value of shares of our common stock that may yet be purchased under the 2020 Program following the ASR Agreements is $67.2 million as of December 31, 2020.

At final settlement, depending on the final purchase price per share, the ASR Counterparties may be required to deliver additional shares of our common stock to the Company, or, under certain circumstances, we may be required to make a cash payment to each ASR Counterparty or may elect to deliver the equivalent value in shares of our common stock. The final purchase price per share under each ASR Agreement will generally be based on the average of daily volume-weighted average prices of shares of our common stock during a term set forth in the such ASR Agreement. The ASR Agreements contain provisions customary for agreements of this type, including provisions for adjustments to the transaction terms, the circumstances generally under which the ASR Agreements may be accelerated, extended or terminated early by the ASR Counterparties and various acknowledgments, representations and warranties made by the parties to one another. Final settlement of the ASR Agreements is expected to be completed during the second quarter of 2021, although the settlement may be accelerated at the ASR Counterparties’ option.

Any future stock repurchase transactions may be made through open market transactions, block trades, privately negotiated transactions (including accelerated share repurchase transactions) or other means, subject to our working capital needs, cash requirements for investments, debt repayment obligations, economic and market conditions at the time, including the price of our common stock, and other factors that we consider relevant. Our stock repurchase program may be accelerated, suspended, delayed or discontinued at any time.

Issuance of Common Stock and Warrants

On December 31, 2020, we completed the issuance of a warrant to a commercial partner, as part of a new and expanded commercial relationship, pursuant to which the warrant holder has the right to purchase 1.5 million shares of our common stock at an exercise price of $9.82 per share, (the closing price of the Company’s common stock on the date definitive agreements with respect to the new and expanded commercial relationship were executed), subject to customary anti-dilution adjustments. The warrant vests in four equal annual installments of 375 thousand shares beginning on December 31, 2020 with each additional installment vesting annually thereafter. The warrant expires on December 31, 2026 and becomes void if certain specified changes to the parties’ commercial relationship occur. The warrant was issued and sold in reliance upon an exemption from registration under the Securities Act of 1933, as amended (the “Securities Act”), afforded by Section 4(a)(2) of the Securities Act and rules promulgated thereunder and corresponding provisions of state securities laws. The commercial partner is an “accredited investor” as defined in Rule 501(a) under the Securities Act. The warrant is not actively traded and was valued based on an option pricing model that used observable and unobservable market data for inputs. The warrant was valued at $12.4 million and is being amortized into earnings over the three-year vesting period. Beginning in January 2021, the amortization of the warrant value will be included in stock-based compensation expense in the accompanying consolidated statements of cash flows. As of December 31, 2020, the warrant has not been exercised.

On June 30, 2016, we issued to a commercial partner, as part of an overall commercial relationship, unregistered warrants to purchase (i) 900,000 shares of our common stock, par value $0.01 per share, at a price per share of $12.47, (ii) 1,000,000 shares of our common stock at a price per share of $14.34 and (iii) 1,100,000 shares of our common stock at a price per share of $15.59, in each case subject to customary anti-dilution adjustments. The warrants vested in four equal annual installments of 750 thousand shares beginning in June 2017 and expire in June 2026. Our issuance of the warrants was a private placement exempt from registration pursuant to Section 4(a)(2) under the Securities Act. These warrants are not actively traded and were valued based on an option pricing model that used observable and unobservable market data for inputs. The warrants were valued at $11 million and were amortized into earnings over the four-year vesting period. The amortization expense is included as a reduction to revenue in the accompanying consolidated statements of operations. On December 30, 2020, the commercial partner exercised its warrants to purchase 900,000 shares on a cashless basis. Based on a price per share of $14.18, which was calculated in accordance with the agreement, it resulted in a delivery of 108 thousand shares. As of December 31, 2020, no additional warrants have been exercised.

In June 2013, in connection with the issuance of the 1.25% Notes, we issued the 1.25% Warrants exercisable for 20.1 million shares of our common stock (subject to anti-dilution adjustments under certain circumstances) with an initial exercise price of $23.135 per share, subject to customary adjustments. The net proceeds from the sale of the 1.25% Warrants of $51.2 million are included as additional paid in capital in the accompanying consolidated balance sheets as of December 31, 2020 and 2019. The 1.25% Warrants began to expire as of October 1, 2020, with expiration continuing to expire over the next 70 trading days. The 1.25% Warrants are exercisable only upon expiration. Additionally, if the market value per share of our common stock exceeds the strike price of the 1.25% Warrants on any trading day during the 70 trading day measurement period, we will, for each such trading day, be obligated to issue to the counterparties a number of shares equal in value to the product of the amount by which such market value exceeds such strike price and 1/70th of the aggregate number of shares of our common stock underlying the 1.25% Warrants transactions, subject to a share delivery cap. For each 1.25% Warrant that is exercised, we will deliver to the option counterparties a number of shares of our common stock equal to the amount by which the settlement price exceeds the exercise price, divided by the settlement price, plus cash in lieu of fractional shares. We will not receive any additional proceeds if the 1.25% Warrants are exercised. The number of warrants and the strike price are subject to adjustment under certain circumstances. The 1.25% Warrants could separately have a dilutive effect to the extent that the market value per share of our common stock (as measured under the terms of the warrant transactions) exceeds the applicable strike price of the 1.25% Warrants. As of December 31, 2020, none of the 1.25% Warrants have been exercised.

Issuance of 0.875% Convertible Senior Notes

In December 2019, we issued the 0.875% Convertible Senior Notes that, at the option of the holders, may be converted into cash, Allscripts' common stock or a combination of cash and Allscripts' common stock. The issuance of the 0.875% Convertible Senior Notes generated a $40.1 million equity component for the embedded conversion option, which was recorded as Additional paid-in capital within the consolidated balance sheets as a discount that will be accreted into interest expense through January 1, 2027 using the interest method. The carrying value of the embedded conversion option was $16.1 million as of December 31, 2020. Refer to Note 10, “Debt” for further information regarding the 0.875% Convertible Senior Notes and embedded conversion option.

14. Earnings (Loss) Per Share

Basic earnings (loss) per share is computed by dividing net income (loss) by the weighted-average shares of common stock outstanding. For purposes of calculating diluted earnings per share, the denominator includes both the weighted average shares of common stock outstanding and dilutive common stock equivalents. Dilutive common stock equivalents consist of stock options, restricted stock unit awards and warrants calculated under the treasury stock method.

The calculations of earnings (loss) per share are as follows:

(In thousands, except per share amounts)	Year Ended December 31, 2020	2019	2018
Basic income (loss) per Common Share:			
Loss from continuing operations, net of tax	$ (132,619)	$ (238,411)	$ (43,216)
Net loss attributable to non-controlling interests	0	424	4,527
Net loss from continuing operations attributable to Allscripts Healthcare Solutions, Inc. stockholders	$ (132,619)	$ (237,987)	$ (38,689)
Income from discontinued operations, net of tax	833,026	55,809	451,023
Accretion of redemption preference on redeemable convertible non-controlling interest - discontinued operations	0	0	(48,594)
Net income from discontinued operations attributable to Allscripts Healthcare Solutions, Inc. stockholders	833,026	55,809	402,429
Net income (loss) attributable to Allscripts Healthcare Solutions, Inc. stockholders	$ 700,407	$ (182,178)	$ 363,740
Weighted-average common shares outstanding	159,281	166,306	176,038
Basic loss from continuing operations per Common Share	$ (0.83)	$ (1.43)	$ (0.22)
Basic income from discontinued operations per Common Share	$ 5.23	$ 0.33	$ 2.29
Net income (loss) attributable to Allscripts Healthcare Solutions, Inc. stockholders per Common Share	$ 4.40	$ (1.10)	$ 2.07
Diluted income (loss) per Common Share:			
Loss from continuing operations, net of tax	$ (132,619)	$ (238,411)	$ (43,216)
Net loss attributable to non-controlling interests	0	424	4,527
Net loss from continuing operations attributable to Allscripts Healthcare Solutions, Inc. stockholders	$ (132,619)	$ (237,987)	$ (38,689)
Income from discontinued operations, net of tax	$ 833,026	$ 55,809	$ 451,023
Accretion of redemption preference on redeemable convertible non-controlling interest - discontinued operations	0	0	(48,594)
Net income from discontinued operations attributable to Allscripts Healthcare Solutions, Inc. stockholders	833,026	55,809	402,429
Net income (loss) attributable to Allscripts Healthcare Solutions, Inc. stockholders	$ 700,407	$ (182,178)	$ 363,740
Weighted-average common shares outstanding	159,281	166,306	176,038
Dilutive effect of stock options, restricted stock unit awards and warrants	0	0	0
Weighted-average common shares outstanding assuming dilution	159,281	166,306	176,038
Diluted (loss) income from continuing operations per Common Share	$ (0.83)	$ (1.43)	$ (0.22)
Diluted income from discontinued operations per Common Share	$ 5.23	$ 0.33	$ 2.29
Net income (loss) attributable to Allscripts Healthcare Solutions, Inc. stockholders per Common Share	$ 4.40	$ (1.10)	$ 2.07

As a result of the loss from continuing operations, net of tax for the years ended December 31, 2020, 2019 and 2018, we used basic weighted-average common shares outstanding in the calculation of diluted loss per share, since the inclusion of any stock equivalents would be anti-dilutive.

The following stock options, restricted stock unit awards and warrants are not included in the computation of diluted earnings (loss) per share as the effect of including such stock options, restricted stock unit awards and warrants in the computation would be anti-dilutive:

	Year Ended December 31,		
(In thousands)	2020	2019	2018
Shares subject to anti-dilutive stock options, restricted stock unit awards and warrants excluded from calculation	42,845	27,945	26,175

15. Accumulated Other Comprehensive Loss

Accumulated Other Comprehensive Loss

Changes in the balances of each component included in accumulated other comprehensive loss ("AOCI") are presented in the tables below. All amounts are net of tax and exclude non-controlling interest.

(In thousands)	Foreign Currency Translation Adjustments	Unrealized Net Gains (Losses) on Foreign Exchange Contracts	Total
Balance as of December 31, 2017 (1)	(2,676)	691	(1,985)
Other comprehensive (loss) income before reclassifications	(2,908)	(264)	(3,172)
Net (gains) losses reclassified from accumulated other comprehensive loss	0	(232)	(232)
Net other comprehensive (loss) income	(2,908)	(496)	(3,404)
Balance as of December 31, 2018 (2)	(5,584)	195	(5,389)
Other comprehensive income (loss) before reclassifications	1,192	61	1,253
Net (gains) losses reclassified from accumulated other comprehensive loss	0	(256)	(256)
Net other comprehensive income (loss)	1,192	(195)	997
Balance as of December 31, 2019 (2)	(4,392)	0	(4,392)
Other comprehensive income (loss) before reclassifications	1,435	1,587	3,022
Net (gains) losses reclassified from accumulated other comprehensive loss	0	(468)	(468)
Net other comprehensive income (loss)	1,435	1,119	2,554
Balance as of December 31, 2020 (3)	$ (2,957)	$ 1,119	$ (1,838)

(1) Net of taxes of $445 thousand for unrealized net gains on marketable securities and foreign exchange contract derivatives.

(2) Tax effects for the years ended December 31, 2019 and 2018 include $149 thousand arising from the revaluations of tax effects included in accumulated other comprehensive income.

(3) Net of taxes of $390 thousand for unrealized net gains on foreign exchange contract derivatives.

Income Tax Effects Related to Components of Other Comprehensive Loss

The following tables reflect the tax effects allocated to each component of other comprehensive loss ("OCI")

	Year Ended December 31, 2020		
(In thousands)	Before-Tax Amount	Tax Effect	Net Amount
Foreign currency translation adjustments	$ 1,435	$ 0	$ 1,435
Derivatives qualifying as cash flow hedges:			
Foreign exchange contracts:			
Net gains (losses) arising during the period	2,139	(552)	1,587
Net (gains) losses reclassified into income	(630)	162	(468)
Net change in unrealized gains (losses) on foreign exchange contracts	1,509	(390)	1,119
Other comprehensive income (loss)	$ 2,944	$ (390)	$ 2,554

(In thousands)	Year Ended December 31, 2019 Before-Tax Amount	Tax Effect	Net Amount
Foreign currency translation adjustments	$ 1,192	$ 0	$ 1,192
Derivatives qualifying as cash flow hedges:			
Foreign exchange contracts:			
Net gains (losses) arising during the period	82	(21)	61
Net (gains) losses reclassified into income	(344)	88	(256)
Net change in unrealized (losses) gains on foreign exchange contracts	(262)	67	(195)
Other comprehensive income	$ 930	$ 67	$ 997

(In thousands)	Year Ended December 31, 2018 Before-Tax Amount	Tax Effect	Net Amount
Foreign currency translation adjustments	$ (2,908)	$ 0	$ (2,908)
Derivatives qualifying as cash flow hedges:			
Foreign exchange contracts:			
Net (losses) gains arising during the period	(357)	93	(264)
Net (gains) losses reclassified into income [1]	(516)	284	(232)
Net change in unrealized (losses) gains on foreign exchange contracts	(873)	377	(496)
Other comprehensive (loss) income	$ (3,781)	$ 377	$ (3,404)

[1] Net of taxes of $68 thousand for unrealized net gains on foreign exchange contract derivatives.

16. Derivative Financial Instruments

The following tables provide information about the fair values of our derivative financial instruments as of the respective balance sheet dates:

	December 31, 2020			
	Asset Derivatives		Liability Derivatives	
(In thousands)	Balance Sheet Location	Fair Value	Balance Sheet Location	Fair Value
Derivatives qualifying as cash flow hedges:				
Foreign exchange contracts	Prepaid expenses and other current assets	$ 1,509	Accrued expenses	$ 0
Derivatives not subject to hedge accounting:				
1.25% Call Option	Other assets	0	N/A	
1.25% Embedded cash conversion option	N/A		Other liabilities	0
Total derivatives		$ 1,509		$ 0

	December 31, 2019			
	Asset Derivatives		Liability Derivatives	
(In thousands)	Balance Sheet Location	Fair Value	Balance Sheet Location	Fair Value
Derivatives qualifying as cash flow hedges:				
Foreign exchange contracts	Prepaid expenses and other current assets	$ 0	Accrued expenses	$ 0
Derivatives not subject to hedge accounting:				
1.25% Call Option	Other assets	84	N/A	
1.25% Embedded cash conversion option	N/A		Other liabilities	185
Total derivatives		$ 84		$ 185

N/A – We define “N/A” as disclosure not being applicable

Foreign Exchange Contracts

We have entered into non-deliverable forward foreign currency exchange contracts with reputable banking counterparties to hedge a portion of our forecasted future INR expenses against foreign currency fluctuations between the United States dollar and the INR. These forward contracts cover a percentage of forecasted monthly INR expenses over time. As of December 31, 2020, there were six forward contracts outstanding that were staggered to mature monthly starting in January 2021 and ending in June 2021. In the future, we may enter into additional forward contracts to increase the amount of hedged monthly INR expenses or initiate hedges for monthly periods beyond June 2021. As of December 31, 2020, the notional amount for each of the outstanding forward contracts was 225 million INR, or the equivalent of $3.1 million, based on the exchange rate between the United States dollar and the INR in effect as of December 31, 2020. These amounts also approximate the forecasted future INR expenses we target to hedge in any one month in the future. As of December 31, 2020, we estimate that $1.5 million of net unrealized derivative gains included in accumulated other comprehensive income will be reclassified into income within the next six months.

The following tables show the impact of derivative instruments designated as cash flow hedges on the consolidated statements of operations and the consolidated statements of comprehensive income (loss):

	Amount of Gain (Loss) Recognized in OCI			Location of Gain (Loss) Reclassified from AOCI into Income	Amount of Gain (Loss) Reclassified from AOCI into Income		
	Year Ended December 31,				Year Ended December 31,		
(In thousands)	**2020**	**2019**	**2018**		**2020**	**2019**	**2018**
Foreign exchange contracts	$ 2,139	$ 82	$ (357)	Cost of Revenue	$ 249	$ 124	$ 165
				Selling, general and administrative expenses	122	83	138
				Research and development	259	137	214

1.25% Call Option

In June 2013, concurrent with the issuance of the 1.25% Notes, we entered into the 1.25% Call Option with certain of the initial purchasers of the 1.25% Notes (the “Option Counterparties”). Assuming full performance by the Option Counterparties, the 1.25% Call Option was intended to offset cash payments in excess of the principal amount due upon any conversion of the 1.25% Notes. On July 1, 2020, the 1.25% Notes matured and were repaid in full (refer to Note 10, “Debt”), and the 1.25% Call Option expired.

Aside from the initial payment of a premium to the Option Counterparties of $82.8 million for the 1.25% Call Option, we were not required to make any cash payments to the Option Counterparties under the 1.25% Call Option, and, subject to the terms and conditions thereof, would have been entitled to receive from the Option Counterparties an amount of cash, generally equal to the amount by which the market price per share of our common stock exceeded the strike price of the 1.25% Call Option during the relevant valuation period. The strike price under the 1.25% Call Option was equal to the conversion price of the 1.25% Notes of $17.19 per share of our common stock.

The 1.25% Call Option, which was indexed to our common stock, was a derivative asset that required mark-to-market accounting treatment, due to the cash settlement features, until the 1.25% Call Option settled or expired. The 1.25% Call Option was measured and reported at fair value on a recurring basis within Level 3 of the fair value hierarchy. For further discussion of the inputs used to determine the fair value of the 1.25% Call Option, refer to Note 6, “Fair Value Measurements and Other Investments.”

The 1.25% Call Option did not qualify for hedge accounting treatment. Therefore, the change in fair value of this instrument was recognized immediately in our consolidated statements of operations in Other income (loss), net. Because the terms of the 1.25% Call Option were substantially similar to those of the 1.25% Notes embedded cash conversion option, discussed next, we expected the net effect of those two derivative instruments on our results of operations to be minimal.

1.25% Notes Embedded Cash Conversion Option

The embedded cash conversion option within the 1.25% Notes was required to be separated from the 1.25% Notes and accounted for separately as a derivative liability, with changes in fair value recognized immediately in our consolidated statements of operations in Other income (loss), net until the cash conversion option settled or expired. The cash conversion option expired without ever having required settlement prior to the maturity of the 1.25% Notes. The initial fair value liability of the embedded cash conversion option was $82.8 million, which simultaneously reduced the carrying value of the 1.25% Notes (effectively an original issuance discount). The embedded cash conversion option was measured and reported at fair value on a recurring basis within Level 3 of the fair value hierarchy. For further discussion of the inputs used to determine the fair value of the embedded cash conversion option, refer to Note 6, “Fair Value Measurements and Other Investments.”

The following table shows the net impact of the changes in fair values of the 1.25% Call Option and 1.25% Notes’ embedded cash conversion option in the consolidated statements of operations:

	Year Ended December 31,		
(In thousands)	**2020**	**2019**	**2018**
1.25% Call Option	$ (84)	$ (9,020)	$ (37,474)
1.25% Embedded cash conversion option	185	9,789	37,803
Net income included in Other income, net	$ 101	$ 769	$ 329

17. Commitments

Commitment with Strategic Partner

We completed renegotiations with Atos to improve the operating cost structure of our private cloud hosting operations during 2019. The new agreement also provides for the payment of initial annual base fees of $35 million per year (an increase from $30 million) plus charges for volume-based services currently projected using volumes estimated based on historical actuals and forecasted projections. Expenses under our agreements with Atos, which are included in cost of revenue in our consolidated statements of operations, are as follows:

	Year Ended December 31,		
(In thousands)	**2020**	**2019**	**2018**
Expenses incurred under Atos agreements	$ 102,730	$ 100,089	$ 55,903

18. Discontinued Operations

EPSi and CarePort Discontinued Operations

During 2020, we implemented a strategic initiative to sell two of our businesses, EPSi and CarePort. Since both businesses were part of the same strategic initiative and were sold within the same period, the combined sale of EPSi and CarePort represents a strategic shift that had a major effect on our operations and financial results. These businesses are now reported together as discontinued operations for all periods presented.

On October 15, 2020, we completed the sale of our EPSi business in exchange for $365.0 million, which is subject to certain adjustments for liabilities assumed by Strata and net working capital as described in the EPSi Purchase Agreement. Prior to the sale, EPSi was part of the Unallocated category as it did not meet the requirements to be a reportable segment nor the criteria to be aggregated into our two reportable segments. On its own, the divestiture of the EPSi business did not represent a strategic shift that had a major effect on our operations and financial results. However, the combined sale of EPSi and CarePort represented a strategic shift that had a major effect on our operations and financial results. Therefore, EPSi is treated as a discontinued operation. Refer to Note 5, “Business Combinations and Divestitures” for additional information about this transaction.

On December 31, 2020, we completed the sale of our CarePort business in exchange for $1.35 billion, which is subject to certain adjustments for liabilities assumed by WellSky and net working capital as described in the CarePort Purchase Agreement. Prior to the sale, CarePort was part of the Data, Analytics and Care Coordination reportable segment. On its own, the divestiture of the CarePort business represents a strategic shift that had a major effect on our operations and financial results. Refer to Note 5, “Business Combinations and Divestitures” for additional information about this transaction.

The following table summarizes the major classes of assets and liabilities of EPSi and CarePort, as reported on the consolidated balance sheets as of December 31, 2020 and 2019:

(In thousands)	December 31, 2020	December 31, 2019
Carrying amounts of major classes of assets associated with EPSi and CarePort included as part of discontinued operations:		
Accounts receivable, net of allowance of $1,874 as of December 31, 2019	$ 0	$ 35,336
Contract assets, net of allowance of $0 as of December 31, 2019	0	2,690
Prepaid expenses and other current assets	0	3,845
Total current assets attributable to discontinued operations	0	41,871
Fixed assets, net	0	386
Software development costs, net	0	21,237
Intangible assets, net	0	7,014
Goodwill	0	387,907
Contract assets - long-term, net of allowance of $0 as of December 31, 2019	0	4,034
Right-of-use assets - operating leases	0	2,263
Other assets	0	5,180
Total long-term assets attributable to discontinued operations	$ 0	$ 428,021
Carrying amounts of major classes of liabilities associated with EPSi and CarePort included as part of discontinued operations:		
Accounts payable	$ 0	$ 1,190
Accrued expenses	6,669	381
Income tax payable	316,142	0
Accrued compensation and benefits	0	2,788
Deferred revenue	0	44,224
Current operating lease liabilities	0	809
Total current liabilities attributable to discontinued operations	322,811	49,392
Deferred revenue long-term	0	1,269
Long-term operating lease liabilities	0	1,574
Total long-term liabilities attributable to discontinued operations	$ 0	$ 2,843

The following table summarizes the major income and expense line items of EPSi and CarePort as reported in the consolidated statement of operations for the years ended December 31, 2020, 2019 and 2018:

	Year ended December 31,		
(In thousands)	**2020**	**2019**	**2018**
Major income and expense line items related to EPSi and CarePort:			
Revenue:			
Software delivery, support and maintenance	$ 122,791	$ 122,268	$ 116,639
Client services	14,030	16,763	15,482
Total revenue	136,821	139,031	132,121
Cost of revenue:			
Software delivery, support and maintenance	11,424	12,482	10,737
Client services	15,585	15,124	12,038
Amortization of software development and acquisition-related assets	9,053	8,166	6,194
Total cost of revenue	36,062	35,772	28,969
Gross profit	100,759	103,259	103,152
Selling, general and administrative expenses	15,539	18,964	18,118
Research and development	8,269	9,065	9,673
Amortization of intangible assets	29	29	29
Income from discontinued operations for EPSi and CarePort	76,922	75,201	75,332
Interest expense	(5,241)	0	0
Other (expense) income, net	(192)	2	5
Gain on sale of discontinued operations	1,156,504	0	0
Income from discontinued operations for EPSi and CarePort before income taxes	1,227,993	75,203	75,337
Income tax provision(1)	(394,926)	(19,417)	(19,452)
Income from discontinued operations, net of tax for EPSi and CarePort(2)	$ 833,067	$ 55,786	$ 55,885

(1) Income tax provision does not agree to the consolidated statement of operations for the year ended December 31, 2019 due to residual amounts related to Netsmart.

(2) Income from discontinued operations, net of tax for EPSi and CarePort does not agree to the consolidated statement of operations for the years ended December 31, 2020 and 2019 due to residual amounts related to Netsmart.

Netsmart Discontinued Operation

On December 31, 2018, we sold all of the Class A Common Units of Netsmart held by the Company in exchange for $566.6 million in cash plus a final settlement as determined following the closing. Prior to the sale, Netsmart comprised a separate reportable segment, which due to its significance to our historical consolidated financial statements and results of operations, is reported as a discontinued operation as a result of the sale. Refer to Note 5, “Business Combinations and Divestitures” for additional information about this transaction.

The following table summarizes Netsmart's major income and expense line items as reported in the consolidated statements of operations for the year ended December 31, 2018:

(In thousands)	Year ended December 31, 2018
Major income and expense line items related to Netsmart:(1)	
Revenue:	
Software delivery, support and maintenance	$ 214,065
Client services	131,166
Total revenue	345,231
Cost of revenue:	
Software delivery, support and maintenance	60,100
Client services	94,061
Amortization of software development and acquisition related assets	34,357
Total cost of revenue	188,518
Gross profit	156,713
Selling, general and administrative expenses	125,807
Research and development	25,315
Amortization of intangible and acquisition-related assets	24,029
Loss from discontinued operations of Netsmart	(18,438)
Interest expense	(59,541)
Other income	101
Gain on sale of discontinued operations	500,471
Income from discontinued operations of Netsmart before income taxes	422,593
Income tax provision	(31,186)
Income from discontinued operations, net of tax for Netsmart	$ 391,407

(1) Activity includes both Netsmart and intercompany transactions that would not have been eliminated if Netsmart's results were not consolidated.

Horizon Clinicals and Series2000 Revenue Cycle Discontinued Operation

Two of the product offerings acquired with the EIS Business in 2017, Horizon Clinicals and Series2000 Revenue Cycle, were sunset after March 31, 2018. The decision to discontinue maintaining and supporting these solutions was made prior to our acquisition of the EIS Business and, therefore, they are presented below as discontinued operations. Until the end of the first quarter of 2018, we were involved in ongoing maintenance and support for these solutions until customers transitioned to other platforms. No disposal gains or losses were recognized during the year ended December 31, 2018 related to these discontinued solutions. We had $0.9 million of accrued expenses associated with the Horizon Clinicals and Series2000 Revenue Cycle businesses on the consolidated balance sheet as of December 31, 2018.

The following table summarizes the major income and expense line items of these discontinued solutions, as reported in the consolidated statements of operations for the year ended December 31, 2018:

(In thousands)	Year ended December 31, 2018
Major classes of line items constituting pretax profit (loss) of discontinued operations for Horizon Clinicals and Series2000 Revenue Cycle:	
Revenue:	
Software delivery, support and maintenance	$ 9,441
Client services	404
Total revenue	9,845
Cost of revenue:	
Software delivery, support and maintenance	2,322
Client services	830
Total cost of revenue	3,152
Gross profit	6,693
Research and development	1,651
Income from discontinued operations for Horizon Clinicals and Series2000 Revenue Cycle before income taxes	5,042
Income tax provision	(1,311)
Income from discontinued operations, net of tax for Horizon Clinicals and Series2000 Revenue Cycle	$ 3,731

19. Business Segments

We primarily derive our revenues from sales of our proprietary software (either as a direct license sale or under a subscription delivery model), which also serves as the basis for our recurring service contracts for software support and maintenance and certain transaction-related services. In addition, we provide various other client services, including installation, and managed services such as outsourcing, private cloud hosting and revenue cycle management.

During the first quarter of 2020, we realigned our reporting structure to organize the Company around strategic business units to maximize delivery of client commitments, operational effectiveness and competitiveness. As a result, we had three operating segments: (i) Core Clinical and Financial Solutions, (ii) Data, Analytics and Care Coordination and (iii) EPSi. The Core Clinical and Financial Solutions and Data, Analytics and Care Coordination operating segments are the equivalent to the two current reportable segments described below.

During the second quarter of 2020, (i) certain operations were moved between the Core Clinical and Financial Solutions segment, and the Data, Analytics and Care Coordination segment and (ii) a transfer price allocation was recorded between the Core Clinical and Financial Solutions segment and the Data, Analytics and Care Coordination segment. In addition, the (i) corporate general and administrative expenses (including marketing expenses) and (ii) revenue and the associated cost from the resale of certain ancillary products, primarily hardware, that were previously in the "Unallocated Amounts" were allocated between the three operating segments.

The new reportable segments are (i) Core Clinical and Financial Solutions and (ii) Data, Analytics and Care Coordination. The new Core Clinical and Financial Solutions segment derives its revenue from the sale of software applications for patient engagement, integrated clinical and financial management solutions, which primarily include EHR-related software, financial and practice management software, related installation, support and maintenance, outsourcing, private cloud hosting and revenue cycle management. The new Data, Analytics and Care Coordination segment derives its revenue from the sale of practice reimbursement and payer and life sciences solutions, which are mainly targeted at physician practices, payers, life sciences companies and other key healthcare stakeholders. These solutions enable clients to transition, analyze, coordinate care and improve the quality, efficiency and value of healthcare delivery across the entire care community. The EPSi operating segment was included in the "Unallocated Amounts" category as it did not meet the requirements to be a reportable segment nor the criteria to be aggregated into the two reportable segments. The segment disclosures below for the years ended December 31, 2019 and 2018 have been revised to conform to the current year presentation.

On October 15, 2020, we completed the sale of our EPSi business. As noted above, prior to the sale, EPSi was included in "Unallocated Amounts." On December 31, 2020, we completed the sale of our CarePort business. Prior to the sale, CarePort was included in the Data, Analytics and Care Coordination reportable segment. The divestitures of EPSi and CarePort are being treated as discontinued operations as they were part of the same strategic initiative, were sold within the same period, and have a combined major effect on our consolidated financial statements and results of operations. Refer to Note 5, "Business Combinations and Divestitures" and to Note 18, "Discontinued Operations" for additional information.

We sold all of our investment in Netsmart on December 31, 2018. Prior to the sale, Netsmart comprised a separate reportable segment, which due to its significance to our historical consolidated financial statements and results of operations, is reported as a discontinued operation as a result of the sale. In addition, the results of operations related to two of the product offerings acquired with the EIS Business (Horizon Clinicals and Series2000) that were sunset in 2018 are also presented throughout these financial statements as discontinued operations. These two product offerings were included within the historical Provider reportable segment, which is now reported within the Core Clinical and Financial Solutions segment. Refer to Note 18, "Discontinued Operations."

Our Chief Operating Decision Maker ("CODM") uses segment revenues, gross profit and loss from operations as measures of performance and to make decisions about the allocation of resources. We do not track our assets by segment.

	Year Ended December 31,		
(In thousands)	**2020**	**2019**	**2018**
Revenue:			
Core Clinical and Financial Solutions	$ 1,254,249	$ 1,377,147	$ 1,379,499
Data, Analytics and Care Coordination	261,321	262,664	246,718
Unallocated Amounts	(12,870)	(7,200)	(8,376)
Total revenue	$ 1,502,700	$ 1,632,611	$ 1,617,841
Gross profit:			
Core Clinical and Financial Solutions	$ 434,288	$ 473,033	$ 491,421
Data, Analytics and Care Coordination	131,407	137,254	129,970
Unallocated Amounts	0	0	0
Total gross profit	$ 565,695	$ 610,287	$ 621,391
Loss from operations:			
Core Clinical and Financial Solutions	$ (116,139)	$ (80,465)	$ (158,440)
Data, Analytics and Care Coordination	(14,741)	(19,224)	(9,944)
Unallocated Amounts	0	0	0
Total loss from operations	$ (130,880)	$ (99,689)	$ (168,384)

20. Supplemental Disclosures

The majority of the restricted cash balance as of December 31, 2020 represents the remaining balance of the escrow account established as part of the acquisition of Netsmart in 2016 to be used by Netsmart to facilitate the integration of our Homecare™ business within Netsmart and an escrow fund related to a previous acquisition associated with the acquired EIS Business.

	December 31	
(In thousands)	**2020**	**2019**
Reconciliation of cash, cash equivalents and restricted cash:		
Cash and cash equivalents	$ 531,104	$ 129,668
Restricted cash	6,361	7,871
Total cash, cash equivalents and restricted cash	$ 537,465	$ 137,539

(In thousands)	Year Ended December 31, 2020		2019		2018	
Cash paid during the period for:						
Interest, including convertible senior notes	$	24,616	$	23,917	$	33,200
Income taxes paid, net of tax refunds	$	76,595	$	42,972	$	10,108
Non-cash transactions:						
Accretion of redemption preference on redeemable convertible non-controlling interest - discontinued operations	$	0	$	0	$	48,594
Obligations incurred to purchase capitalized software or enter into finance leases	$	0	$	0	$	1,501
Contributions of assets in exchange for equity interest	$	0	$	0	$	4,000
Issuance of treasury stock to commercial partner	$	752	$	701	$	1,121

Accrued expenses consist of the following:

(In thousands)	December 31, 2020		2019	
Royalties, certain third-party product costs and licenses	$	37,841	$	35,064
Practice Fusion settlement		0		145,000
Other		62,421		90,217
Total Accrued expenses	$	100,262	$	270,281

Other consists of various accrued expenses and no individual item accounted for more than 5% of the current liabilities balance at the respective balance sheet dates.

Prepaid and other current assets consists of the following:

(In thousands)	December 31, 2020		2019	
Prepaid assets	$	132,944	$	142,191
Other current assets		3,320		1,954
Total Prepaid and other current assets	$	136,264	$	144,145

Other assets consist of the following:

(In thousands)	December 31, 2020		2019	
Fair value of 1.25% Call Option	$	0	$	84
Long-term deferred hosting fees		11,025		36,002
Long-term prepaid commissions		27,882		28,876
Investments in non-marketable securities		35,805		43,806
Long-term deposits and other assets		16,916		10,819
Total Other assets	$	91,628	$	119,587

21. Geographic Information

Revenues are attributed to geographic regions based on the location where the sale originated. Our revenues by geographic area are summarized below:

(In thousands)	Year Ended December 31, 2020		2019		2018	
United States	$	1,439,737	$	1,562,107	$	1,565,057
Canada		15,624		16,495		15,377
Other international		47,339		54,009		37,407
Total	$	1,502,700	$	1,632,611	$	1,617,841

A summary of our long-lived assets, comprised of fixed assets by geographic area, is presented below:

(In thousands)	December 31, 2020	December 31, 2019
United States	$ 62,016	$ 77,736
India	5,876	5,321
Israel	2,611	3,240
Canada	187	51
Other international	1,472	1,605
Total	$ 72,162	$ 87,953

22. Contingencies

In addition to commitments and obligations in the ordinary course of business, we are currently subject to various legal proceedings and claims that have not been fully adjudicated. We intend to vigorously defend ourselves, as appropriate, in these matters.

No less than quarterly, we review the status of each significant matter and assess our potential financial exposure. We accrue a liability for an estimated loss if the potential loss from any legal proceeding or claim is considered probable and the amount can be reasonably estimated. Significant judgment is required in both the determination of probability and the determination as to whether the amount of an exposure is reasonably estimable, and accruals are based only on the information available to our management at the time the judgment is made.

The outcome of legal proceedings is inherently uncertain, and we may incur substantial defense costs and expenses defending any of these matters. In the opinion of our management, the ultimate disposition of pending legal proceedings or claims will not have a material adverse effect on our consolidated financial position, liquidity or results of operations. However, if one or more of these additional legal proceedings were resolved against or settled by us in a reporting period for amounts in excess of our management's expectations, our consolidated financial statements for that and subsequent reporting periods could be materially adversely affected. Additionally, the resolution of a legal proceeding against us could prevent us from offering our products and services to current or prospective clients or cause us to incur increased compliance costs, either of which could further adversely affect our operating results.

The Enterprise Information Solutions business (the "EIS Business") acquired from McKesson Corporation ("McKesson") on October 2, 2017 is subject to a May 2017 civil investigative demand ("CID") from the U.S. Attorney's Office for the Eastern District of New York. The CID requests documents and information related to the certification McKesson obtained for Horizon Clinicals in connection with the U.S. Department of Health and Human Services' Electronic Health Record Incentive Program. In August 2018, McKesson received an additional CID seeking similar information for Paragon. McKesson has agreed, with respect to the CIDs, to indemnify Allscripts for amounts paid or payable to the government (or any private relator) involving any products or services marketed, sold or licensed by the EIS Business as of or prior to the closing of the acquisition.

Practice Fusion, acquired by Allscripts on February 13, 2018, received in March 2017 a request for documents and information from the U.S. Attorney's Office for the District of Vermont pursuant to a CID. Between April 2018 and June 2019, Practice Fusion received from the U.S. Department of Justice (the "DOJ") seven additional requests for documents and information through four additional CIDs and three Health Insurance Portability and Accountability Act ("HIPAA") subpoenas related to both the certification Practice Fusion obtained in connection with the U.S. Department of Health and Human Services' Electronic Health Record Incentive Program and Practice Fusion's compliance with the Anti-Kickback Statute ("AKS") and HIPAA as it relates to certain business practices engaged in by Practice Fusion. In March 2019, Practice Fusion received a grand jury subpoena in connection with a criminal investigation related to Practice Fusion's compliance with the AKS. On January 27, 2020, Practice Fusion entered into the Settlement Agreements resolving the investigations conducted by the DOJ and the U.S. Attorney's Office. See risk factor entitled "The failure by Practice Fusion to comply with the terms of its settlement agreements with the DOJ could have a material and adverse impact on our business, results of operations and financial condition, and, even if Practice Fusion complies with those settlement agreements, the costs and burdens of compliance could be significant, and we may face additional investigations and proceedings from other governmental entities or third parties related to the same or similar conduct underlying the agreements with the DOJ." The terms of Settlement Agreements resolved, among other things, allegations that Practice Fusion, long before its acquisition by Allscripts and concerning conduct about which Allscripts was unaware at the time of the acquisition, violated the AKS through the manner by which a sponsored Clinical Decision Support arrangement was sold to an opioid manufacturer and other AKS allegations made by the DOJ against Practice Fusion as well as False Claims Act allegations pertaining to Meaningful Use payments the federal government made to users of Practice Fusion's EHR system. The Settlement Agreements also required Practice Fusion to pay a criminal fine of $25.3 million, a forfeiture payment of $959,700 and a civil settlement of $118.6 million, which included $5.2 million designated for the state Medicaid program expenditures, all of which have now been paid in full.

23. Quarterly Financial Information (Unaudited)

The following tables contain a summary of our unaudited quarterly consolidated results of operations for our last eight fiscal quarters, which have been restated to illustrate CarePort and EPSi as discontinued operations.

	Quarter Ended			
(In thousands, except per share amounts)	December 31, 2020	September 30, 2020	June 30, 2020	March 31, 2020
Revenue	$ 386,414	$ 365,618	$ 369,304	$ 381,364
Cost of revenue	225,391	230,480	231,706	249,428
Gross profit	161,023	135,138	137,598	131,936
Selling, general and administrative expenses	93,777	93,442	109,897	92,825
Research and development	54,287	46,352	46,045	59,377
Asset impairment charges	74,759	210	0	0
Amortization of intangible and acquisition-related assets	6,278	6,295	6,321	6,710
Loss from operations	(68,078)	(11,161)	(24,665)	(26,976)
Interest expense	(6,458)	(6,667)	(10,314)	(10,665)
Other income (loss), net	9	398	(875)	522
Impairment of long-term investments	0	(1,025)	(550)	0
Equity in net (loss) income of unconsolidated investments	(223)	383	16,834	200
Loss from continuing operations before income taxes	(74,750)	(18,072)	(19,570)	(36,919)
Income tax benefit (provision)	10,051	4,116	(2,009)	4,534
Loss from continuing operations, net of tax	(64,699)	(13,956)	(21,579)	(32,385)
Income from discontinued operations	16,847	19,545	18,838	16,218
Gain on sale of discontinued operations	1,156,504	0	0	0
Income tax effect on discontinued operations	(380,828)	(5,047)	(4,864)	(4,187)
Income from discontinued operations, net of tax	792,523	14,498	13,974	12,031
Net income (loss)	727,824	542	(7,605)	(20,354)
Net income (loss) attributable to Allscripts Healthcare Solutions, Inc. stockholders	$ 727,824	$ 542	$ (7,605)	$ (20,354)
Net income (loss) attributable to Allscripts Healthcare Solutions, Inc. stockholders per share: (3)				
Basic				
Continuing operations	$ (0.43)	$ (0.09)	$ (0.13)	$ (0.20)
Discontinued operations	$ 5.25	$ 0.09	$ 0.08	$ 0.07
Net income (loss) attributable to Allscripts Healthcare Solutions, Inc. stockholders per share	$ 4.82	$ 0.00	$ (0.05)	$ (0.13)
Diluted				
Continuing operations	$ (0.43)	$ (0.09)	$ (0.13)	$ (0.20)
Discontinued operations	$ 5.25	$ 0.09	$ 0.08	$ 0.07
Net income (loss) attributable to Allscripts Healthcare Solutions, Inc. stockholders per share	$ 4.82	$ 0.00	$ (0.05)	$ (0.13)

(In thousands, except per share amounts)	Quarter Ended December 31, 2019	September 30, 2019 (2)	June 30, 2019 (1)	March 31, 2019
Revenue	$ 414,330	$ 408,280	$ 410,883	$ 399,118
Cost of revenue	261,711	259,767	251,680	249,166
Gross profit	152,619	148,513	159,203	149,952
Selling, general and administrative expenses	108,275	96,080	100,462	95,991
Research and development	60,112	61,062	61,922	62,347
Asset impairment charges	6,800	248	3,691	98
Goodwill impairment charge	25,700	0	0	0
Amortization of intangible and acquisition-related assets	6,834	6,840	6,724	6,790
Loss from operations	(55,102)	(15,717)	(13,596)	(15,274)
Interest expense	(11,725)	(10,839)	(10,424)	(10,184)
Other income (loss), net	4,796	781	(144,994)	513
(Impairment) recovery of long-term investments	(1,696)	0	0	1,045
Equity in net income (loss) of unconsolidated investments	125	386	218	(64)
Loss from continuing operations before income taxes	(63,602)	(25,389)	(168,796)	(23,964)
Income tax benefit	29,738	5,645	5,262	2,695
Loss from continuing operations, net of tax	(33,864)	(19,744)	(163,534)	(21,269)
Income from discontinued operations	20,078	18,899	18,339	17,919
Income tax effect on discontinued operations	(5,184)	(4,880)	(4,735)	(4,627)
Income from discontinued operations, net of tax	14,894	14,019	13,604	13,292
Net loss	(18,970)	(5,725)	(149,930)	(7,977)
Net loss attributable to non-controlling interest	0	0	0	424
Net loss attributable to Allscripts Healthcare Solutions, Inc. stockholders	$ (18,970)	$ (5,725)	$ (149,930)	$ (7,553)
Net loss attributable to Allscripts Healthcare Solutions, Inc. stockholders per share: (3)				
Basic				
Continuing operations	$ (0.21)	$ (0.11)	$ (0.98)	$ (0.12)
Discontinued operations	$ 0.09	$ 0.08	$ 0.08	$ 0.08
Net loss attributable to Allscripts Healthcare Solutions, Inc. stockholders per share	$ (0.12)	$ (0.03)	$ (0.90)	$ (0.04)
Diluted				
Continuing operations	$ (0.21)	$ (0.11)	$ (0.98)	$ (0.12)
Discontinued operations	$ 0.09	$ 0.08	$ 0.08	$ 0.08
Net loss attributable to Allscripts Healthcare Solutions, Inc. stockholders per share	$ (0.12)	$ (0.03)	$ (0.90)	$ (0.04)

(1) Results of operations for the quarter include the results of operations of a third party engaged in a specialty prescription drug platform since June 10, 2019.

(2) Results of operations for the quarter include the results of operations of Pinnacle and Diabetes and Collaborative Registries since July 2, 2019.

(3) The sum of the quarterly per share amounts may not equal per share amounts reported for year to date periods. This is due to changes in the number of weighted-average shares outstanding and the effects of rounding for each period.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Under the supervision and with the participation of our management, including our chief executive officer and chief financial officer, we conducted an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures, as such term is defined under Rule 13a-15(e) promulgated under the Exchange Act, as of the end of the period covered by this Form 10-K.

Based on management's evaluation, our chief executive officer and our chief financial officer concluded that our disclosure controls and procedures are designed to, and were effective as of December 31, 2020 to, provide assurance at a reasonable level that the information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in SEC rules and forms, and that such information is accumulated and communicated to our management, including our chief executive officer and chief financial officer, as appropriate, to allow for timely decisions regarding required disclosure.

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Under the supervision and with the participation of our management, including our chief executive officer and chief financial officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting as of December 31, 2020 based on the guidelines established in *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework). Our internal control over financial reporting includes policies and procedures that provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external reporting purposes in accordance with GAAP.

Based on the results of our evaluation, our management concluded that our internal control over financial reporting was effective as of December 31, 2020. We reviewed the results of management's assessment with the Audit Committee of our Board. The effectiveness of our internal control over financial reporting as of December 31, 2020 has been audited by Grant Thornton LLP, an independent registered public accounting firm, as stated in its report which is included in Part II, Item 8, "Financial Statements and Supplementary Data" of this Form 10-K.

Changes in Internal Control over Financial Reporting

We have implemented internal controls related to the new credit loss accounting standard which we adopted on January 1, 2020. There have been no changes in our internal control over financial reporting during the quarter ended December 31, 2020, which were identified in connection with management's evaluation required by paragraph (d) of Rules 13a-15 and 15d-15 under the Exchange Act, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitations on Effectiveness of Controls

Our management, including our chief executive officer and chief financial officer, do not expect that our disclosure controls or our internal control over financial reporting will prevent all errors and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that we have detected all control issues and instances of fraud, if any, within our Company. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of a simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the controls. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions; over time, controls may become inadequate because of changes in conditions, or the degree of compliance with policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The information concerning our executive officers required by this Item is incorporated by reference from Part I, Item 1 of this Form 10-K, under the heading "Information about our Executive Officers."

Other information required by this Item is incorporated by reference from the information contained under the proposal "Election of Directors," the heading "Directors," and the subheadings "Section 16(a) Beneficial Ownership Reporting Compliance," "Code of Conduct" and "Audit Committee Financial Experts" under the heading "Corporate Governance" in our 2021 Proxy Statement (the "2021 Proxy Statement") to be filed with the U.S. Securities and Exchange Commission (the "SEC") within 120 days after December 31, 2020.

Item 11. Executive Compensation

The information required by this Item is incorporated by reference from information contained under the headings "Compensation Discussion and Analysis" and "Executive Compensation" and the subheadings "Board Oversight of Risk Management," "Compensation Committee Interlocks and Insider Participation," and "Compensation of Directors" under the heading "Corporate Governance" in the 2021 Proxy Statement to be filed with the SEC within 120 days after December 31, 2020.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The information required by this Item is incorporated by reference from information contained under the headings "Security Ownership of Certain Beneficial Owners and Management" and "Equity Compensation Plan Information" in the 2021 Proxy Statement to be filed with the SEC within 120 days after December 31, 2020.

Item 13. Certain Relationships and Related Transactions and Director Independence

The information required by this Item is incorporated by reference from information contained under the subheadings "Certain Relationships and Related Transactions" and "Board Meetings" under the heading "Corporate Governance" in the 2021 Proxy Statement to be filed with the SEC within 120 days after December 31, 2020.

Item 14. Principal Accountant Fees and Services

The information required by this Item is incorporated by reference from information contained under the subheadings "Fees and Related Expenses Paid to Auditors" and "Pre-Approval of Audit and Permissible Non-Audit Services of the Independent Registered Public Accounting Firm" under the proposal "Ratification of Appointment of Independent Registered Public Accounting Firm" in the 2021 Proxy Statement to be filed with the SEC within 120 days after December 31, 2020.

PART IV

Item 15. Exhibits and Financial Statement Schedules

(a)(1) Financial Statements

Our consolidated financial statements are included in Part II of this Form 10-K:

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Report of Independent Registered Public Accounting Firm	55
Report of Independent Registered Public Accounting Firm	57
Consolidated Balance Sheets as of December 31, 2020 and 2019	58
Consolidated Statements of Operations for the years ended December 31, 2020, 2019 and 2018	60
Consolidated Statements of Comprehensive Income for the years ended December 31, 2020, 2019 and 2018	61
Consolidated Statements of Stockholders' Equity for the years ended December 31, 2020, 2019 and 2018	62
Consolidated Statements of Cash Flows for the years ended December 31, 2020, 2019 and 2018	63
Notes to Consolidated Financial Statements	64

(a)(2) Financial Statement Schedules

Schedule II—Valuation and Qualifying Accounts

(In thousands)	Balance at Beginning of Year	Charged to Expenses/ Against Revenue	Write-Offs, Net of Recoveries	Balance at End of Year
Allowance for doubtful accounts and sales credits				
Year ended December 31, 2019	$ 25,826	3,467	(7,288)	$ 22,005
Year ended December 31, 2018	$ 12,317	21,081	(7,572)	$ 25,826

All other schedules are omitted, since the required information is not applicable or is not present in amounts sufficient to require submission of the schedule, or because the information required is included in the consolidated financial statements and notes thereto.

(a)(3) Exhibits

Exhibit Number		Exhibit Description	Filed Herewith	Furnished Herewith	Incorporated by Reference		
					Form	Exhibit	Filing Date
2.1	*	Purchase Agreement, dated as of August 1, 2017, by and between McKesson Corporation and Allscripts Healthcare, LLC.			8-K	2.1	August 4, 2017
2.2		Amendment No. 1 to Purchase Agreement, dated as of October 2, 2017, by and between McKesson Corporation and Allscripts Healthcare, LLC.			10-Q	2.3	November 9, 2017
2.3	*	Asset Purchase Agreement, dated as of February 15, 2018, by and among Hyland Software, Inc., Allscripts Healthcare, LLC, PF2 EIS LLC, Allscripts Software, LLC and Allscripts Healthcare Solutions, Inc.			8-K	2.1	February 16, 2018
2.4	*	Agreement and Plan of Merger, dated as of January 5, 2018, by and among Allscripts Healthcare, LLC, Presidio Sub, Inc., Practice Fusion, Inc. and Fortis Advisors LLC, as representative of the Holders			10-Q	2.2	May 8, 2018
2.5	*	Agreement and Plan of Merger, dated as of April 27, 2018, by and among Allscripts Healthcare, LLC, FollowMyHealth Merger Sub, Inc., Health Grid Holding Company, the persons listed on the schedules thereto and Raj Toleti in his capacity as the representative of the Stockholders			10-Q	2.2	August 6, 2018
2.6	*	Unit Purchase Agreement, dated as of December 7, 2018, by and among Allscripts Healthcare, LLC, Allscripts Next, LLC, Allscripts Healthcare Solutions, Inc. and the Purchasers named in the schedules thereto.			8-K	2.1	December 11, 2018
2.7	*	Asset Purchase Agreement, dated as of July 30, 2020, by and among Allscripts Healthcare Solutions, Inc., a Delaware corporation, Allscripts Healthcare, LLC, a North Carolina limited liability company, Allscripts Software, LLC, a Delaware limited liability company, Strata Decision Technology LLC, an Illinois limited liability company, and, solely for purposes of Article VI and Section 12.18 thereof, Roper Technologies, Inc.			8-K	2.1	August 3, 2020
2.8	*	Purchase Agreement, dated as of October 12, 2020, by and among Allscripts Healthcare, LLC, a North Carolina limited liability company, Carbonite Buyer, Inc., a Delaware corporation, and, solely for purposes of Section 9.13(f) thereof, WellSky Corporation, a Delaware corporation			8-K	2.1	October 15, 2020
3.1		Fifth Amended and Restated Certificate of Incorporation of Allscripts Healthcare Solutions, Inc.			10-K	3.1	February 29, 2016
3.2		By-Laws of Allscripts Healthcare Solutions, Inc.			8-K	3.1	August 20, 2015
4.1		Indenture, dated as of December 9, 2019, by and between Allscripts Healthcare Solutions, Inc. and U.S. Bank National Association			8-K	4.1	December 4, 2019
4.2		Form of 0.875% Convertible Senior Note due 2027 (included in Exhibit 4.1)			8-K	4.2	December 4, 2019
4.3		Description of the Registrant’s Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934	X				

Exhibit Number	Exhibit Description	Filed Herewith	Furnished Herewith	Incorporated by Reference		
				Form	Exhibit	Filing Date
10.1	Second Amended and Restated Credit Agreement, dated as of February 15, 2018, by and among Allscripts Healthcare Solutions, Inc., Allscripts Healthcare, LLC, the lenders from time to time parties thereto, JPMorgan Chase Bank, N.A., as Administrative Agent, and Fifth Third Bank, KeyBank National Association, SunTrust Bank, and Wells Fargo Bank, National Association, as Syndication Agents			8-K	10.1	February 15, 2018
10.2	First Amendment, dated as of August 7, 2019, to the Second Amended and Restated Credit Agreement, dated as of February 15, 2018, among Allscripts Healthcare Solutions, Inc., Allscripts Healthcare, LLC, the lenders from time to time party thereto, and JPMorgan Chase Bank, N.A., as Administrative Agent			8-K	10.2	August 9, 2019
10.3	Second Amendment, dated as of July 20, 2020, to the Second Amended and Restated Credit Agreement, dated as of February 16, 2018, among Allscripts Healthcare Solutions, Inc., Allscripts Healthcare, LLC, the lenders from time to time parties thereto and JPMorgan Chase Bank, N.A. as Administrative Agent			10-Q	10.2	July 31, 2020
10.4	Guarantee and Collateral Agreement, dated as of June 28, 2013, by and among Allscripts Healthcare Solutions, Inc., Allscripts Healthcare, LLC and certain other subsidiaries party thereto, and JPMorgan Chase Bank, N.A., as administrative agent			8-K	10.2	July 2, 2013
10.5	Accelerated Share Repurchase Master Confirmation dated November 30, 2020	X				
10.6	Accelerated Share Repurchase Master Confirmation dated November 30, 2020	X				
10.7	Deferred Prosecution Agreement, dated January 27, 2020			8-K	10.1	January 28, 2020
10.8	Civil Settlement Agreement, dated January 26, 2020			8-K	10.2	January 28, 2020
10.9	Letter Agreement, dated April 8, 2020, between the U.S. Department of Justice and Practice Fusion, amending Exhibit A of the Civil Settlement Agreement dated January 26, 2020			10-Q	10.1	May 8, 2020
10.10	Capped call transaction confirmation, dated as of December 4, 2019, by and between JPMorgan Chase Bank, National Association, New York Branch and Allscripts Healthcare Solutions, Inc.			8-K	10.1	December 4, 2019
10.11	Capped call transaction confirmation, dated as of December 4, 2019, by and between Wells Fargo Bank, National Association and Allscripts Healthcare Solutions, Inc.			8-K	10.2	December 4, 2019
10.12	Capped call transaction confirmation, dated as of December 4, 2019, by and between Bank of America, N.A. and Allscripts Healthcare Solutions, Inc.			8-K	10.3	December 4, 2019

Exhibit Number		Exhibit Description	Filed Herewith	Furnished Herewith	Incorporated by Reference		
					Form	Exhibit	Filing Date
10.13		Capped call transaction confirmation, dated as of December 4, 2019, by and between Deutsche Bank AG, London Branch and Allscripts Healthcare Solutions, Inc.			8-K	10.4	December 4, 2019
10.14		Additional capped call transaction confirmation, dated as of December 18, 2019, by and between JPMorgan Chase Bank, National Association, New York Branch and Allscripts Healthcare Solutions, Inc.			8-K	10.1	December 18, 2019
10.15		Additional capped call transaction confirmation, dated as of December 18, 2019, by and between Wells Fargo Bank, National Association and Allscripts Healthcare Solutions, Inc.			8-K	10.2	December 18, 2019
10.16		Additional capped call transaction confirmation, dated as of December 18, 2019, by and between Bank of America, N.A. and Allscripts Healthcare Solutions, Inc.			8-K	10.3	December 18, 2019
10.17		Additional capped call transaction confirmation, dated as of December 18, 2019, by and between Deutsche Bank AG, London Branch and Allscripts Healthcare Solutions, Inc.			8-K	10.4	December 18, 2019
10.18	†	Allscripts Healthcare Solutions, Inc., Amended and Restated 1993 Stock Incentive Plan (as amended and restated effective October 8, 2009)			10-Q	10.3	October 13, 2009
10.19	†	Allscripts Healthcare Solutions, Inc. Second Amended and Restated 2011 Stock Incentive Plan			8-K	10.1	May 24, 2017
10.20	†	Allscripts Healthcare Solutions, Inc. Amended and Restated 2019 Stock Incentive Plan			S-8	4.3	May 22, 2020
10.21	†	Amended and Restated Allscripts Healthcare Solutions, Inc. Director Deferred Compensation Plan			10-Q	10.16	August 9, 2013
10.22	†	Form of Restricted Stock Unit Award Agreement (Directors)			10-KT	10.37	March 1, 2011
10.23	†	Form of Restricted Stock Unit Award Agreement (February 2011)			10-KT	10.38	March 1, 2011
10.24	†	Form of Performance-Based Restricted Stock Unit Award Agreement			10-KT	10.39	March 1, 2011
10.25	†	Form of Performance-Based Restricted Stock Unit Award Agreement (TSR)			10-KT	10.40	March 1, 2011
10.26	†	Form of Restricted Stock Unit Award Agreement for Non-Employee Directors (2011 Stock Incentive Plan)			10-Q	10.4	August 9, 2011
10.27	†	Form of Time-Based Vesting Restricted Stock Unit Award Agreement for Employees (2011 Stock Incentive Plan)			10-Q	10.5	August 9, 2011

Exhibit Number		Exhibit Description	Filed Herewith	Furnished Herewith	Incorporated by Reference		
					Form	Exhibit	Filing Date
10.28	†	Form of Stock Option Agreement			10-K	10.38	March 1, 2013
10.29	†	Form of Performance-Based Restricted Stock Unit Award Agreement (TSR)			10-K	10.39	March 1, 2013
10.30	†	Form of Performance-Based Restricted Stock Unit Award Agreement (TSR) (February 2014)			10-K	10.29	March 3, 2014
10.31	†	Form of Performance-Based Restricted Stock Unit Award Agreement (TSR) for Paul M. Black			10-K	10.40	March 1, 2013
10.32	†	Amendment to Performance-Based Restricted Stock Unit Award Agreement, dated February 25, 2014, between Allscripts Healthcare Solutions, Inc. and Paul M. Black			10-K	10.31	March 2, 2015
10.33	†	Amendment No. 1 to Performance-Based Restricted Stock Unit Award Agreement, dated December 24, 2012, between Allscripts Healthcare Solutions, Inc. and Paul M. Black			10-K	10.31	March 3, 2014
10.34	†	Amendment No. 2 to Performance-Based Restricted Stock Unit Award Agreement, dated December 24, 2012, between Allscripts Healthcare Solutions, Inc. and Paul M. Black			8-K	99.1	December 31, 2014
10.35	†	Form of Restricted Stock Unit Award Agreement for Paul M. Black			8-K	10.41	March 1, 2013
10.36	†	Employment Agreement, dated as of December 19, 2012, between Allscripts Healthcare Solutions, Inc. and Paul M. Black			8-K	10.1	December 19, 2012
10.37	†	Amendment No. 1 to Employment Agreement, effective October 1, 2015, between Allscripts Healthcare Solutions, Inc. and Paul M. Black			8-K	10.1	October 7, 2015
10.38	†	Employment Agreement, dated as of October 10, 2012 but effective as of October 29, 2012, between Allscripts Healthcare Solutions, Inc. and Richard Poulton			10-K	10.67	March 1, 2013
10.39	†	First Amendment to Employment Agreement between Allscripts Healthcare Solutions, Inc. and Richard Poulton			8-K	10.1	August 3, 2020
10.40	†	Employment Agreement, dated as of October 10, 2012 but effective as of November 12, 2012, between Allscripts Healthcare Solutions, Inc. and Dennis Olis			10-K	10.39	March 3, 2014
10.41	†	Employment Agreement, dated as of May 28, 2013, between Allscripts Healthcare Solutions, Inc. and Brian Farley			10-K	10.40	March 3, 2014
10.42	†	Employment Agreement, dated as of October 30, 2016, effective November 1, 2016, between Allscripts Healthcare Solutions, Inc. and Lisa Khorey			10-K	10.49	February 27, 2017

Exhibit Number	Exhibit Description	Filed Herewith	Furnished Herewith	Incorporated by Reference		
				Form	Exhibit	Filing Date
21.1	Subsidiaries	X				
23.1	Consent of Grant Thornton LLP	X				
24.1	Powers of Attorney (included on the signature page hereto)	X				
31.1	Rule 13a - 14(a) Certification of Chief Executive Officer	X				
31.2	Rule 13a - 14(a) Certification of Chief Financial Officer	X				
32.1	Section 1350 Certifications of Chief Executive Officer and Chief Financial Officer		X			
101.INS	Inline XBRL Instance Document – the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline document	X				
101.SCH	Inline XBRL Taxonomy Extension Schema	X				
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase	X				
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase	X				
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase	X				
101.DEF	Inline XBRL Taxonomy Definition Linkbase	X				
104	The cover page from the Company’s Annual Report on Form 10-K for the year ended December 31, 2020, formatted in Inline XBRL and included in Exhibit 101	X				

† Indicates management contract or compensatory plan.
* Omitted schedules will be furnished supplementally to the SEC upon request

Item 16. Form 10-K Summary

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: February 26, 2021

Allscripts Healthcare Solutions, Inc.

By: /s/ Paul M. Black

Paul M. Black
Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Paul M. Black and Richard J. Poulton, jointly and severally, his or her attorney-in-fact, each with the power of substitution, for him or her in any and all capacities, to sign any amendments to this Annual Report on From 10-K and to file the same, with exhibits thereto and other documents in connections therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact, or his or her substitute or substitutes, may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this Annual Report on Form 10-K has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Paul M. Black **Paul M. Black**	Chief Executive Officer and Director (Principal Executive Officer)	February 26, 2021
/s/ Richard J. Poulton **Richard J. Poulton**	President and Chief Financial Officer (Principal Financial and Accounting Officer)	February 26, 2021
/s/ Elizabeth A. Altman **Elizabeth A. Altman**	Director	February 26, 2021
/s/ Mara G. Aspinall **Mara G. Aspinall**	Director	February 26 2021
/s/ P. Gregory Garrison **P. Gregory Garrison**	Director	February 26, 2021
/s/ Jonathan J. Judge **Jonathan J. Judge**	Director	February 26, 2021
/s/ Michael A. Klayko **Michael A. Klayko**	Chairman of the Board and Director	February 26, 2021
/s/ Dave B. Stevens **Dave B. Stevens**	Director	February 26, 2021
/s/ David D. Stevens **David D. Stevens**	Director	February 26, 2021
/s/ Carol J. Zierhoffer **Carol J. Zierhoffer**	Director	February 26, 2021

Exhibit 4.3

DESCRIPTION OF THE REGISTRANT'S SECURITIES REGISTERED PURSUANT TO SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934

Allscripts Healthcare Solutions, Inc. ("Allscripts," "we," "us" or "our") has one class of securities registered under Section 12 of the Securities Exchange Act of 1934: our common stock. The following summary of the material terms of our capital stock is not meant to be complete and is qualified by reference to Allscripts' Fifth Amended and Restated Certificate of Incorporation (the "Certificate of Incorporation") and Allscripts' By-Laws, as amended and restated (the "By-Laws"), each of which is attached as an exhibit to our Annual Report on Form 10-K, and to all applicable provisions of the General Corporation Law of the State of Delaware (the "DGCL").

Authorized Capital Stock

Allscripts' current authorized capital stock consists of 349,000,000 shares of common stock, $0.01 par value per share, and 1,000,000 shares of preferred stock, $0.01 par value per share.

Allscripts Common Stock

Voting and Other Rights. Holders of Allscripts common stock are entitled to one vote for each share held of record on all matters submitted to a vote of stockholders, including the election of directors, and do not have cumulative voting rights. Generally, matters other than the election of directors to be decided by the stockholders will be decided by the vote of holders of a majority of the shares of Allscripts common stock entitled to vote on the subject matter and represented in person or by proxy at a meeting at which a quorum is present except where a different standard is required by the DGCL. Each director is elected by the vote of the majority of the votes cast with respect to that director's election. The rights, preferences and privileges of holders of common stock are subject to, and may be adversely affected by, the rights of holders of shares of any series of preferred stock that Allscripts may designate and issue at any time in the future.

Dividend Rights; Rights Upon Liquidation. Holders of Allscripts common stock are entitled to receive dividends ratably, if any, as may be declared by the board of directors out of legally available funds. Upon Allscripts' liquidation, dissolution or winding-up, holders of Allscripts common stock are entitled to share ratably in all assets remaining after payment of Allscripts' debts and other liabilities, subject to the rights of holders of shares of any series of preferred stock that Allscripts may designate and issue at any time in the future.

Other Rights. Holders of Allscripts common stock currently have no pre-emptive, subscription or conversion rights. There are no sinking fund provisions or redemption provisions applicable to Allscripts common stock.

Allscripts Preferred Stock

The Allscripts board of directors is authorized, without further stockholder approval but subject to any limitations prescribed by law, to establish from time to time one or more classes or series of preferred stock covering up to an aggregate of 1,000,000 shares of preferred stock, and to issue these shares of preferred stock in one or more series. Each class or series of Allscripts preferred stock will cover the number of shares and will have the preferences, voting powers, qualifications and special or relative rights or privileges as are determined by the board of directors, which may include, among others, dividend rights, liquidation preferences, voting rights, conversion rights and redemption rights.

The Allscripts board of directors may authorize the issuance of preferred stock with voting or conversion rights that could dilute the voting power or other rights of the holders of Allscripts common stock. The issuance of preferred stock could also delay, defer or prevent a change of control of Allscripts or otherwise negatively affect the market price of Allscripts common stock.

Anti-Takeover Provisions

Some provisions of Delaware law and our Certificate of Incorporation and By-Laws could make the following more difficult:

- acquisition of us by means of a tender offer;
- acquisition of us by means of a proxy contest or otherwise; or
- removal of our incumbent officers and directors.

These provisions, summarized below, are expected to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control of us to first negotiate with our board of directors. We believe that these provisions give our board of directors the flexibility to exercise its fiduciary duties in a manner consistent with the interests of our stockholders.

Advance Notice Requirements. Our By-Laws establish advance notice procedures with respect to stockholder proposals and the nomination of candidates for election as directors.

Delaware Law. Our Certificate of Incorporation contains an election to be governed by Section 203 of the DGCL. Section 203 of the DGCL generally prohibits certain “business combinations,” including certain mergers, sales and leases of assets and tender or exchange offers, by a corporation or certain subsidiaries with an interested stockholder who beneficially owns 15% or more of a corporation’s voting stock, within three years after the person or entity becomes an interested stockholder, unless:

- the board of directors of the corporation has approved, before the acquisition time, either the business combination or the transaction that resulted in the person becoming an interested stockholder,

- upon consummation of the transaction that resulted in the person becoming an interested stockholder, the person owns at least 85% of the corporation's voting stock (excluding shares owned by directors who are officers and shares owned by employee stock plans in which participants do not have the right to determine confidentially whether shares will be tendered in a tender or exchange offer), or

- after the person or entity becomes an interested stockholder, the business combination is approved by the board of directors and authorized by the vote of at least two-thirds of the outstanding voting stock not owned by the interested stockholder.

No Stockholder Action by Written Consent; Special Meeting of Stockholders. Our Certificate of Incorporation prohibits our stockholders from acting by written consent without a meeting, and provides that special meetings of the stockholders may be called only by the Chairman of our board of directors or the board of directors in the manner provided in the By-Laws.

Undesignated Preferred Stock. The ability of our board of directors to issue shares of preferred stock without any action on the part of our stockholders may impede a takeover of us and prevent a transaction favorable to the holders of our common stock.

Exhibit 10.5

EXECUTED VERSION

November 30, 2020

From: Wells Fargo Bank, National Association
30 Hudson Yards
New York, NY 10001-2170
Email: CorporateDerivativeNotifications@wellsfargo.com

To: Allscripts Healthcare Solutions, Inc.
222 Merchandise Mart Plaza, Suite 2024
Chicago, IL 60654
Attention: Richard J. Poulton
Telephone No.:312.506.1216
Email:rick.poulton@allscripts.com; legal.notices@allscripts.com

Re: Master Confirmation—Uncollared Accelerated Share Repurchase

This master confirmation (this "**Master Confirmation**"), dated as of November 30, 2020, is intended to set forth certain terms and provisions of certain Transactions (each, a "**Transaction**") entered into from time to time between Wells Fargo Bank, National Association ("**Wells Fargo**") and Allscripts Healthcare Solutions, Inc., a Delaware corporation ("**Counterparty**"). This Master Confirmation, taken alone, is neither a commitment by either party to enter into any Transaction nor evidence of a Transaction. The additional terms of any particular Transaction shall be set forth in a Supplemental Confirmation in the form of Schedule A hereto (a "**Supplemental Confirmation**"), which shall reference this Master Confirmation and supplement, form a part of, and be subject to this Master Confirmation. This Master Confirmation and each Supplemental Confirmation together shall constitute a "Confirmation" as referred to in the Agreement specified below.

The definitions and provisions contained in the 2002 ISDA Equity Derivatives Definitions (the "**Equity Definitions**"), as published by the International Swaps and Derivatives Association, Inc., are incorporated into this Master Confirmation. This Master Confirmation and each Supplemental Confirmation evidence a complete binding agreement between Counterparty and Wells Fargo as to the subject matter and terms of each Transaction to which this Master Confirmation and such Supplemental Confirmation relate and shall supersede all prior or contemporaneous written or oral communications with respect thereto.

This Master Confirmation and each Supplemental Confirmation supplement, form a part of, and are subject to an agreement in the form of the ISDA 2002 Master Agreement (the "**Agreement**") as if Wells Fargo and Counterparty had executed the Agreement on the date of this Master Confirmation (but without any Schedule except for (i) the election of New York law as the governing law (without reference to its choice of law provisions), (ii) the election that subparagraph (ii) of Section 2(c) of the Agreement will not apply to the Transactions, (iii) the election that the "Cross Default" provisions of Section 5(a)(vi) of the Agreement shall apply to Wells Fargo, with a "Threshold Amount" of 3% of the shareholders' equity of Wells Fargo & Company and as if "Specified Indebtedness" had the meaning specified in Section 14 of the Agreement, except that such term shall not include obligations in respect of deposits received in the ordinary course of Wells Fargo's banking business (*provided* that (a) the text ", or becoming capable at such time of being declared," shall be deleted from Section 5(a)(vi)(1) of the Agreement and (b) the following provision shall be added to the end of Section 5(a)(vi) of the Agreement: "but a default under clause (2) above shall not constitute an Event of Default if (x) the default was caused solely by error or omission of an administrative or operational nature, (y) funds were available to enable the party to make the payment when due and

(z) the payment is made within two Local Business Days of such party's receipt of written notice of its failure to pay"), and (iv) as otherwise provided herein or in a Supplemental Confirmation).

The Transactions shall be the sole Transactions under the Agreement. If there exists any ISDA Master Agreement between Wells Fargo and Counterparty or any confirmation or other agreement between Wells Fargo and Counterparty pursuant to which an ISDA Master Agreement is deemed to exist between Wells Fargo and Counterparty, then notwithstanding anything to the contrary in such ISDA Master Agreement, such confirmation or agreement or any other agreement to which Wells Fargo and Counterparty are parties, the Transactions shall not be considered Transactions under, or otherwise governed by, such existing or deemed ISDA Master Agreement, and the occurrence of any Event of Default or Termination Event under the Agreement with respect to either party or any Transaction shall not, by itself, give rise to any right or obligation under any such other agreement or deemed agreement. Notwithstanding anything to the contrary in any other agreement between the parties or their Affiliates, the Transactions shall not be "Specified Transactions" (or similarly treated) under any other agreement between the parties or their Affiliates.

All provisions contained or incorporated by reference in the Agreement shall govern this Master Confirmation and each Supplemental Confirmation except as expressly modified herein or in the related Supplemental Confirmation.

If, in relation to any Transaction to which this Master Confirmation and a Supplemental Confirmation relate, there is any inconsistency between the Agreement, this Master Confirmation, such Supplemental Confirmation and the Equity Definitions, the following will prevail for purposes of such Transaction in the order of precedence indicated: (i) such Supplemental Confirmation; (ii) this Master Confirmation; (iii) the Equity Definitions; and (iv) the Agreement.

1. Each Transaction constitutes a Share Forward Transaction for the purposes of the Equity Definitions. Set forth below are the terms and conditions that, together with the terms and conditions set forth in the Supplemental Confirmation relating to any Transaction, shall govern such Transaction.

General Terms.

Trade Date:	For each Transaction, as set forth in the related Supplemental Confirmation.
Buyer:	Counterparty
Seller:	Wells Fargo
Shares:	The common stock of Counterparty, par value USD 0.01 per share (Exchange symbol "MDRX").
Exchange:	The NASDAQ Global Select Market
Related Exchange(s):	All Exchanges
Prepayment/Variable Obligation:	Applicable
Prepayment Amount:	For each Transaction, as set forth in the related Supplemental Confirmation.
Prepayment Date:	For each Transaction, as set forth in the related Supplemental Confirmation.

Valuation.

VWAP Price:	For any Exchange Business Day, the volume-weighted average price at which the Shares trade as reported in the composite transactions for United States exchanges and quotation systems, during the regular trading session for the Exchange on such Exchange Business Day, excluding

(i) trades that do not settle regular way, (ii) opening (regular way) reported trades in the consolidated system on such Exchange Business Day, (iii) trades that occur in the last ten minutes before the scheduled close of trading on the Exchange on such Exchange Business Day and ten minutes before the scheduled close of the primary trading in the market where the trade is effected, and (iv) trades on such Exchange Business Day that do not satisfy the requirements of Rule 10b-18(b)(3) under the Securities Exchange Act of 1934, as amended (the "**Exchange Act**"), as determined in good faith by the Calculation Agent (all such trades other than any trades described in clauses (i) to (iv) above, "**Rule 10b-18 Eligible Transactions**"). The Calculation Agent shall refer to the Bloomberg Page "MDRX US <Equity> AQR SEC" (or any successor thereto) for such Exchange Business Day to determine the VWAP Price, unless the Calculation Agent, in its reasonable judgment, determines that such source does not accurately reflect the VWAP Price or unless such source is unavailable.

Forward Price: For each Transaction, the arithmetic average of the VWAP Prices for all of the Calculation Dates in the Calculation Period for such Transaction, subject to "Valuation Disruption" below.

Forward Price Adjustment Amount: For each Transaction, as set forth in the related Supplemental Confirmation.

Calculation Period: For each Transaction, the period from, and including, the Calculation Period Start Date for such Transaction to, and including, the Termination Date for such Transaction.

Calculation Period Start Date: For each Transaction, as set forth in the related Supplemental Confirmation.

Termination Date: For each Transaction, the Scheduled Termination Date for such Transaction; *provided* that Wells Fargo shall have the right to designate any Calculation Date on or after the First Acceleration Date to be the Termination Date for all or any part of such Transaction (an "**Accelerated Termination Date**") by delivering a notice (an "**Acceleration Notice**") to Counterparty of any such designation prior to 6:00 p.m. (New York City time) on the Calculation Date immediately following the designated Accelerated Termination Date. Wells Fargo shall specify in each Acceleration Notice the portion of the Prepayment Amount that is subject to acceleration (which may be less than the full Prepayment Amount). If the portion of the Prepayment Amount that is subject to acceleration is less than the full Prepayment Amount, then the Calculation Agent shall adjust the terms of the Transaction as appropriate to take into account the occurrence of such Accelerated Termination Date (including cumulative adjustments to take into account all prior Accelerated Termination Dates).

Calculation Dates:	For each Transaction, each date that is both an Exchange Business Day and is set forth as a Calculation Date in the related Supplemental Confirmation.
Scheduled Termination Date:	For each Transaction, as set forth in the related Supplemental Confirmation, subject to postponement as provided in "Valuation Disruption" below.
First Acceleration Date:	For each Transaction, as set forth in the related Supplemental Confirmation.
Valuation Disruption:	The definition of "Market Disruption Event" in Section 6.3(a) of the Equity Definitions is hereby amended by deleting the words "at any time during the one-hour period that ends at the relevant Valuation Time, Latest Exercise Time, Knock-in Valuation Time or Knock-out Valuation Time, as the case may be" and inserting the words "at any time on any Scheduled Trading Day during the Calculation Period or Settlement Valuation Period" after the word "material," in the third line thereof. Section 6.3(d) of the Equity Definitions is hereby amended by deleting the remainder of the provision following the term "Scheduled Closing Time" in the fourth line thereof. Notwithstanding anything to the contrary in the Equity Definitions, if a Disrupted Day occurs (i) in the Calculation Period, the Calculation Agent may, in its good faith and commercially reasonable discretion, postpone the Scheduled Termination Date, or (ii) in the Settlement Valuation Period, the Calculation Agent may extend the Settlement Valuation Period. The Calculation Agent may also determine that (i) such Disrupted Day is a Disrupted Day in full, in which case the VWAP Price for such Disrupted Day shall not be included for purposes of determining the Forward Price or the Settlement Price, as the case may be, or (ii) such Disrupted Day is a Disrupted Day only in part, in which case the VWAP Price for such Disrupted Day shall be determined by the Calculation Agent in a good faith and commercially reasonable manner based on Rule 10b-18 Eligible Transactions in the Shares on such Disrupted Day taking into account the nature and duration of the relevant Market Disruption Event, and the weighting of the VWAP Price for the relevant Calculation Dates during the Calculation Period or the Settlement Valuation Period, as the case may be, shall be adjusted in a good faith and commercially reasonable manner by the Calculation Agent for purposes of determining the Forward Price or the Settlement Price, as the case may be, with such adjustments based on, among other factors, the duration of any Market Disruption Event and the volume, historical trading patterns and price of the Shares. Any Exchange Business Day on which, as of the date hereof, the Exchange is scheduled to close prior to its normal close of trading shall be deemed not to be an Exchange Business Day; if a closure of the Exchange prior to its normal close of trading on any Exchange Business Day is scheduled following the

date hereof, then such Exchange Business Day shall be deemed to be a Disrupted Day in full.

If a Disrupted Day occurs during the Calculation Period for any Transaction or the Settlement Valuation Period for any Transaction, as the case may be, and each of the nine immediately following Scheduled Trading Days is a Disrupted Day (a "**Disruption Event**"), then the Calculation Agent, in its good faith and commercially reasonable discretion, may deem such Disruption Event (and each consecutive Disrupted Day thereafter) to be either (x) a Potential Adjustment Event in respect of such Transaction or (y) an Additional Termination Event in respect of such Transaction, with Counterparty as the sole Affected Party and such Transaction as the sole Affected Transaction.

Settlement Terms.

Settlement Procedures:

For each Transaction:

(i) if the Number of Shares to be Delivered for such Transaction is positive, Physical Settlement shall be applicable to such Transaction; *provided* that Wells Fargo does not, and shall not, make the agreement or the representations set forth in Section 9.11 of the Equity Definitions related to the restrictions imposed by applicable securities laws with respect to any Shares delivered by Wells Fargo to Counterparty under any Transaction; or

(ii) if the Number of Shares to be Delivered for such Transaction is negative, then the Counterparty Settlement Provisions in Annex A hereto shall apply to such Transaction.

Number of Shares to be Delivered:

For each Transaction, a number of Shares (rounded down to the nearest whole number) equal to (a)(i) the Prepayment Amount for such Transaction, *divided by* (ii)(A) the Forward Price for such Transaction *minus* (B) the Forward Price Adjustment Amount for such Transaction, *minus* (b) the number of Initial Shares for such Transaction; *provided* that if the result of the calculation in clause (a)(ii) is equal to or less than the Floor Price for such Transaction, then the Number of Shares to be Delivered for such Transaction shall be determined as if clause (a)(ii) were replaced with "(ii) the Floor Price for such Transaction". For the avoidance of doubt, if the Forward Price Adjustment Amount for any Transaction is a negative number, clause (a)(ii) of the immediately preceding sentence shall be equal to (A) the Forward Price for such Transaction, *plus* (B) the absolute value of the Forward Price Adjustment Amount.

Floor Price:

For each Transaction, as set forth in the related Supplemental Confirmation.

Excess Dividend Amount:	For the avoidance of doubt, all references to the Excess Dividend Amount shall be deleted from Section 9.2(a)(iii) of the Equity Definitions.
Settlement Date:	For each Transaction, if the Number of Shares to be Delivered for all or such portion of such Transaction is positive (x) in the case of an Accelerated Termination Date, the date that is one Settlement Cycle immediately following the date on which Wells Fargo delivers notice of such Accelerated Termination Date and (y) in the case of a Termination Date occurring on the Scheduled Termination Date, the date that is one Settlement Cycle immediately following the Termination Date, in either case, for all or such portion of such Transaction (the final Settlement Date, the "**Final Settlement Date**").
Settlement Currency:	USD
Initial Share Delivery:	For each Transaction, Wells Fargo shall deliver a number of Shares equal to the Initial Shares for such Transaction to Counterparty on the Initial Share Delivery Date for such Transaction in accordance with Section 9.4 of the Equity Definitions, with such Initial Share Delivery Date deemed to be a "Settlement Date" for purposes of such Section 9.4.
Initial Share Delivery Date:	For each Transaction, as set forth in the related Supplemental Confirmation.
Initial Shares:	For each Transaction, as set forth in the related Supplemental Confirmation.

Share Adjustments.

Potential Adjustment Event:	Notwithstanding anything to the contrary in Section 11.2(e) of the Equity Definitions, neither an Extraordinary Dividend nor the issuance of additional stock options, restricted stock or restricted stock units in the ordinary course pursuant to Counterparty's employee equity incentive plan shall constitute a Potential Adjustment Event.
	In addition to the events described in Section 11.2(e) of the Equity Definitions, it shall constitute an additional Potential Adjustment Event if (x) the Scheduled Termination Date for any Transaction is postponed pursuant to "Valuation Disruption" above (including, for the avoidance of doubt, pursuant to Section 8 hereof), (y) a Regulatory Disruption as described in Section 8 hereof occurs or (z) a Disruption Event occurs. In the case of any event described in clause (x), (y) or (z) above occurs, the Calculation Agent may, in a good faith and commercially reasonable manner, adjust any relevant terms of such Transaction as necessary to preserve as nearly as practicable the fair value of such Transaction to Wells Fargo prior to such postponement, Regulatory Disruption or Disruption Event, as the case may be; *provided* that the Calculation Agent shall not adjust any of the dates

identified as Calculation Dates in the related Supplemental Confirmation.

Excess Dividend:	Any dividend or distribution on the Shares (other than any dividend or distribution of the type described in Section 11.2(e)(i) or Section 11.2(e)(ii)(A) of the Equity Definitions or any Extraordinary Dividend). "**Extraordinary Dividend**" means the per Share cash dividend or distribution, or a portion thereof, declared by Counterparty on the Shares that is classified by the board of directors of Counterparty as an "extraordinary" dividend.
Consequences of Excess Dividend:	The declaration by the Issuer of any Excess Dividend, the ex-dividend date for which occurs or is scheduled to occur during the Relevant Dividend Period for any Transaction, may, at Wells Fargo's election in its sole discretion, either (x) constitute an Additional Termination Event in respect of such Transaction, with Counterparty as the sole Affected Party and such Transaction as the sole Affected Transaction or (y) result in an adjustment, by the Calculation Agent, to the Floor Price as the Calculation Agent determines appropriate to preserve the fair value of such Transaction after taking into account such Excess Dividend.
Method of Adjustment:	Calculation Agent Adjustment
Relevant Dividend Period:	For each Transaction, the period from, and including, the Trade Date for such Transaction to, and including, the Relevant Dividend Period End Date for such Transaction.
Relevant Dividend Period End Date:	For each Transaction, if the Number of Shares to be Delivered for such Transaction is negative, the last day of the Settlement Valuation Period; otherwise, the Termination Date for such Transaction.

Extraordinary Events.

Consequences of Merger Events:

(a) Share-for-Share:	Cancellation and Payment
(b) Share-for-Other:	Cancellation and Payment
(c) Share-for-Combined:	Cancellation and Payment
Tender Offer:	Applicable; *provided* that (a) Section 12.1(d) of the Equity Definitions shall be amended by replacing "10%" in the third line thereof with "20%", (b) Section 12.1(l) of the Equity Definitions shall be amended by (i) deleting the parenthetical in the fifth line thereof, (ii) replacing "that" in the fifth line thereof with "whether or not such announcement" and (iii) adding immediately after the words "Tender Offer" in the fifth line thereof ", and any publicly announced change or amendment to such an announcement (including, without limitation, the announcement of an abandonment of such intention)" and (c) Sections 12.3(a) and 12.3(d) of the Equity Definitions

shall each be amended by replacing each occurrence of the words "Tender Offer Date" by "Announcement Date."

Consequences of Tender Offers:

(a) Share-for-Share:	Modified Calculation Agent Adjustment
(b) Share-for-Other:	Modified Calculation Agent Adjustment
(c) Share-for-Combined:	Modified Calculation Agent Adjustment

Any adjustment to the terms of any Transaction and the determination of any amounts due upon termination of any Transaction hereunder as a result of a Merger Event or Tender Offer shall be made without duplication in respect of any prior adjustment hereunder (including, without limitation, any prior adjustment pursuant to Section 12 or 13 hereof).

Nationalization, Insolvency or Delisting:	Cancellation and Payment; *provided* that in addition to the provisions of Section 12.6(a)(iii) of the Equity Definitions, it shall also constitute a Delisting if the Exchange is located in the United States and the Shares are not immediately re-listed, re-traded or re-quoted on any of the New York Stock Exchange, The NASDAQ Global Select Market or The NASDAQ Global Market (or their respective successors); if the Shares are immediately re-listed, re-traded or re-quoted on any such exchange or quotation system, such exchange or quotation system shall be deemed to be the Exchange.

Additional Disruption Events:

(a) Change in Law:	Applicable; *provided* that Section 12.9(a)(ii) of the Equity Definitions is hereby amended by (i) replacing the phrase "the interpretation" in the third line thereof with the phrase ", or public announcement of, the formal or informal interpretation", (ii) replacing the word "Shares" where it appears in clause (X) thereof with the words "Hedge Positions" and (iii) immediately following the word "Transaction" in clause (X) thereof, adding the phrase "in the manner contemplated by the Hedging Party on the Trade Date"; *provided further* that Section 12.9(a)(ii) of the Equity Definitions is hereby amended by replacing the parenthetical beginning after the word "regulation" in the second line thereof with the words "(including, for the avoidance of doubt and without limitation, (x) any tax law or (y) adoption or promulgation of new regulations authorized or mandated by existing statute)".
(b) Failure to Deliver:	Applicable
(c) Insolvency Filing:	Applicable
(d) Loss of Stock Borrow:	Applicable
Maximum Stock Loan Rate:	For each Transaction, as set forth in the related Supplemental Confirmation.
Hedging Party:	Wells Fargo
Determining Party:	Wells Fargo

(e) Hedging Disruption:	Applicable
Hedging Party:	Wells Fargo
Determining Party:	Wells Fargo
(f) Increased Cost of Hedging:	Applicable
Hedging Party:	Wells Fargo
Determining Party:	Wells Fargo
(g) Increased Cost of Stock Borrow:	Applicable
Initial Stock Loan Rate:	For each Transaction, as set forth in the related Supplemental Confirmation.
Hedging Party:	Wells Fargo
Determining Party:	Wells Fargo
Hedging Adjustments:	For the avoidance of doubt, whenever the Calculation Agent is called upon to make an adjustment pursuant to the terms of this Master Confirmation or the Equity Definitions to take into account the effect of an event, the Calculation Agent shall make such adjustment by reference to the effect of such event on Wells Fargo, assuming that Wells Fargo maintains a commercially reasonable Hedge Position.
Non-Reliance/Agreements and Acknowledgements Regarding Hedging Activities/Additional Acknowledgements:	Applicable

2. <u>Calculation Agent</u>. Wells Fargo; *provided* that, following the occurrence and during the continuation of an Event of Default pursuant to Section 5(a)(vii) of the Agreement with respect to which Wells Fargo is the Defaulting Party, Counterparty shall have the right to select a leading dealer in the market for U.S. corporate equity derivatives reasonably acceptable to Wells Fargo to replace Wells Fargo as Calculation Agent, and the parties shall work in good faith to execute any appropriate documentation required by such replacement Calculation Agent.

Whenever the Calculation Agent is required to act or to exercise judgment in any way with respect to any Transaction hereunder, it will do so in a good faith and commercially reasonable manner. Notwithstanding anything to the contrary in this Master Confirmation or any Supplemental Confirmation, the Calculation Agent shall not adjust the dates identified as Calculation Dates in the relevant Supplemental Confirmation for any Transaction.

Following any determination, adjustment or calculation by the Calculation Agent hereunder, the Calculation Agent shall deliver to Counterparty, within five Exchange Business Days after a written request by Counterparty, a

report in a commonly used file format for the storage and manipulation of financial data (including the methodology, interest rates, quotations and market data (including volatility) but without disclosing any proprietary or confidential models or other proprietary or confidential information) displaying in reasonable detail the basis for such determination, adjustment or calculation, as the case may be.

3. Account Details.

(a) Account for payments to Counterparty:

As separately notified by Counterparty

Account for delivery of Shares to Counterparty:

As separately notified by Counterparty

(b) Account for payments to Wells Fargo:

Wells Fargo's USD payment instructions:	ABA: 121-000-248 Wells Fargo Bank, National Association Charlotte, NC Internal Acct No. 01020304464228 A/C Name: WFB Equity Derivatives
Wells Fargo's delivery instructions:	DTC Number: 2072 Agent ID: 52196 Institution ID: 52196

4. Offices.

(a) The Office of Counterparty for each Transaction is: Inapplicable, Counterparty is not a Multibranch Party.

(b) The Office of Wells Fargo for each Transaction is: Charlotte

Wells Fargo Bank, National Association
301 S Tryon St Fl 1, Charlotte
NC, 28282

5. Notices.

(a) Address for notices or communications to Counterparty:

Allscripts Healthcare Solutions, Inc.
222 Merchandise Mart Plaza, Suite 2024
Chicago, IL 60654
Attention: Richard J. Poulton
Telephone No.: 312.506.1216
Email: rick.poulton@allscripts.com; legal.notices@allscripts.com

(b) Address for notices or communications to Wells Fargo:

Wells Fargo Bank, National Association ("**Wells Fargo**")
30 Hudson Yards
New York, NY 10001-2170
Email: CorporateDerivativeNotifications@wellsfargo.com

Notwithstanding anything to the contrary in the Agreement, all notices to Wells Fargo in connection with the Transaction are effective only upon receipt of email message to CorporateDerivativeNotifications@wellsfargo.com.

6. <u>Representations, Warranties and Agreements</u>.

(a) *Additional Representations, Warranties and Covenants of Each Party*. In addition to the representations, warranties and covenants in the Agreement, each party represents, warrants and covenants to the other party that:

(i) It is an "eligible contract participant" (as such term is defined in the Commodity Exchange Act, as amended).

(ii) The offer and sale of each Transaction to it is intended to be exempt from registration under the Securities Act of 1933, as amended (the "**Securities Act**"), by virtue of Section 4(a)(2) thereof. Accordingly, each party represents and warrants to the other that (A) it has the financial ability to bear the economic risk of its investment in each Transaction and is able to bear a total loss of its investment, (B) it is an "accredited investor" as that term is defined under Regulation D under the Securities Act and (C) the disposition of each Transaction is restricted under this Master Confirmation, the Securities Act and state securities laws.

(b) *Additional Representations, Warranties and Covenants of Counterparty*. In addition to the representations, warranties and covenants in the Agreement, Counterparty represents, warrants and covenants to Wells Fargo that:

(i) As of the Trade Date for each Transaction hereunder, Counterparty is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware. Each of this Master Confirmation and the Supplemental Confirmation for such Transaction has been duly authorized, executed and delivered by Counterparty and (assuming due authorization, execution and delivery thereof by Wells Fargo) this Master Confirmation, as supplemented by such Supplemental Confirmation, constitutes a valid and legally binding obligation of Counterparty. Counterparty has all corporate power to enter into this Master Confirmation and such Supplemental Confirmation and to consummate the transactions contemplated hereby and thereby and to purchase the Shares and deliver any Settlement Shares in accordance with the terms hereof and thereof.

(ii) As of the Trade Date for each Transaction hereunder, the execution and delivery by Counterparty of, and the performance by Counterparty of its obligations under, this Master Confirmation and the Supplemental Confirmation for such Transaction, and the consummation of the transactions herein and therein contemplated, do not conflict with or violate (A) any provision of the certificate of incorporation, by-laws or other constitutive documents of Counterparty, (B) any statute or order, rule, regulation or judgment of any court or governmental agency or body having jurisdiction over Counterparty or any of its subsidiaries or any of their respective assets or (C) any contractual restriction binding on or affecting Counterparty or any of its subsidiaries or any of its assets.

(iii) As of the Trade Date for each Transaction hereunder, all governmental and other consents that are required to have been obtained by Counterparty with respect to performance, execution and delivery of this Master Confirmation and the Supplemental Confirmation

for such Transaction have been obtained and are in full force and effect and all conditions of any such consents have been complied with.

(iv) As of the Trade Date for each Transaction hereunder, (A) such Transaction is being entered into pursuant to a publicly disclosed Share buy-back program and its Board of Directors has approved the use of derivatives to effect the Share buy-back program, and (B) there is no internal policy of Counterparty, whether written or oral, that would prohibit Counterparty from entering into any aspect of such Transaction, including, without limitation, the purchases of Shares to be made pursuant to such Transaction.

(v) As of the Trade Date for each Transaction hereunder, the purchase or writing of such Transaction and the transactions contemplated hereby will not violate Rule 13e-1 or Rule 13e-4 under the Exchange Act.

(vi) As of the Trade Date for each Transaction hereunder, it is not entering into such Transaction, and as of the date of any election with respect to any Transaction hereunder, it is not making such election, in each case (A) on the basis of, and is not aware of, any material non-public information regarding Counterparty or the Shares, (B) in anticipation of, in connection with, or to facilitate, a distribution of its securities, a self tender offer or a third-party tender offer in violation of the Exchange Act or (C) to create actual or apparent trading activity in the Shares (or any security convertible into or exchangeable for the Shares) or to raise or depress or otherwise manipulate the price of the Shares (or any security convertible into or exchangeable for the Shares).

(vii) Counterparty (A) is capable of evaluating investment risks independently, both in general and with regard to all transactions and investment strategies involving a security or securities; (B) will exercise independent judgment in evaluating the recommendations of any broker-dealer or its associated persons, unless it has otherwise notified the broker-dealer in writing; and (C) has total assets of at least USD 50,000,000 as of the date hereof.

(viii) As of the Trade Date for each Transaction hereunder, and as of the date of any election with respect to any Transaction hereunder, Counterparty is in compliance with its reporting obligations under the Exchange Act and its most recent Annual Report on Form 10-K, together with all reports subsequently filed by it pursuant to the Exchange Act, taken together and as amended and supplemented to the date of this representation, do not, as of their respective filing dates, contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading.

(ix) Counterparty has made, and will make, all filings required to be made by it with the Securities and Exchange Commission, any securities exchange or any other regulatory body with respect to each Transaction.

(x) (A) The Shares are not, as of the Calculation Period Start Date, and (B) Counterparty will not, at any time during any Regulation M Period (as defined below) for any Transaction, cause the Shares to be, subject to a “restricted period” (as defined in Regulation M under the Exchange Act) unless, in the case of clause (B), Counterparty has provided written notice to Wells Fargo of such restricted period not later than the Scheduled Trading Day immediately preceding the first day of such “restricted period”; Counterparty acknowledges that any such notice may cause a Disrupted Day to occur pursuant to Section 8 hereof; accordingly, Counterparty acknowledges that its delivery of such notice must comply with the standards set forth in Section 9 hereof. Counterparty is not currently contemplating any “distribution” (as defined in Regulation M under the Exchange Act) of Shares, or any security for which Shares are a “reference security” (as defined in Regulation M under the Exchange Act). “**Regulation M Period**” means, for any Transaction, (A) the Relevant Period (as defined below) for such Transaction, (B) the Settlement Valuation Period, if any, for such Transaction and (C) the Seller Termination

Purchase Period (as defined below), if any, for such Transaction. "**Relevant Period**" means, for any Transaction, the period commencing on the Calculation Period Start Date for such Transaction and ending on the later of (1) the earlier of (x) the Scheduled Termination Date and (y) the last Additional Relevant Day (as specified in the related Supplemental Confirmation) for such Transaction, or such earlier day as elected by Wells Fargo and communicated to Counterparty on such day (or, if later, the First Acceleration Date without regard to any acceleration thereof pursuant to "Special Provisions for Acquisition Transaction Announcements" below) and (2) if Section 16 hereof is applicable to such Transaction, the date on which all deliveries owed pursuant to Section 16 hereof have been made.

(xi) As of the Trade Date, the Prepayment Date, the Initial Share Delivery Date, the Settlement Date, any Cash Settlement Payment Date and any Settlement Method Election Date for each Transaction, Counterparty is not, and will not be, "insolvent" (as such term is defined under Section 101(32) of the U.S. Bankruptcy Code (Title 11 of the United States Code) (the "**Bankruptcy Code**")) and Counterparty would be able to purchase a number of Shares with a value equal to the Prepayment Amount in compliance with the laws of the jurisdiction of Counterparty's incorporation.

(xii) Counterparty is not, and after giving effect to each Transaction will not be, required to register as an "investment company" as such term is defined in the Investment Company Act of 1940, as amended.

(xiii) Counterparty shall cooperate with Wells Fargo, and execute and deliver, or use its commercially reasonable efforts to cause to be executed and delivered, all such other instruments, and to obtain all consents, approvals or authorizations of any person, and take all such other actions as Wells Fargo may reasonably request from time to time, consistent with the terms of the Agreement, this Master Confirmation and any Supplemental Confirmation, to effectuate the purposes of the Agreement, this Master Confirmation, any Supplemental Confirmation and any Transaction.

(xiv) Counterparty has not entered, and will not enter, into any repurchase transaction other than any Other Specified Repurchase Agreement (as defined below) with respect to the Shares (or any security convertible into or exchangeable for the Shares) (including, without limitation, any agreements similar to the Transactions described herein) where any initial hedge period, calculation period, relevant period, settlement valuation period or seller termination purchase period (each however defined) in such other transaction will overlap at any time (including, without limitation, as a result of extensions in such initial hedge period, calculation period, relevant period, settlement valuation period or seller termination purchase period as provided in the relevant agreements) with any Relevant Period, any Settlement Valuation Period (if applicable) or any Seller Termination Purchase Period (if applicable) under this Master Confirmation. In the event that the initial hedge period, relevant period, calculation period or settlement valuation period in any other transaction (other than any Other Specified Repurchase Agreement) overlaps with any Relevant Period, any Settlement Valuation Period (if applicable) or any Seller Termination Purchase Period (if applicable) under this Master Confirmation as a result of any postponement of the Scheduled Termination Date or extension of the Settlement Valuation Period pursuant to "Valuation Disruption" above or any analogous provision in such other transaction, Counterparty shall promptly amend such other transaction to avoid any such overlap.

(xv) Counterparty shall, at least one day prior to the first day of the Calculation Period, the Settlement Valuation Period, if any, or the Seller Termination Purchase Period, if any, for any Transaction, notify Wells Fargo of the total number of Shares purchased in Rule 10b-18 purchases of blocks pursuant to the once-a-week block exception set forth in paragraph (b)(4) of Rule 10b-18 under the Exchange Act ("**Rule 10b-18**") by or for Counterparty or any of its "affiliated purchasers" (as defined in Rule 10b-18) during each of the four calendar weeks preceding such day and during the calendar week in which such day occurs

("Rule 10b-18 purchase" and "blocks" each being used as defined in Rule 10b-18), which notice shall be substantially in the form set forth in Schedule B hereto.

(xvi) As of the Trade Date for each Transaction hereunder, and as of the date of any election with respect to any Transaction hereunder, there has not been any Merger Announcement (as defined below).

(xvii) The assets of Counterparty do not constitute "plan assets" under the Employee Retirement Income Security Act of 1974, as amended, the Department of Labor Regulations promulgated thereunder or similar law.

(xviii) Counterparty represents that it is not a "financial end user" as defined in 12 CFR §45.2.

7. **Additional Representations.** Warranties and Covenants of Wells Fargo. In addition to the representations, warranties and covenants in the Agreement, Wells Fargo represents, warrants and covenants to Counterparty that Wells Fargo shall use its commercially reasonable efforts, during the Calculation Period, any Settlement Valuation Period and any Seller Termination Purchase Period for each Transaction, to make all purchases of Shares in connection with such Transaction in a manner that would comply with the limitations set forth in clauses (b)(1), (b)(2), (b)(3) and (b)(4) and (c) of Rule 10b-18, as if such rule were applicable to such purchases and taking into account any applicable Securities and Exchange Commission no-action letters as appropriate, and subject to any delays between the execution and reporting of a trade of the Shares on the Exchange and other circumstances beyond Wells Fargo's control; *provided* that, during a Calculation Period, the foregoing agreement shall not apply to purchases made to dynamically hedge for Wells Fargo's own account or the account of its affiliate(s) the optionality arising under a Transaction (including, for the avoidance of doubt, timing optionality); and *provided further* that, without limiting the generality of this Section 7, (x) Wells Fargo shall not be responsible for any failure to comply with Rule 10b-18(b)(3) to the extent any transaction that was executed (or deemed to be executed) by or on behalf of Counterparty or an "affiliated purchaser" (as defined under Rule 10b-18) pursuant to a separate agreement is not deemed to be an "independent bid" or an "independent transaction" for purposes of Rule 10b-18(b)(3) and (y) Wells Fargo shall not be responsible for any failure to comply with Rule 10b-18(b)(1) to the extent Counterparty fails to comply with Section 10 hereof.

8. **Regulatory Disruption.** In the event that Wells Fargo concludes, in its sole discretion, that it is appropriate with respect to any legal, regulatory or self-regulatory requirements or related policies and procedures (whether or not such requirements, policies or procedures are imposed by law or have been voluntarily adopted by Wells Fargo), for it to refrain from or decrease any market activity on any Scheduled Trading Day or Days during the Calculation Period or, if applicable, the Settlement Valuation Period, Wells Fargo may by written notice to Counterparty elect to deem that a Market Disruption Event has occurred and will be continuing on such Scheduled Trading Day or Days.

9. **10b5-1 Plan.** Counterparty represents, warrants and covenants to Wells Fargo that:

(a) Counterparty is entering into this Master Confirmation and each Transaction hereunder in good faith and not as part of a plan or scheme to evade the prohibitions of Rule 10b5-1 under the Exchange Act ("**Rule 10b5-1**") or any other antifraud or anti-manipulation provisions of the federal or applicable state securities laws and that it has not entered into or altered and will not enter into or alter any corresponding or hedging transaction or position with respect to the Shares. For the avoidance of doubt, the parties hereto acknowledge that entry into any Other Specified Repurchase Agreement (as defined below) shall not fall within the ambit of the previous sentence. Counterparty acknowledges that it is the intent of the parties that each Transaction entered into under this Master Confirmation comply with the requirements of paragraphs (c)(1)(i)(A) and (B) of Rule 10b5-1 and each Transaction entered into under this Master Confirmation shall be interpreted to comply with the requirements of Rule 10b5-1(c). "**Other Specified Repurchase Agreement**" means, for any Transaction, any other prepaid variable share repurchase transaction entered into on the Trade Date for such Transaction.

(b) During the Calculation Period and the Settlement Valuation Period, if any, for any Transaction and in connection with the delivery of any Alternative Delivery Units for any Transaction, Wells Fargo (or its agent or Affiliate) may effect transactions in Shares in connection with such Transaction. The timing of such transactions by Wells Fargo, the price paid or received per Share pursuant to such transactions and the manner in which such transactions are made, including, without limitation, whether such transactions are made on any securities exchange or privately, shall be within the sole judgment of Wells Fargo. Counterparty acknowledges and agrees that all such transactions shall be made in Wells Fargo's sole judgment and for Wells Fargo's own account.

(c) Counterparty does not have, and shall not attempt to exercise, any control or influence over how, when or whether Wells Fargo (or its agent or Affiliate) makes any "purchases or sales" (within the meaning of Rule 10b5-1(c)(1)(i)(B)(3)) in connection with any Transaction, including, without limitation, over how, when or whether Wells Fargo (or its agent or Affiliate) enters into any hedging transactions. Counterparty represents and warrants that it has consulted with its own advisors as to the legal aspects of its adoption and implementation of this Master Confirmation and each Supplemental Confirmation under Rule 10b5-1.

(d) Counterparty acknowledges and agrees that any amendment, modification, waiver or termination of this Master Confirmation or any Supplemental Confirmation must be effected in accordance with the requirements for the amendment or termination of a "plan" as defined in Rule 10b5-1(c). Without limiting the generality of the foregoing, any such amendment, modification, waiver or termination shall be made in good faith and not as part of a plan or scheme to evade the prohibitions of Rule 10b-5, and no such amendment, modification or waiver shall be made at any time at which Counterparty or any officer, director, manager or similar person of Counterparty is aware of any material non-public information regarding Counterparty or the Shares.

10. **Counterparty Purchases.** Counterparty (or any "affiliate" or "affiliated purchaser" as defined in Rule 10b-18) shall not, without the prior written consent of Wells Fargo, directly or indirectly (including, without limitation, by means of a derivative instrument) purchase, offer to purchase, place any bid or limit order that would effect a purchase of, or commence any tender offer relating to, any Shares (or equivalent interest, including, without limitation, a unit of beneficial interest in a trust or limited partnership or a depository share), listed contracts on the Shares or securities that are convertible into, or exchangeable or exercisable for Shares (including, without limitation, any Rule 10b-18 purchases of blocks (as defined in Rule 10b-18)) during any Relevant Period, any Settlement Valuation Period (if applicable) or any Seller Termination Purchase Period (if applicable), under this Master Confirmation except pursuant to any Other Specified Repurchase Agreement that is intended to comply with the requirements of Rule 10b5-1(c) of the Exchange Act. However, the foregoing shall not (a) limit Counterparty's ability to purchase Shares in connection with any company employee, officer or director equity plan or any dividend reinvestment plan, in each case, that is not expected to result in market transactions, (b) limit Counterparty's ability to withhold Shares to cover tax liabilities associated with any such plan, (c) prohibit any purchases effected by or for an issuer "plan" by an "agent independent of the issuer" (each as defined in Rule 10b-18), (d) otherwise restrict Counterparty's or any of its affiliates' ability to repurchase Shares under privately negotiated, off exchange transactions with any of its employees, officers, directors, affiliates or any third party that are not expected to result in market transactions or (e) limit Counterparty's ability to grant stock and options to "affiliated purchasers" (as defined in Rule 10b-18) or the ability of such affiliated purchasers to acquire such stock or options in connection with Counterparty's compensation policies for directors, officers and employees or any agreements with respect to the compensation of directors, officers or employees of any entities that are acquisition targets of Counterparty.

11. **Special Provisions for Merger Transactions.** Notwithstanding anything to the contrary herein or in the Equity Definitions:

(a) Counterparty agrees that it:

(i) will not during the period commencing on the Trade Date for any Transaction and ending on the last day of the Relevant Period or, if applicable, the later of the last day of the Settlement Valuation Period and the last day of the Seller Termination Purchase Period,

for such Transaction make, or permit to be made, any public announcement (as defined in Rule 165(f) under the Securities Act) of any Merger Transaction or potential Merger Transaction (a "**Merger Announcement**") unless such Merger Announcement is made prior to the opening or after the close of the regular trading session on the Exchange for the Shares;

(ii) shall promptly (but in any event prior to the next opening of the regular trading session on the Exchange) notify Wells Fargo following any such Merger Announcement that such Merger Announcement has been made; and

(iii) shall promptly (but in any event prior to the next opening of the regular trading session on the Exchange) provide Wells Fargo with written notice specifying (i) Counterparty's average daily Rule 10b-18 Purchases (as defined in Rule 10b-18) during the three full calendar months immediately preceding the announcement date of any Merger Transaction or potential Merger Transaction that were not effected through Wells Fargo or its Affiliates and (ii) the number of Shares purchased pursuant to the proviso in Rule 10b-18(b)(4) under the Exchange Act for the three full calendar months preceding the announcement date of any Merger Transaction or potential Merger Transaction. Such written notice shall be deemed to be a certification by Counterparty to Wells Fargo that such information is true and correct. In addition, Counterparty shall promptly notify Wells Fargo of the earlier to occur of the completion of such transaction and the completion of the vote by target shareholders.

(b) Counterparty acknowledges that any such Merger Announcement or delivery of a notice with respect thereto may cause the terms of any Transaction to be adjusted or such Transaction to be terminated; accordingly, Counterparty acknowledges that its delivery of such notice must comply with the standards set forth in Section 9 hereof.

(c) Upon the occurrence of any Merger Announcement (whether made by Counterparty or a third party), Wells Fargo in its good faith and reasonable discretion may (i) make adjustments to the terms of any Transaction (other than the dates identified as Calculation Dates in the related Supplemental Confirmation), including, without limitation, the Scheduled Termination Date or the Forward Price Adjustment Amount, and/or suspend the Calculation Period and/or any Settlement Valuation Period or (ii) treat the occurrence of such Merger Announcement as an Additional Termination Event with Counterparty as the sole Affected Party and the Transactions hereunder as the Affected Transactions and with the amount under Section 6(e) of the Agreement determined taking into account the fact that the Calculation Period or Settlement Valuation Period, as the case may be, had fewer Scheduled Trading Days than originally anticipated.

"**Merger Transaction**" means any merger, acquisition or similar transaction involving a recapitalization as contemplated by Rule 10b-18(a)(13)(iv) under the Exchange Act.

12. **<u>Special Provisions for Acquisition Transaction Announcements</u>.** Notwithstanding anything to the contrary herein or in the Equity Definitions:

(a) If an Acquisition Transaction Announcement occurs on or prior to the Final Settlement Date for any Transaction, then the Calculation Agent shall make such adjustments to the exercise, settlement, payment or any other terms of such Transaction as the Calculation Agent determines appropriate (including, without limitation and for the avoidance of doubt, adjustments that would allow the Number of Shares to be Delivered to be less than zero), at such time or at multiple times as the Calculation Agent determines appropriate, to account for the economic effect on such Transaction of such event (including adjustments to account for changes in volatility, expected dividends, stock loan rate, value of any commercially reasonable Hedge Positions in connection with the Transaction and liquidity relevant to the Shares or to such Transaction). If an Acquisition Transaction Announcement occurs after the Trade Date, but prior to the First Acceleration Date of any Transaction, the First Acceleration Date shall be the date of such Acquisition Transaction Announcement. If the Number of Shares to be Delivered for any settlement of any Transaction is a

negative number, then the terms of the Counterparty Settlement Provisions in Annex A hereto shall apply.

(b) "**Acquisition Transaction Announcement**" means (i) the announcement of an Acquisition Transaction or an event that, if consummated, would result in an Acquisition Transaction, (ii) an announcement that Counterparty or any of its subsidiaries has entered into an agreement, a letter of intent or an understanding designed to result in an Acquisition Transaction, (iii) the announcement of the intention to solicit or enter into, or to explore strategic alternatives or other similar undertaking that would reasonably be expected to include, an Acquisition Transaction, (iv) any other announcement that in the good faith and commercially reasonable judgment of the Calculation Agent may result in an Acquisition Transaction, or (v) any announcement of any change or amendment to any previous Acquisition Transaction Announcement (including any announcement of the abandonment of any such previously announced Acquisition Transaction, agreement, letter of intent, understanding or intention). For the avoidance of doubt, announcements as used in the definition of Acquisition Transaction Announcement refer to any public announcement whether made by the Issuer or a third party.

(c) "**Acquisition Transaction**" means (i) any Merger Event (for purposes of this definition the definition of Merger Event shall be read with the references therein to "100%" being replaced by "25%" and references to "50%" being replaced by "75%" and without reference to the clause beginning immediately following the definition of Reverse Merger therein to the end of such definition), Tender Offer or Merger Transaction or any other transaction involving the merger of Counterparty with or into any third party, (ii) the sale or transfer of all or substantially all of the assets of Counterparty, (iii) a recapitalization, reclassification, binding share exchange or other similar transaction with respect to Counterparty, (iv) any acquisition by Counterparty or any of its subsidiaries where the aggregate consideration transferable by Counterparty or its subsidiaries exceeds 25% of the market capitalization of Counterparty, (v) any lease, exchange, transfer, disposition (including, without limitation, by way of spin-off or distribution) of assets (including, without limitation, any capital stock or other ownership interests in subsidiaries) or other similar event by Counterparty or any of its subsidiaries where the aggregate consideration transferable or receivable by or to Counterparty or its subsidiaries exceeds 25% of the market capitalization of Counterparty or (vi) any transaction in which Counterparty or its board of directors has a legal obligation to make a recommendation to its shareholders in respect of such transaction (whether pursuant to Rule 14e-2 under the Exchange Act or otherwise).

13. Acknowledgments.

(a) The parties hereto intend for:

(i) each Transaction to be a "securities contract" as defined in Section 741(7) of the Bankruptcy Code and a "forward contract" as defined in Section 101(25) of the Bankruptcy Code, and the parties hereto to be entitled to the protections afforded by, among other Sections, Sections 362(b)(6), 362(b)(27), 362(o), 546(e), 546(j), 555, 556, 560 and 561 of the Bankruptcy Code;

(ii) the Agreement to be a "master netting agreement" as defined in Section 101(38A) of the Bankruptcy Code;

(iii) a party's right to liquidate, terminate or accelerate any Transaction, net out or offset termination values or payment amounts, and to exercise any other remedies upon the occurrence of any Event of Default or Termination Event under the Agreement with respect to the other party or any Extraordinary Event that results in the termination or cancellation of any Transaction to constitute a "contractual right" (as defined in the Bankruptcy Code); and

(iv) all payments for, under or in connection with each Transaction, all payments for the Shares (including, for the avoidance of doubt, payment of the Prepayment Amount) and the

transfer of such Shares to constitute "settlement payments" and "transfers" (as defined in the Bankruptcy Code).

(b) Counterparty acknowledges that:

(i) during the term of any Transaction, Wells Fargo and its Affiliates may buy or sell Shares or other securities or buy or sell options or futures contracts or enter into swaps or other derivative securities to establish, adjust or unwind its hedge position with respect to such Transaction;

(ii) Wells Fargo and its Affiliates may also be active in the market for the Shares and Share-linked transactions other than in connection with hedging activities in relation to any Transaction;

(iii) Wells Fargo shall make its own determination as to whether, when or in what manner any hedging or market activities in Counterparty's securities shall be conducted and shall do so in a manner that it deems appropriate to hedge its price and market risk with respect to the Forward Price and the VWAP Price;

(iv) any market activities of Wells Fargo and its Affiliates with respect to the Shares may affect the market price and volatility of the Shares, as well as the Forward Price, the VWAP Price and the Settlement Price, each in a manner that may be adverse to Counterparty; and

(v) each Transaction is a derivatives transaction in which it has granted Wells Fargo an option; Wells Fargo may purchase shares for its own account at an average price that may be greater than, or less than, the price paid by Counterparty under the terms of the related Transaction.

14. **No Collateral, Netting or Setoff.** Notwithstanding any provision of the Agreement or any other agreement between the parties to the contrary, the obligations of Counterparty hereunder are not secured by any collateral. Obligations under any Transaction shall not be netted, recouped or set off (including pursuant to Section 6 of the Agreement) against any other obligations of the parties, whether arising under the Agreement, this Master Confirmation or any Supplemental Confirmation, or under any other agreement between the parties hereto, by operation of law or otherwise, and no other obligations of the parties shall be netted, recouped or set off (including pursuant to Section 6 of the Agreement) against obligations under any Transaction, whether arising under the Agreement, this Master Confirmation or any Supplemental Confirmation, or under any other agreement between the parties hereto, by operation of law or otherwise, and each party hereby waives any such right of setoff, netting or recoupment.

15. **Delivery of Shares.** Notwithstanding anything to the contrary herein, Wells Fargo may, by prior notice to Counterparty, satisfy its obligation to deliver any Shares or other securities on any date due (an "**Original Delivery Date**") by making separate deliveries of Shares or such securities, as the case may be, at more than one time on or prior to such Original Delivery Date, so long as the aggregate number of Shares and other securities so delivered on or prior to such Original Delivery Date is equal to the number required to be delivered on such Original Delivery Date.

16. **Alternative Termination Settlement.** In the event that (a) an Early Termination Date (whether as a result of an Event of Default or a Termination Event) occurs or is designated with respect to any Transaction or (b) any Transaction is cancelled or terminated upon the occurrence of an Extraordinary Event (except as a result of (i) a Nationalization, Insolvency or Merger Event in which the consideration to be paid to holders of Shares consists solely of cash, (ii) a Merger Event or Tender Offer that is within Counterparty's control, or (iii) an Event of Default in which Counterparty is the Defaulting Party or a Termination Event in which Counterparty is the Affected Party other than an Event of Default of the type described in Section 5(a)(iii), (v), (vi), (vii) or (viii) of the Agreement or a Termination Event of the type described in Section 5(b) of the Agreement, in each case that resulted from an event or events outside Counterparty's control), if either party would owe any amount to the other party pursuant to Section 6(d)(ii) of the Agreement or any Cancellation Amount pursuant to Article 12 of the Equity Definitions (any such amount, a "**Payment Amount**"), then, in lieu of any payment

of such Payment Amount, unless Counterparty makes an election to the contrary no later than the Early Termination Date or the date on which such Transaction is terminated or cancelled, Counterparty or Wells Fargo, as the case may be, shall deliver to the other party a number of Shares (or, in the case of a Nationalization, Insolvency or Merger Event, a number of units, each comprising the number or amount of the securities or property that a hypothetical holder of one Share would receive in such Nationalization, Insolvency or Merger Event, as the case may be (each such unit, an "**Alternative Delivery Unit**")) with a value equal to the Payment Amount, as determined by the Calculation Agent over a commercially reasonable period of time (and the parties agree that, in making such determination of value, the Calculation Agent may take into account a number of factors, including, without limitation, the market price of the Shares or Alternative Delivery Units on the Early Termination Date or the date of early cancellation or termination, as the case may be, and, if such delivery is made by Wells Fargo, the prices at which Wells Fargo purchases Shares or Alternative Delivery Units on any Calculation Date to fulfill its delivery obligations under this Section 16); *provided* that in determining the composition of any Alternative Delivery Unit, if the relevant Nationalization, Insolvency or Merger Event involves a choice of consideration to be received by holders, such holder shall be deemed to have elected to receive the maximum possible amount of cash; and *provided further* that Counterparty may elect that the provisions of this Section 16 above providing for the delivery of Shares or Alternative Delivery Units, as the case may be, shall not apply only if Counterparty represents and warrants to Wells Fargo, in writing on the date it notifies Wells Fargo of such election, that, as of such date, Counterparty is not aware of any material non-public information regarding Counterparty or the Shares and is making such election in good faith and not as part of a plan or scheme to evade compliance with the federal securities laws. If delivery of Shares or Alternative Delivery Units, as the case may be, pursuant to this Section 16 is to be made by Counterparty, paragraphs 2 through 7 of Annex A hereto shall apply as if (A) such delivery were a settlement of such Transaction to which Net Share Settlement applied, (B) the Cash Settlement Payment Date were the Early Termination Date or the date of early cancellation or termination, as the case may be, and (C) the Forward Cash Settlement Amount were equal to (x) zero *minus* (y) the Payment Amount owed by Counterparty. For the avoidance of doubt, if Counterparty validly elects for the provisions of this Section 16 relating to the delivery of Shares or Alternative Delivery Units, as the case may be, not to apply to any Payment Amount, the provisions of Article 12 of the Equity Definitions, or the provisions of Section 6(d)(ii) of the Agreement, as the case may be, shall apply. If delivery of Shares or Alternative Delivery Units, as the case may be, is to be made by Wells Fargo pursuant to this Section 1616, the period during which Wells Fargo purchases Shares or Alternative Delivery Units to fulfill its delivery obligations under this Section 166 shall be referred to as the "**Seller Termination Purchase Period**"; *provided* that the parties hereby agree that such purchases shall be made solely on Calculation Dates for the relevant Transaction.

17. **<u>Calculations and Payment Date upon Early Termination</u>.** The parties acknowledge and agree that in calculating (a) the Close-Out Amount pursuant to Section 6 of the Agreement and (b) the amount due upon cancellation or termination of any Transaction (whether in whole or in part) pursuant to Article 12 of the Equity Definitions as a result of an Extraordinary Event, Wells Fargo may (but need not) determine such amount based on (i) expected losses assuming a commercially reasonable (including, without limitation, with regard to reasonable legal and regulatory guidelines and taking into account the existence of any Other Specified Repurchase Transaction) risk bid were used to determine loss or (ii) the price at which one or more market participants would offer to sell to the Seller a block of Shares equal in number to the Seller's hedge position in relation to the Transaction. Notwithstanding anything to the contrary in Section 6(d)(ii) of the Agreement or Article 12 of the Equity Definitions, all amounts calculated as being due in respect of an Early Termination Date under Section 6(e) of the Agreement or upon cancellation or termination of the relevant Transaction under Article 12 of the Equity Definitions will be payable on the day that notice of the amount payable is effective; *provided* that if Counterparty elects to receive or deliver Shares or Alternative Delivery Units in accordance with Section 16 hereof, such Shares or Alternative Delivery Units shall be delivered on a date selected in a good faith and commercially reasonable manner by Wells Fargo as promptly as practicable.

18. **<u>Limit on Beneficial Ownership</u>.** Notwithstanding any other provisions hereof, Wells Fargo may not be entitled to take delivery of any Shares deliverable hereunder to the extent (but only to the extent) that, after such receipt of any Shares hereunder, the Equity Percentage would exceed 7.5%. Any purported delivery hereunder shall be void and have no effect to the extent (but only to the extent) that, after such delivery the Equity Percentage would exceed 7.5%. If any delivery owed to Wells Fargo hereunder is not made, in whole or in part, as a result of this provision, Counterparty's obligation to make such delivery shall not be

extinguished and Counterparty shall make such delivery as promptly as practicable after, but in no event later than one Business Day after, Wells Fargo gives notice to Counterparty that, after such delivery, the Equity Percentage would not exceed 7.5%. The "Equity Percentage" as of any day is the fraction, expressed as a percentage, (A) the numerator of which is the number of Shares that Wells Fargo and any of its affiliates or any other person subject to aggregation with Wells Fargo for purposes of the "beneficial ownership" test under Section 13 of the Exchange Act, or any "group" (within the meaning of Section 13) of which Wells Fargo is or may be deemed to be a part beneficially owns (within the meaning of Section 13 of the Exchange Act), without duplication, on such day (or, to the extent that for any reason the equivalent calculation under Section 16 of the Exchange Act and the rules and regulations thereunder results in a higher number, such higher number) and (B) the denominator of which is the number of Shares outstanding on such day.

19. **Maximum Share Delivery.** Notwithstanding anything to the contrary in this Master Confirmation, in no event shall Wells Fargo be required to deliver any Shares, or any Shares or other securities comprising Alternative Delivery Units, in respect of any Transaction in excess of the Maximum Number of Shares set forth in the Supplemental Confirmation for such Transaction.

20. **Additional Termination Events.** Notwithstanding anything to the contrary in Section 6 of the Agreement, if a Termination Price is specified in the Supplemental Confirmation for any Transaction, then an Additional Termination Event will occur without any notice or action by Wells Fargo or Counterparty if the price of the Shares on the Exchange at any time falls below such Termination Price, with Counterparty as the sole Affected Party and such Transaction as the sole Affected Transaction.

21. **Non-confidentiality.** Wells Fargo and Counterparty hereby acknowledge and agree that each is authorized to disclose every aspect of this Master Confirmation, any Supplemental Confirmation and the transactions contemplated hereby and thereby to any and all persons, without limitation of any kind, and there are no express or implied agreements, arrangements or understandings to the contrary.

22. **[RESERVED].**

23. **[RESERVED].**

24. **Assignment and Transfer.** Notwithstanding anything to the contrary in the Agreement, Wells Fargo may not assign any of its rights or duties hereunder to any one or more of its Affiliates without the prior written consent of Counterparty, which consent will not be unreasonably withheld or delayed; *provided* that such assignment shall not be permitted if Counterparty will either (x) be required to pay an additional amount in respect of an Indemnifiable Tax under Section 2(d)(i)(4) of the Agreement under the law as of the date of the transfer or assignment, or (y) receive a payment from which an amount has been deducted or withheld for or on account of any Tax in respect of which the other party is not required to pay an additional amount, in either case, as a result of such assignment.. Notwithstanding any other provision in this Master Confirmation to the contrary requiring or allowing Wells Fargo to purchase, sell, receive or deliver any Shares or other securities to or from Counterparty, Wells Fargo may designate any of its Affiliates to purchase, sell, receive or deliver such Shares or other securities and otherwise to perform Wells Fargo's obligations in respect of any Transaction and any such designee may assume such obligations. Wells Fargo may assign the right to receive Settlement Shares to any third party who may legally receive Settlement Shares. Wells Fargo shall be discharged of its obligations to Counterparty only to the extent of any such performance. For the avoidance of doubt, Wells Fargo hereby acknowledges that notwithstanding any such designation hereunder, to the extent any of Wells Fargo's obligations in respect of any Transaction are not completed by its designee, Wells Fargo shall be obligated to continue to perform or to cause any other of its designees to perform in respect of such obligations.

25. **Amendments to the Equity Definitions.**

(a) Section 11.2(a) of the Equity Definitions is hereby amended by deleting the words "a diluting or concentrative" and replacing them with the word "an"; and adding the phrase "or such Transaction" at the end of the sentence.

(b) Section 11.2(c) of the Equity Definitions is hereby amended by (i) replacing the words "a diluting or concentrative" with "an" in the fifth line thereof, (ii) adding the phrase "or such Transaction" after the words "the relevant Shares" in the same sentence, (iii) deleting the words "diluting or concentrative" in the sixth to last line thereof, and (iv) deleting the phrase "(provided that no adjustments will be made to account solely for changes in volatility, expected dividends, stock loan rate or liquidity relative to the relevant Shares)" and replacing it with the phrase "(and, for the avoidance of doubt, adjustments may be made to account solely for changes in volatility, expected dividends, stock loan rate or liquidity relative to the relevant Shares)."

(c) Section 11.2(e)(vii) of the Equity Definitions is hereby amended by deleting the words "a diluting or concentrative" and replacing them with the words "a material"; and adding the phrase "or the relevant Transaction" at the end of the sentence.

(d) Section 12.6(a)(ii) of the Equity Definitions is hereby amended by (i) deleting from the fourth line thereof the word "or" after the word "official" and inserting a comma therefor, and (ii) deleting the semi-colon at the end of subsection (B) thereof and inserting the following words therefor "or (C) at Wells Fargo's option, the occurrence of any of the events specified in Section 5(a)(vii) (1) through (9) of the ISDA Master Agreement with respect to that Issuer."

(e) Section 12.9(b)(iv) of the Equity Definitions is hereby amended by:

(i) deleting (1) subsection (A) in its entirety, (2) the phrase "or (B)" following subsection (A) and (3) the phrase "in each case" in subsection (B); and

(ii) replacing the phrase "neither the Non-Hedging Party nor the Lending Party lends Shares" with the phrase "such Lending Party does not lend Shares" in the penultimate sentence.

(f) Section 12.9(b)(v) of the Equity Definitions is hereby amended by:

(i) adding the word "or" immediately before subsection "(B)" and deleting the comma at the end of subsection (A); and

(ii) (1) deleting subsection (C) in its entirety, (2) deleting the word "or" immediately preceding subsection (C), (3) deleting the penultimate sentence in its entirety and replacing it with the sentence "The Hedging Party will determine the Cancellation Amount payable by one party to the other" and (4) deleting clause (X) in the final sentence.

(g) Section 12.9(b)(vi) of the Equity Definitions is hereby amended by:

(i) adding the word "or" immediately before subsection "(B)" and deleting the comma at the end of subsection (A); and

(ii) (1) deleting subsection (C) in its entirety, (2) deleting the word "or" immediately preceding subsection (C) and (3) deleting the final sentence in its entirety and replacing it with the sentence "The Hedging Party will determine the Cancellation Amount payable by one party to the other".

26. **Extraordinary Dividend.** If Counterparty declares any Extraordinary Dividend that has an ex-dividend date during the period commencing on the Trade Date for any Transaction and ending of the last day of the Relevant Period or, if applicable, the later of the last day of the Settlement Valuation Period and the last day of the Seller Termination Purchase Period, for such Transaction, then prior to or on the date on which such Extraordinary Dividend is paid by Counterparty to holders of record, Counterparty shall pay to Wells Fargo, for each Transaction under this Master Confirmation, an amount in cash equal to the product of (i) the amount of such Extraordinary Dividend and (ii) the theoretical short delta number of shares as of the opening of business on the related ex-dividend date, as determined by the Calculation Agent, required for Wells Fargo to hedge its exposure to such Transaction.

27. Tax Matters.

(a) For the purpose of Section 3(e) of the Agreement, each of Counterparty and Wells Fargo hereby represents that it is not required by any applicable law, as modified by the practice of any relevant governmental revenue authority, of any Relevant Jurisdiction to make any deduction or withholding for or on account of any Tax from any payment (other than interest under Section 9(h) of the Agreement or amounts payable hereunder that may be considered to be interest for United States federal income tax purposes) to be made by it to the other party under the Agreement. In making this representation, it may rely on (i) the accuracy of any representations made by the other party pursuant to Section 3(f) of the Agreement, (ii) the satisfaction of the agreement contained in Section 4(a)(i) or 4(a)(iii) of the Agreement and the accuracy and effectiveness of any document provided by the other party pursuant to Section 4(a)(i) or 4(a)(iii) of the Agreement and (iii) the satisfaction of the agreement of the other party contained in Section 4(d) of the Agreement, except that it will not be a breach of this representation where reliance is placed on clause (ii) above and the other party does not deliver a form or document under Section 4(a)(iii) by reason of material prejudice to its legal or commercial position.

(b) For the purpose of Section 3(f) of the Agreement,

(i) Counterparty makes the following representation to Wells Fargo:

Counterparty is a "U.S. person" (as that term is used in Section 1.1441-4(a)(3)(ii) of United States Treasury Regulations) for United States federal income tax purposes.

(ii) Wells Fargo makes the following representation to Counterparty:

Wells Fargo is a national banking association organized or formed under the laws of the United States and is a United States resident for United States federal income tax purposes.

(c) "Tax" and "Indemnifiable Tax", each as defined in Section 14 of the Agreement, shall not include any U.S. federal withholding tax imposed or collected pursuant to Sections 1471 through 1474 of the U.S. Internal Revenue Code of 1986, as amended (the "**Code**"), any current or future regulations or official interpretations thereof, any agreement entered into pursuant to Section 1471(b) of the Code, or any fiscal or regulatory legislation, rules or practices adopted pursuant to any intergovernmental agreement entered into in connection with the implementation of such Sections of the Code (a "**FATCA Withholding Tax**"). For the avoidance of doubt, a FATCA Withholding Tax is a Tax the deduction or withholding of which is required by applicable law for the purposes of Section 2(d) of the Agreement.

(d) Each party shall provide to the other party a valid U.S. Internal Revenue Service Form W-9 or any successor thereto, (i) on or before the date of execution of this Master Confirmation and (ii) promptly upon learning that any such tax form previously provided by such party has become obsolete or incorrect. Additionally, each party shall, promptly upon request by the other party, provide such other tax forms and documents reasonably requested by the other party.

28. Status of Claims in Bankruptcy. Wells Fargo acknowledges and agrees that neither this Master Confirmation nor any Supplemental Confirmation is intended to convey to Wells Fargo rights against Counterparty with respect to any Transaction that are senior to the claims of common stockholders of Counterparty in any United States bankruptcy proceedings of Counterparty; *provided* that nothing herein shall limit or shall be deemed to limit Wells Fargo's right to pursue remedies in the event of a breach by Counterparty of its obligations and agreements with respect to any Transaction; *provided further* that nothing herein shall limit or shall be deemed to limit Wells Fargo's rights in respect of any transactions other than any Transaction.

29. Wall Street Transparency and Accountability Act. In connection with Section 739 of the Wall Street Transparency and Accountability Act of 2010 ("**WSTAA**"), the parties hereby agree that neither the enactment of WSTAA or any regulation under the WSTAA, nor any requirement under WSTAA or an

amendment made by WSTAA, nor any similar legal certainty provision in any legislation enacted, or rule or regulation promulgated, on or after the date of this Master Confirmation, shall limit or otherwise impair either party's otherwise applicable rights to terminate, renegotiate, modify, amend or supplement any Supplemental Confirmation, this Master Confirmation or the Agreement, as applicable, arising from a termination event, force majeure, illegality, increased costs, regulatory change or similar event under any Supplemental Confirmation, this Master Confirmation, the Equity Definitions incorporated herein, or the Agreement (including, without limitation, rights arising from Change in Law, Loss of Stock Borrow, Increased Cost of Stock Borrow, Hedging Disruption, Increased Cost of Hedging, or Illegality).

30. **Communications with Employees of Wells Fargo Securities LLC.** If Counterparty interacts with any employee of Wells Fargo Securities LLC with respect to any Transaction, Counterparty is hereby notified that such employee will act solely as an authorized representative of Wells Fargo Bank, National Association (and not as a representative of Wells Fargo Securities LLC) in connection with such Transaction.

31. **Waiver of Jury Trial.** EACH PARTY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY SUIT, ACTION OR PROCEEDING RELATING TO THE AGREEMENT, THIS MASTER CONFIRMATION, EACH SUPPLEMENTAL CONFIRMATION, THE TRANSACTIONS HEREUNDER AND ALL MATTERS ARISING IN CONNECTION WITH THE AGREEMENT, THIS MASTER CONFIRMATION AND ANY SUPPLEMENTAL CONFIRMATION AND THE TRANSACTIONS HEREUNDER. EACH PARTY (I) CERTIFIES THAT NO REPRESENTATIVE, AGENT OR ATTORNEY OF THE OTHER PARTY HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT, IN THE EVENT OF SUCH A SUIT, ACTION OR PROCEEDING, SEEK TO ENFORCE THE FOREGOING WAIVER AND (II) ACKNOWLEDGES THAT IT AND THE OTHER PARTY HAVE BEEN INDUCED TO ENTER INTO THE TRANSACTIONS, AS APPLICABLE, BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS PROVIDED HEREIN.

32. **Counterparts.**

(a) This Master Confirmation may be executed in any number of counterparts, all of which shall constitute one and the same instrument, and any party hereto may execute this Master Confirmation by signing and delivering one or more counterparts. Counterparts may be delivered via facsimile, electronic mail (including any electronic signature covered by the U.S. federal ESIGN Act of 2000, Uniform Electronic Transactions Act, the Electronic Signatures and Records Act or other applicable law, e.g., DocuSign and AdobeSign (any such signature, an "Electronic Signature")) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes. The words "execution," "signed," "signature" and words of like import in this Master Confirmation or in any other certificate, agreement or document related to this Master Confirmation shall include any Electronic Signature, except to the extent electronic notices are expressly prohibited under this Master Confirmation or the Agreement

(b) Notwithstanding anything to the contrary in the Agreement, either party may deliver to the other party a notice relating to any Event of Default or Termination Event under this Master Confirmation by e-mail.

33. **U.S. Resolution Stay Protocol.** The parties acknowledge and agree that (i) to the extent that prior to the date hereof both parties have adhered to the 2018 ISDA U.S. Resolution Stay Protocol (the "**Protocol**"), the terms of the Protocol are incorporated into and form a part of the Agreement, and for such purposes the Agreement shall be deemed a Protocol Covered Agreement, Wells Fargo shall be deemed a Regulated Entity and Counterparty shall be deemed an Adhering Party; (ii) to the extent that prior to the date hereof the parties have executed a separate agreement the effect of which is to amend the qualified financial contracts between them to conform with the requirements of the QFC Stay Rules (the "**Bilateral Agreement**"), the terms of the Bilateral Agreement are incorporated into and form a part of the Agreement, and for such purposes the Agreement shall be deemed a Covered Agreement, Wells Fargo shall be deemed a Covered Entity and Counterparty shall be deemed a Counterparty Entity; or (iii) if clause (i) and clause (ii) do not apply, the terms of Section 1 and Section 2 and the related defined terms (together, the "**Bilateral Terms**") of the form of bilateral template entitled "Full-Length Omnibus (for use between U.S. G-SIBs and Corporate Groups)"

published by ISDA on November 2, 2018 (currently available on the 2018 ISDA U.S. Resolution Stay Protocol page at www.isda.org and, a copy of which is available upon request), the effect of which is to amend the qualified financial contracts between the parties thereto to conform with the requirements of the QFC Stay Rules, are hereby incorporated into and form a part of the Agreement, and for such purposes the Agreement shall be deemed a "Covered Agreement," Wells Fargo shall be deemed a "Covered Entity" and Counterparty shall be deemed a "Counterparty Entity." In the event that, after the date of the Agreement, both parties hereto become adhering parties to the Protocol, the terms of the Protocol will replace the terms of this paragraph. In the event of any inconsistencies between the Agreement and the terms of the Protocol, the Bilateral Agreement or the Bilateral Terms (each, the "**QFC Stay Terms**"), as applicable, the QFC Stay Terms will govern. Terms used in this paragraph without definition shall have the meanings assigned to them under the QFC Stay Rules. For purposes of this paragraph, references to "the Agreement" include any related credit enhancements entered into between the parties or provided by one to the other. In addition, the parties agree that the terms of this paragraph shall be incorporated into any related covered affiliate credit enhancements, with all references to Wells Fargo replaced by references to the covered affiliate support provider.

"**QFC Stay Rules**" means the regulations codified at 12 C.F.R. 252.2, 252.81–8, 12 C.F.R. 382.1-7 and 12 C.F.R. 47.1-8, which, subject to limited exceptions, require an express recognition of the stay-and-transfer powers of the FDIC under the Federal Deposit Insurance Act and the Orderly Liquidation Authority under Title II of the Dodd Frank Wall Street Reform and Consumer Protection Act and the override of default rights related directly or indirectly to the entry of an affiliate into certain insolvency proceedings and any restrictions on the transfer of any covered affiliate credit enhancements.

34. **CARES Act.** Counterparty (x) represents and warrants that it has not, as of the Trade Date, applied for or received a loan, loan guarantee, direct loan (as that term is defined in the Coronavirus Aid, Relief and Economic Security Act (the "**CARES Act**")) and is not in material breach of any Material Governmental Restrictions (as defined below) under any or other investment, or any financial assistance or relief under any program or facility (collectively "**Financial Assistance**") that (a) is established under applicable law (whether in existence as of the Trade Date or subsequently enacted, adopted or amended), including without limitation the CARES Act and the Federal Reserve Act, as amended, and (b) (i) requires under applicable law (or any regulation, guidance, interpretation or other pronouncement of a governmental authority with jurisdiction for such program or facility) as a condition of such Financial Assistance, that Counterparty comply with certain a requirements (the "**Material Governmental Restrictions"**) not to, or otherwise agree, attest, certify or warrant that it has not, as of the date specified in such condition, repurchased, or will not repurchase, any equity security of Counterparty, and that it has not, as of the date specified in such condition, made a capital distribution or will not make a capital distribution, or (ii) for which the terms of the Transaction would cause Counterparty to fail to satisfy any condition for application for or receipt or retention of the Financial Assistance and (y) acknowledges that entering into the Transaction may limit its ability to receive such loan, loan guarantee, or direct loan Financial Assistance.

WELLS FARGO

Please confirm that the foregoing correctly sets forth the terms of our agreement by executing this Master Confirmation and returning it to us.

Very truly yours,

WELLS FARGO BANK, NATIONAL ASSOCIATION

By: /s/ Thomas Yates
Authorized Signatory
Name: Thomas Yates

Accepted and confirmed
as of the date first set
forth above:

ALLSCRIPTS HEALTHCARE SOLUTIONS, INC.

By: /s/ Richard J. Poulton
Authorized Signatory
Name: Richard J. Poulton

WELLS FARGO

SCHEDULE A

FORM OF SUPPLEMENTAL CONFIRMATION

[__________], 20[__]

From: Wells Fargo Bank, National Association
30 Hudson Yards
New York, NY 10001-2170
Email: CorporateDerivativeNotifications@wellsfargo.com

To: Allscripts Healthcare Solutions, Inc.
222 Merchandise Mart Plaza, Suite 2024
Chicago, IL 60654
Attention: [Chief Financial Officer]
Telephone No.:[____________]
Facsimile No.:[____________]

Re: Supplemental Confirmation—Uncollared Accelerated Share Repurchase

The purpose of this Supplemental Confirmation is to confirm the terms and conditions of the Transaction entered into between Wells Fargo Bank, National Association ("**Wells Fargo**") and Allscripts Healthcare Solutions, Inc., a Delaware corporation ("**Counterparty**") on the Trade Date specified below. This Supplemental Confirmation is a binding contract between Wells Fargo and Counterparty as of the relevant Trade Date for the Transaction referenced below.

1. This Supplemental Confirmation supplements, forms part of, and is subject to the Master Confirmation, dated as of November 30, 2020 (the "**Master Confirmation**"), between Wells Fargo and Counterparty, as amended and supplemented from time to time. All provisions contained in the Master Confirmation govern this Supplemental Confirmation except as expressly modified below.

2. The terms of the Transaction to which this Supplemental Confirmation relates are as follows:

Trade Date:	[__________], 20[__]
Forward Price Adjustment Amount:	USD [___]
Calculation Period Start Date:	[__________], 20[__]
Scheduled Termination Date:	[__________], 20[__]
First Acceleration Date:	[__________], 20[__]
Prepayment Amount:	USD [___]
Prepayment Date:	[__________], 20[__]
Initial Shares:	[___] Shares; provided that if, in connection with the Transaction, Wells Fargo is unable to borrow or otherwise acquire a number of Shares equal to the Initial Shares for delivery to Counterparty on the Initial Share Delivery Date, the Initial Shares delivered on the Initial Share Delivery Date shall be reduced to such number of Shares that Wells Fargo is able to so borrow or otherwise acquire. All Shares delivered to Counterparty in respect of the Transaction pursuant to this paragraph shall be the "Initial Shares" for purposes of "Number of Shares to be Delivered" in the Master Confirmation.

Initial Share Delivery Date:	[__________], 20[__]
Maximum Stock Loan Rate:	[__] basis points per annum
Initial Stock Loan Rate:	[__] basis points per annum
Maximum Number of Shares:	[__][1] Shares
Floor Price:	USD 0.01 per Share
Termination Price:	USD [___] per Share
Additional Relevant Days:	The [___] Exchange Business Days immediately following the Calculation Period.
Reserved Shares:	Notwithstanding anything to the contrary in the Master Confirmation, as of the date of this Supplemental Confirmation, the Reserved Shares shall be equal to [___] Shares.

[1] To be approximately 50% of the total number of Shares outstanding on the Trade Date.

Calculation Dates:

1.		2.		3.	
4.		5.		6.	
7.		8.		9.	
10.		11.		12.	
[_]		[_]		[_]	

If necessary, the Calculation Agent may add additional Calculation Dates beginning with [__________], 20[__] and continuing with every other Scheduled Trading Day thereafter.

3. Counterparty represents and warrants to Wells Fargo that neither it nor any "affiliated purchaser" (as defined in Rule 10b-18 under the Exchange Act) has made any purchases of blocks pursuant to the proviso in Rule 10b-18(b)(4) under the Exchange Act during either (i) the four full calendar weeks immediately preceding the Trade Date or (ii) during the calendar week in which the Trade Date occurs, except as set forth in any notice delivered pursuant to Section 6(b)(xv) of the Master Confirmation.

4. This Supplemental Confirmation may be executed in any number of counterparts, all of which shall constitute one and the same instrument, and any party hereto may execute this Supplemental Confirmation by signing and delivering one or more counterparts.

Please confirm that the foregoing correctly sets forth the terms of our agreement by executing this Supplemental Confirmation and returning it to us.

Very truly yours,

WELLS FARGO BANK, NATIONAL ASSOCIATION

By: ______________________________
Authorized Signatory
Name:

Accepted and confirmed
as of the Trade Date:

ALLSCRIPTS HEALTHCARE SOLUTIONS, INC.

By: ______________________________
Authorized Signatory
Name:

SCHEDULE B

FORM OF CERTIFICATE OF RULE 10B-18 PURCHASES

[Letterhead of Counterparty]

Wells Fargo Bank, National Association (“**Wells Fargo**”)
30 Hudson Yards
New York, NY 10001-2170
Email: CorporateDerivativeNotifications@wellsfargo.com

Re: Uncollared Accelerated Share Repurchase

Ladies and Gentlemen:

In connection with our entry into the Master Confirmation, dated as of November [_], 2020, between Wells Fargo Bank, National Association and Allscripts Healthcare Solutions, Inc., a Delaware corporation, as amended and supplemented from time to time (the “**Master Confirmation**”) and the Supplemental Confirmation thereto, dated as of November 30, 2020, we hereby represent that set forth below is the total number of shares of our common stock purchased by or for us or any of our affiliated purchasers in Rule 10b-18 purchases of blocks (all as defined in Rule 10b-18 under the Securities Exchange Act of 1934) pursuant to the once-a-week block exception set forth in Rule 10b-18(b)(4) during the four full calendar weeks immediately preceding the first day of the [Calculation Period][Settlement Valuation Period][Seller Termination Purchase Period] (as defined in the Master Confirmation) and the week during which the first day of such [Calculation Period][Settlement Valuation Period][Seller Termination Purchase Period] occurs.

Number of Shares: ___________________

We understand that you will use this information in calculating trading volume for purposes of Rule 10b-18.

Confirmed as of the date first written above:

ALLSCRIPTS HEALTHCARE SOLUTIONS, INC.

By: ____
Authorized Signatory
Name:

ANNEX A

COUNTERPARTY SETTLEMENT PROVISIONS

1. The following Counterparty Settlement Provisions shall apply to any Transaction to the extent indicated under the Master Confirmation:

Settlement Currency:	USD
Settlement Method Election:	Applicable; *provided* that (i) Section 7.1 of the Equity Definitions is hereby amended by deleting the word “Physical” in the sixth line thereof and replacing it with the words “Net Share” and (ii) the Electing Party may make a settlement method election only if the Electing Party represents and warrants to Wells Fargo in writing on the date it notifies Wells Fargo of its election that, as of such date, the Electing Party is not aware of any material non-public information regarding Counterparty or the Shares and is electing the settlement method in good faith and not as part of a plan or scheme to evade compliance with the federal securities laws.
Electing Party:	Counterparty
Settlement Method Election Date:	The earlier of (i) the Scheduled Termination Date and (ii) the second Exchange Business Day immediately following the Accelerated Termination Date (in which case the election under Section 7.1 of the Equity Definitions shall be made no later than 10 minutes prior to the open of trading on the Exchange on such second Exchange Business Day), as the case may be.
Default Settlement Method:	Cash Settlement
Forward Cash Settlement Amount:	An amount equal to (a) the Number of Shares to be Delivered, *multiplied by* (b) the Settlement Price.
Settlement Price:	An amount equal to the average of the VWAP Prices for the Calculation Dates in the Settlement Valuation Period, *plus* USD 0.02, subject to Valuation Disruption as specified in the Master Confirmation (in each case, *plus* interest on such amount during the Settlement Valuation Period at the rate of interest for Counterparty’s long term, unsecured and unsubordinated indebtedness, as determined by the Calculation Agent).
Settlement Valuation Period:	A number of Scheduled Trading Days selected by Wells Fargo in its reasonable discretion, beginning on the Scheduled Trading Day immediately following the earlier of (i) the Scheduled Termination Date or (ii) the Exchange Business Day immediately following the Termination Date.
Cash Settlement:	If Cash Settlement is applicable, then Buyer shall pay to Wells Fargo the absolute value of the Forward Cash Settlement Amount on the Cash Settlement Payment Date.
Cash Settlement Payment Date:	The Exchange Business Day immediately following the last day of the Settlement Valuation Period.
Net Share Settlement Procedures:	If Net Share Settlement is applicable, Net Share Settlement shall be made in accordance with paragraphs 2 through 7 below.

2. Net Share Settlement shall be made by delivery on the Cash Settlement Payment Date of a number of Shares satisfying the conditions set forth in paragraph 3 below (the "**Registered Settlement Shares**"), or a number of Shares not satisfying such conditions (the "**Unregistered Settlement Shares**"), in either case with a value equal to 101% (in the case of Registered Settlement Shares) or 105% (in the case of Unregistered Settlement Shares) of the absolute value of the Forward Cash Settlement Amount, with such Shares' value based on the value thereof to Wells Fargo (which value shall, in the case of Unregistered Settlement Shares, take into account a commercially reasonable illiquidity discount), in each case as determined by the Calculation Agent. If all of the conditions for delivery of either Registered Settlement Shares or Unregistered Settlement Shares have not been satisfied, Cash Settlement shall be applicable in accordance with paragraph 1 above notwithstanding Counterparty's election of Net Share Settlement.

3. Counterparty may only deliver Registered Settlement Shares pursuant to paragraph 2 above if:

(a) a registration statement covering public resale of the Registered Settlement Shares by Wells Fargo (the "**Registration Statement**") shall have been filed with the Securities and Exchange Commission under the Securities Act and been declared or otherwise become effective on or prior to the date of delivery, and no stop order shall be in effect with respect to the Registration Statement; a printed prospectus relating to the Registered Settlement Shares (including, without limitation, any prospectus supplement thereto, the "**Prospectus**") shall have been delivered to Wells Fargo, in such quantities as Wells Fargo shall reasonably have requested, on or prior to the date of delivery;

(b) the form and content of the Registration Statement and the Prospectus (including, without limitation, any sections describing the plan of distribution) shall be satisfactory to Wells Fargo;

(c) as of or prior to the date of delivery, Wells Fargo and its agents shall have been afforded a reasonable opportunity to conduct a due diligence investigation with respect to Counterparty customary in scope for underwritten offerings of equity securities of similar size and the results of such investigation are satisfactory to Wells Fargo, in its discretion; and

(d) as of the date of delivery, an agreement (the "**Underwriting Agreement**") shall have been entered into with Wells Fargo in connection with the public resale of the Registered Settlement Shares by Wells Fargo substantially similar to underwriting agreements customary for underwritten offerings of equity securities of similar size, in form and substance satisfactory to Wells Fargo, which Underwriting Agreement shall include, without limitation, provisions substantially similar to those contained in such underwriting agreements relating, without limitation, to the indemnification of, and contribution in connection with the liability of, Wells Fargo and its Affiliates and the provision of customary opinions, accountants' comfort letters and lawyers' negative assurance letters.

4. If Counterparty delivers Unregistered Settlement Shares pursuant to paragraph 2 above:

(a) all Unregistered Settlement Shares shall be delivered to Wells Fargo (or any Affiliate of Wells Fargo designated by Wells Fargo) pursuant to the exemption from the registration requirements of the Securities Act provided by Section 4(a)(2) thereof;

(b) as of or prior to the date of delivery, Wells Fargo and any potential purchaser of any such shares from Wells Fargo (or any Affiliate of Wells Fargo designated by Wells Fargo) identified by Wells Fargo shall be afforded a commercially reasonable opportunity to conduct a due diligence investigation with respect to Counterparty customary in scope for private placements of equity securities (including, without limitation, the right to have made available to them for inspection all financial and other records, pertinent corporate documents and other information reasonably requested by them);

(c) as of the date of delivery, Counterparty shall enter into an agreement (a "**Private Placement Agreement**") with Wells Fargo (or any Affiliate of Wells Fargo designated by Wells Fargo) in connection with the private placement of such shares by Counterparty to Wells Fargo (or any such Affiliate) and the private resale of such shares by Wells Fargo (or any such Affiliate), substantially similar to private placement purchase agreements customary for private placements of equity securities, in form and substance commercially reasonably satisfactory to Wells Fargo, which Private Placement Agreement shall include, without limitation, provisions substantially similar to those contained in such private placement purchase agreements relating, without limitation, to the indemnification of, and contribution in connection with the liability of, Wells Fargo and its Affiliates and the provision of customary opinions, accountants' comfort letters and lawyers' negative assurance letters, and shall provide for the payment by

Counterparty of all fees and expenses of Wells Fargo (and any such Affiliate) in connection with such resale, including, without limitation, all fees and expenses of counsel for Wells Fargo, and shall contain representations, warranties, covenants and agreements of Counterparty reasonably necessary or advisable to establish and maintain the availability of an exemption from the registration requirements of the Securities Act for such resales; and

(d) in connection with the private placement of such shares by Counterparty to Wells Fargo (or any such Affiliate) and the private resale of such shares by Wells Fargo (or any such Affiliate), Counterparty shall, if so requested by Wells Fargo, prepare, in cooperation with Wells Fargo, a private placement memorandum in form and substance reasonably satisfactory to Wells Fargo.

5. Wells Fargo, itself or through an Affiliate (the "**Selling Agent**") or any underwriter(s), will sell all, or such lesser portion as may be required hereunder, of the Registered Settlement Shares or Unregistered Settlement Shares and any Makewhole Shares (as defined below) (together, the "**Settlement Shares**") delivered by Counterparty to Wells Fargo pursuant to paragraph 6 below commencing on the Cash Settlement Payment Date and continuing until the date on which the aggregate Net Proceeds (as such term is defined below) of such sales, as determined by Wells Fargo, is equal to the absolute value of the Forward Cash Settlement Amount (such date, the "**Final Resale Date**"). If the proceeds of any sale(s) made by Wells Fargo, the Selling Agent or any underwriter(s), net of any fees and commissions (including, without limitation, underwriting or placement fees) customary for similar transactions under the circumstances at the time of the offering, together with carrying charges and expenses incurred in connection with the offer and sale of the Shares (including, without limitation, the covering of any over-allotment or short position (syndicate or otherwise)) (the "**Net Proceeds**") exceed the absolute value of the Forward Cash Settlement Amount, Wells Fargo will refund, in USD, such excess to Counterparty on the date that is three (3) Currency Business Days following the Final Resale Date, and, if any portion of the Settlement Shares remains unsold, Wells Fargo shall return to Counterparty on that date such unsold Shares.

6. If the Calculation Agent determines that the Net Proceeds received from the sale of the Registered Settlement Shares or Unregistered Settlement Shares or any Makewhole Shares, if any, pursuant to this paragraph 6 are less than the absolute value of the Forward Cash Settlement Amount (the amount in USD by which the Net Proceeds are less than the absolute value of the Forward Cash Settlement Amount being the "**Shortfall**" and the date on which such determination is made, the "**Deficiency Determination Date**"), Counterparty shall on the Exchange Business Day next succeeding the Deficiency Determination Date (the "**Makewhole Notice Date**") deliver to Wells Fargo, through the Selling Agent, a notice of Counterparty's election that Counterparty shall either (i) pay an amount in cash equal to the Shortfall on the day that is one Currency Business Day after the Makewhole Notice Date, or (ii) deliver additional Shares. If Counterparty elects to deliver to Wells Fargo additional Shares, then Counterparty shall deliver additional Shares in compliance with the terms and conditions of paragraph 3 or paragraph 4 above, as the case may be (the "**Makewhole Shares**"), on the first Clearance System Business Day which is also an Exchange Business Day following the Makewhole Notice Date in such number as the Calculation Agent reasonably believes would have a market value on that Exchange Business Day equal to the Shortfall. Such Makewhole Shares shall be sold by Wells Fargo in accordance with the provisions above; provided that if the sum of the Net Proceeds from the sale of the originally delivered Shares and the Net Proceeds from the sale of any Makewhole Shares is less than the absolute value of the Forward Cash Settlement Amount then Counterparty shall, at its election, either make such cash payment or deliver to Wells Fargo further Makewhole Shares until such Shortfall has been reduced to zero.

7. Notwithstanding the foregoing, in no event shall the aggregate number of Settlement Shares for any Transaction be greater than the Reserved Shares minus the amount of any Shares actually delivered by Counterparty under any other Transaction under this Master Confirmation (the result of such calculation, the "**Capped Number**"). Counterparty represents and warrants (which shall be deemed to be repeated on each day that a Transaction is outstanding) that the Capped Number is equal to or less than the number of Shares determined according to the following formula:

A – B

Where	A =	the number of authorized but unissued shares of Counterparty that are not reserved for future issuance on the date of the determination of the Capped Number; and
	B =	the maximum number of Shares required to be delivered to third parties if Counterparty elected Net Share Settlement of all transactions in the Shares (other than Transactions in the Shares under this Master Confirmation) with all third parties that are then currently outstanding and unexercised.

"**Reserved Shares**" means initially, 14,619,883 Shares. The Reserved Shares may be increased or decreased in a Supplemental Confirmation.

If at any time, as a result of this paragraph 7, Counterparty fails to deliver to Wells Fargo any Settlement Shares, Counterparty shall, to the extent that Counterparty has at such time authorized but unissued Shares not reserved for other purposes, promptly notify Wells Fargo thereof and deliver to Wells Fargo a number of Shares not previously delivered as a result of this paragraph 7. Counterparty agrees to use its commercially reasonable efforts to cause the number of authorized but unissued Shares to be increased, if necessary, to an amount sufficient to permit Counterparty to fulfill its obligation to deliver any Settlement Shares.

EXECUTED VERSION

J.P.Morgan

November 30, 2020

From: JPMorgan Chase Bank, National Association
New York Branch
383 Madison Avenue
New York, NY, 10179

To: Allscripts Healthcare Solutions, Inc.
222 Merchandise Mart Plaza, Suite 2024
Chicago, IL 60654
Attention: Richard J. Poulton
Telephone No.:312.506.1216
Email:rick.poulton@allscripts.com; legal.notices@allscripts.com

Re: Master Confirmation—Uncollared Accelerated Share Repurchase

This master confirmation (this "**Master Confirmation**"), dated as of November 30, 2020, is intended to set forth certain terms and provisions of certain Transactions (each, a "**Transaction**") entered into from time to time between JPMorgan Chase Bank, National Association ("**JPMorgan**") and Allscripts Healthcare Solutions, Inc., a Delaware corporation ("**Counterparty**"). This Master Confirmation, taken alone, is neither a commitment by either party to enter into any Transaction nor evidence of a Transaction. The additional terms of any particular Transaction shall be set forth in a Supplemental Confirmation in the form of Schedule A hereto (a "**Supplemental Confirmation**"), which shall reference this Master Confirmation and supplement, form a part of, and be subject to this Master Confirmation. This Master Confirmation and each Supplemental Confirmation together shall constitute a "Confirmation" as referred to in the Agreement specified below.

The definitions and provisions contained in the 2002 ISDA Equity Derivatives Definitions (the "**Equity Definitions**"), as published by the International Swaps and Derivatives Association, Inc., are incorporated into this Master Confirmation. This Master Confirmation and each Supplemental Confirmation evidence a complete binding agreement between Counterparty and JPMorgan as to the subject matter and terms of each Transaction to which this Master Confirmation and such Supplemental Confirmation relate and shall supersede all prior or contemporaneous written or oral communications with respect thereto.

This Master Confirmation and each Supplemental Confirmation supplement, form a part of, and are subject to an agreement in the form of the ISDA 2002 Master Agreement (the "**Agreement**") as if JPMorgan and Counterparty had executed the Agreement on the date of this Master Confirmation (but without any Schedule except for (i) the election of New York law as the governing law (without reference to its choice of law provisions), (ii) the election that subparagraph (ii) of Section 2(c) of the Agreement will not apply to the Transactions, (iii) the election that the "Cross Default" provisions of Section 5(a)(vi) of the Agreement shall apply to JPMorgan, with a "Threshold Amount" of 3% of the shareholders' equity of JPMorgan Chase & Co. and as if "Specified Indebtedness" had the meaning specified in Section 14 of the Agreement, except that such term shall not include obligations in respect of deposits received in the ordinary course of JPMorgan's banking business (*provided* that (a) the text ", or becoming capable at such time of being declared," shall be deleted from Section 5(a)(vi)(1) of the Agreement and (b) the following provision shall be added to the end of Section 5(a)(vi) of the Agreement: "but a default under clause (2) above shall not constitute an Event of Default if (x) the default was caused solely by error or omission of an administrative or operational nature, (y) funds were available to enable the party to make the payment when due and (z) the payment is made within two Local Business Days of such party's receipt of written notice of its failure to pay"), and (iv) as otherwise provided herein or in a Supplemental Confirmation).

The Transactions shall be the sole Transactions under the Agreement. If there exists any ISDA Master Agreement between JPMorgan and Counterparty or any confirmation or other agreement between JPMorgan and Counterparty pursuant to which an ISDA Master Agreement is deemed to exist between JPMorgan and Counterparty, then notwithstanding anything to the contrary in such ISDA Master Agreement, such confirmation or agreement or any other agreement to which JPMorgan and Counterparty are parties, the Transactions shall not be considered Transactions under, or otherwise governed by, such existing or deemed ISDA Master Agreement, and the occurrence

of any Event of Default or Termination Event under the Agreement with respect to either party or any Transaction shall not, by itself, give rise to any right or obligation under any such other agreement or deemed agreement. Notwithstanding anything to the contrary in any other agreement between the parties or their Affiliates, the Transactions shall not be "Specified Transactions" (or similarly treated) under any other agreement between the parties or their Affiliates.

All provisions contained or incorporated by reference in the Agreement shall govern this Master Confirmation and each Supplemental Confirmation except as expressly modified herein or in the related Supplemental Confirmation.

If, in relation to any Transaction to which this Master Confirmation and a Supplemental Confirmation relate, there is any inconsistency between the Agreement, this Master Confirmation, such Supplemental Confirmation and the Equity Definitions, the following will prevail for purposes of such Transaction in the order of precedence indicated: (i) such Supplemental Confirmation; (ii) this Master Confirmation; (iii) the Equity Definitions; and (iv) the Agreement.

1. Each Transaction constitutes a Share Forward Transaction for the purposes of the Equity Definitions. Set forth below are the terms and conditions that, together with the terms and conditions set forth in the Supplemental Confirmation relating to any Transaction, shall govern such Transaction.

General Terms.

Trade Date:	For each Transaction, as set forth in the related Supplemental Confirmation.
Buyer:	Counterparty
Seller:	JPMorgan
Shares:	The common stock of Counterparty, par value USD 0.01 per share (Exchange symbol "MDRX").
Exchange:	The NASDAQ Global Select Market
Related Exchange(s):	All Exchanges
Prepayment/Variable Obligation:	Applicable
Prepayment Amount:	For each Transaction, as set forth in the related Supplemental Confirmation.
Prepayment Date:	For each Transaction, as set forth in the related Supplemental Confirmation.

Valuation.

VWAP Price:	For any Exchange Business Day, the volume-weighted average price at which the Shares trade as reported in the composite transactions for United States exchanges and quotation systems, during the regular trading session for the Exchange on such Exchange Business Day, excluding (i) trades that do not settle regular way, (ii) opening (regular way) reported trades in the consolidated system on such Exchange Business Day, (iii) trades that occur in the last ten minutes before the scheduled close of trading on the Exchange on such Exchange Business Day and ten minutes before the scheduled close of the primary trading in the market where the trade is effected, and (iv) trades on such Exchange Business Day that do not satisfy the requirements of Rule 10b-18(b)(3) under the Securities

	Exchange Act of 1934, as amended (the "**Exchange Act**"), as determined in good faith by the Calculation Agent (all such trades other than any trades described in clauses (i) to (iv) above, "**Rule 10b-18 Eligible Transactions**"). The Calculation Agent shall refer to the Bloomberg Page "MDRX US <Equity> AQR SEC" (or any successor thereto) for such Exchange Business Day to determine the VWAP Price, unless the Calculation Agent, in its reasonable judgment, determines that such source does not accurately reflect the VWAP Price or unless such source is unavailable.
Forward Price:	For each Transaction, the arithmetic average of the VWAP Prices for all of the Calculation Dates in the Calculation Period for such Transaction, subject to "Valuation Disruption" below.
Forward Price Adjustment Amount:	For each Transaction, as set forth in the related Supplemental Confirmation.
Calculation Period:	For each Transaction, the period from, and including, the Calculation Period Start Date for such Transaction to, and including, the Termination Date for such Transaction.
Calculation Period Start Date:	For each Transaction, as set forth in the related Supplemental Confirmation.
Termination Date:	For each Transaction, the Scheduled Termination Date for such Transaction; *provided* that JPMorgan shall have the right to designate any Calculation Date on or after the First Acceleration Date to be the Termination Date for all or any part of such Transaction (an "**Accelerated Termination Date**") by delivering a notice (an "**Acceleration Notice**") to Counterparty of any such designation prior to 6:00 p.m. (New York City time) on the Calculation Date immediately following the designated Accelerated Termination Date. JPMorgan shall specify in each Acceleration Notice the portion of the Prepayment Amount that is subject to acceleration (which may be less than the full Prepayment Amount). If the portion of the Prepayment Amount that is subject to acceleration is less than the full Prepayment Amount, then the Calculation Agent shall adjust the terms of the Transaction as appropriate to take into account the occurrence of such Accelerated Termination Date (including cumulative adjustments to take into account all prior Accelerated Termination Dates).
Calculation Dates:	For each Transaction, each date that is both an Exchange Business Day and is set forth as a Calculation Date in the related Supplemental Confirmation.
Scheduled Termination Date:	For each Transaction, as set forth in the related Supplemental Confirmation, subject to postponement as provided in "Valuation Disruption" below.
First Acceleration Date:	For each Transaction, as set forth in the related Supplemental Confirmation.

Valuation Disruption:

The definition of "Market Disruption Event" in Section 6.3(a) of the Equity Definitions is hereby amended by deleting the words "at any time during the one-hour period that ends at the relevant Valuation Time, Latest Exercise Time, Knock-in Valuation Time or Knock-out Valuation Time, as the case may be" and inserting the words "at any time on any Scheduled Trading Day during the Calculation Period or Settlement Valuation Period" after the word "material," in the third line thereof.

Section 6.3(d) of the Equity Definitions is hereby amended by deleting the remainder of the provision following the term "Scheduled Closing Time" in the fourth line thereof.

Notwithstanding anything to the contrary in the Equity Definitions, if a Disrupted Day occurs (i) in the Calculation Period, the Calculation Agent may, in its good faith and commercially reasonable discretion, postpone the Scheduled Termination Date, or (ii) in the Settlement Valuation Period, the Calculation Agent may extend the Settlement Valuation Period. The Calculation Agent may also determine that (i) such Disrupted Day is a Disrupted Day in full, in which case the VWAP Price for such Disrupted Day shall not be included for purposes of determining the Forward Price or the Settlement Price, as the case may be, or (ii) such Disrupted Day is a Disrupted Day only in part, in which case the VWAP Price for such Disrupted Day shall be determined by the Calculation Agent in a good faith and commercially reasonable manner based on Rule 10b-18 Eligible Transactions in the Shares on such Disrupted Day taking into account the nature and duration of the relevant Market Disruption Event, and the weighting of the VWAP Price for the relevant Calculation Dates during the Calculation Period or the Settlement Valuation Period, as the case may be, shall be adjusted in a good faith and commercially reasonable manner by the Calculation Agent for purposes of determining the Forward Price or the Settlement Price, as the case may be, with such adjustments based on, among other factors, the duration of any Market Disruption Event and the volume, historical trading patterns and price of the Shares. Any Exchange Business Day on which, as of the date hereof, the Exchange is scheduled to close prior to its normal close of trading shall be deemed not to be an Exchange Business Day; if a closure of the Exchange prior to its normal close of trading on any Exchange Business Day is scheduled following the date hereof, then such Exchange Business Day shall be deemed to be a Disrupted Day in full.

If a Disrupted Day occurs during the Calculation Period for any Transaction or the Settlement Valuation Period for any Transaction, as the case may be, and each of the nine immediately following Scheduled Trading Days is a Disrupted Day (a "**Disruption Event**"), then the Calculation Agent, in its good faith and commercially reasonable discretion, may deem such Disruption Event (and each consecutive Disrupted Day thereafter) to be

either (x) a Potential Adjustment Event in respect of such Transaction or (y) an Additional Termination Event in respect of such Transaction, with Counterparty as the sole Affected Party and such Transaction as the sole Affected Transaction.

Settlement Terms.

Settlement Procedures: For each Transaction:

(i) if the Number of Shares to be Delivered for such Transaction is positive, Physical Settlement shall be applicable to such Transaction; *provided* that JPMorgan does not, and shall not, make the agreement or the representations set forth in Section 9.11 of the Equity Definitions related to the restrictions imposed by applicable securities laws with respect to any Shares delivered by JPMorgan to Counterparty under any Transaction; or

(ii) if the Number of Shares to be Delivered for such Transaction is negative, then the Counterparty Settlement Provisions in Annex A hereto shall apply to such Transaction.

Number of Shares to be Delivered: For each Transaction, a number of Shares (rounded down to the nearest whole number) equal to (a)(i) the Prepayment Amount for such Transaction, *divided by* (ii)(A) the Forward Price for such Transaction *minus* (B) the Forward Price Adjustment Amount for such Transaction, *minus* (b) the number of Initial Shares for such Transaction; *provided* that if the result of the calculation in clause (a)(ii) is equal to or less than the Floor Price for such Transaction, then the Number of Shares to be Delivered for such Transaction shall be determined as if clause (a)(ii) were replaced with “(ii) the Floor Price for such Transaction”. For the avoidance of doubt, if the Forward Price Adjustment Amount for any Transaction is a negative number, clause (a)(ii) of the immediately preceding sentence shall be equal to (A) the Forward Price for such Transaction, *plus* (B) the absolute value of the Forward Price Adjustment Amount.

Floor Price: For each Transaction, as set forth in the related Supplemental Confirmation.

Excess Dividend Amount: For the avoidance of doubt, all references to the Excess Dividend Amount shall be deleted from Section 9.2(a)(iii) of the Equity Definitions.

Settlement Date: For each Transaction, if the Number of Shares to be Delivered for all or such portion of such Transaction is positive (x) in the case of an Accelerated Termination Date, the date that is one Settlement Cycle immediately following the date on which JPMorgan delivers notice of such Accelerated Termination Date and (y) in the case of a Termination Date occurring on the Scheduled Termination Date, the date that is one Settlement Cycle immediately following the Termination Date, in either case, for all or

	such portion of such Transaction (the final Settlement Date, the "**Final Settlement Date**").
Settlement Currency:	USD
Initial Share Delivery:	For each Transaction, JPMorgan shall deliver a number of Shares equal to the Initial Shares for such Transaction to Counterparty on the Initial Share Delivery Date for such Transaction in accordance with Section 9.4 of the Equity Definitions, with such Initial Share Delivery Date deemed to be a "Settlement Date" for purposes of such Section 9.4.
Initial Share Delivery Date:	For each Transaction, as set forth in the related Supplemental Confirmation.
Initial Shares:	For each Transaction, as set forth in the related Supplemental Confirmation.

Share Adjustments.

Potential Adjustment Event:	Notwithstanding anything to the contrary in Section 11.2(e) of the Equity Definitions, neither an Extraordinary Dividend nor the issuance of additional stock options, restricted stock or restricted stock units in the ordinary course pursuant to Counterparty's employee equity incentive plan shall constitute a Potential Adjustment Event.
	In addition to the events described in Section 11.2(e) of the Equity Definitions, it shall constitute an additional Potential Adjustment Event if (x) the Scheduled Termination Date for any Transaction is postponed pursuant to "Valuation Disruption" above (including, for the avoidance of doubt, pursuant to Section 8 hereof), (y) a Regulatory Disruption as described in Section 8 hereof occurs or (z) a Disruption Event occurs. In the case of any event described in clause (x), (y) or (z) above occurs, the Calculation Agent may, in a good faith and commercially reasonable manner, adjust any relevant terms of such Transaction as necessary to preserve as nearly as practicable the fair value of such Transaction to JPMorgan prior to such postponement, Regulatory Disruption or Disruption Event, as the case may be; *provided* that the Calculation Agent shall not adjust any of the dates identified as Calculation Dates in the related Supplemental Confirmation.
Excess Dividend:	Any dividend or distribution on the Shares (other than any dividend or distribution of the type described in Section 11.2(e)(i) or Section 11.2(e)(ii)(A) of the Equity Definitions or any Extraordinary Dividend). "**Extraordinary Dividend**" means the per Share cash dividend or distribution, or a portion thereof, declared by Counterparty on the Shares that is classified by the board of directors of Counterparty as an "extraordinary" dividend.
Consequences of Excess Dividend:	The declaration by the Issuer of any Excess Dividend, the ex-dividend date for which occurs or is scheduled to occur

during the Relevant Dividend Period for any Transaction, may, at JPMorgan's election in its sole discretion, either (x) constitute an Additional Termination Event in respect of such Transaction, with Counterparty as the sole Affected Party and such Transaction as the sole Affected Transaction or (y) result in an adjustment, by the Calculation Agent, to the Floor Price as the Calculation Agent determines appropriate to preserve the fair value of such Transaction after taking into account such Excess Dividend.

Method of Adjustment:	Calculation Agent Adjustment
Relevant Dividend Period:	For each Transaction, the period from, and including, the Trade Date for such Transaction to, and including, the Relevant Dividend Period End Date for such Transaction.
Relevant Dividend Period End Date:	For each Transaction, if the Number of Shares to be Delivered for such Transaction is negative, the last day of the Settlement Valuation Period; otherwise, the Termination Date for such Transaction.

Extraordinary Events.

Consequences of Merger Events:

(a) Share-for-Share:	Cancellation and Payment
(b) Share-for-Other:	Cancellation and Payment
(c) Share-for-Combined:	Cancellation and Payment
Tender Offer:	Applicable; *provided* that (a) Section 12.1(d) of the Equity Definitions shall be amended by replacing "10%" in the third line thereof with "20%", (b) Section 12.1(l) of the Equity Definitions shall be amended by (i) deleting the parenthetical in the fifth line thereof, (ii) replacing "that" in the fifth line thereof with "whether or not such announcement" and (iii) adding immediately after the words "Tender Offer" in the fifth line thereof ", and any publicly announced change or amendment to such an announcement (including, without limitation, the announcement of an abandonment of such intention)" and (c) Sections 12.3(a) and 12.3(d) of the Equity Definitions shall each be amended by replacing each occurrence of the words "Tender Offer Date" by "Announcement Date."

Consequences of Tender Offers:

(a) Share-for-Share:	Modified Calculation Agent Adjustment
(b) Share-for-Other:	Modified Calculation Agent Adjustment
(c) Share-for-Combined:	Modified Calculation Agent Adjustment

Any adjustment to the terms of any Transaction and the determination of any amounts due upon termination of any Transaction hereunder as a result of a Merger Event or Tender Offer shall be made without duplication in respect of any prior adjustment hereunder (including, without limitation, any prior adjustment pursuant to Section 12 or 13 hereof).

Nationalization, Insolvency or Delisting:	Cancellation and Payment; *provided* that in addition to the provisions of Section 12.6(a)(iii) of the Equity Definitions, it shall also constitute a Delisting if the Exchange is located in the United States and the Shares are not immediately re-listed, re-traded or re-quoted on any of the New York Stock Exchange, The NASDAQ Global Select Market or The NASDAQ Global Market (or their respective successors); if the Shares are immediately re-listed, re-traded or re-quoted on any such exchange or quotation system, such exchange or quotation system shall be deemed to be the Exchange.

Additional Disruption Events:

(a) Change in Law:	Applicable; *provided* that Section 12.9(a)(ii) of the Equity Definitions is hereby amended by (i) replacing the phrase "the interpretation" in the third line thereof with the phrase ", or public announcement of, the formal or informal interpretation", (ii) replacing the word "Shares" where it appears in clause (X) thereof with the words "Hedge Positions" and (iii) immediately following the word "Transaction" in clause (X) thereof, adding the phrase "in the manner contemplated by the Hedging Party on the Trade Date"; *provided further* that Section 12.9(a)(ii) of the Equity Definitions is hereby amended by replacing the parenthetical beginning after the word "regulation" in the second line thereof with the words "(including, for the avoidance of doubt and without limitation, (x) any tax law or (y) adoption or promulgation of new regulations authorized or mandated by existing statute)".
(b) Failure to Deliver:	Applicable
(c) Insolvency Filing:	Applicable
(d) Loss of Stock Borrow:	Applicable
Maximum Stock Loan Rate:	For each Transaction, as set forth in the related Supplemental Confirmation.
Hedging Party:	JPMorgan
Determining Party:	JPMorgan
(e) Hedging Disruption:	Applicable
Hedging Party:	JPMorgan
Determining Party:	JPMorgan
(f) Increased Cost of Hedging:	Applicable
Hedging Party:	JPMorgan
Determining Party:	JPMorgan
(g) Increased Cost of Stock Borrow:	Applicable

Initial Stock Loan Rate: For each Transaction, as set forth in the related Supplemental Confirmation.

Hedging Party: JPMorgan

Determining Party: JPMorgan

Hedging Adjustments: For the avoidance of doubt, whenever the Calculation Agent is called upon to make an adjustment pursuant to the terms of this Master Confirmation or the Equity Definitions to take into account the effect of an event, the Calculation Agent shall make such adjustment by reference to the effect of such event on JPMorgan, assuming that JPMorgan maintains a commercially reasonable Hedge Position.

Non-Reliance/Agreements and Acknowledgements Regarding Hedging Activities/Additional Acknowledgements: Applicable

2. **Calculation Agent.** JPMorgan; *provided* that, following the occurrence and during the continuation of an Event of Default pursuant to Section 5(a)(vii) of the Agreement with respect to which JPMorgan is the Defaulting Party, Counterparty shall have the right to select a leading dealer in the market for U.S. corporate equity derivatives reasonably acceptable to JPMorgan to replace JPMorgan as Calculation Agent, and the parties shall work in good faith to execute any appropriate documentation required by such replacement Calculation Agent.

Whenever the Calculation Agent is required to act or to exercise judgment in any way with respect to any Transaction hereunder, it will do so in a good faith and commercially reasonable manner. Notwithstanding anything to the contrary in this Master Confirmation or any Supplemental Confirmation, the Calculation Agent shall not adjust the dates identified as Calculation Dates in the relevant Supplemental Confirmation for any Transaction.

Following any determination, adjustment or calculation by the Calculation Agent hereunder, the Calculation Agent shall deliver to Counterparty, within five Exchange Business Days after a written request by Counterparty, a report in a commonly used file format for the storage and manipulation of financial data (including the methodology, interest rates, quotations and market data (including volatility) but without disclosing any proprietary or confidential models or other proprietary or confidential information) displaying in reasonable detail the basis for such determination, adjustment or calculation, as the case may be.

3. **Account Details.**

(a) Account for payments to Counterparty:

As separately notified by Counterparty

Account for delivery of Shares to Counterparty:

As separately notified by Counterparty

(b) Account for payments to JPMorgan:

Bank: JPMorgan Chase Bank, N.A.
ABA#: 021000021
Acct No.: 099997979
Beneficiary: JPMorgan Chase Bank, N.A. New York
Ref: Derivatives

Account for delivery of Shares to JPMorgan:

DTC 0352

4. **Offices.**

(a) The Office of Counterparty for each Transaction is: Inapplicable, Counterparty is not a Multibranch Party.

(b) The Office of JPMorgan for each Transaction is: New York

JPMorgan Chase Bank, National Association
New York Branch
383 Madison Avenue
New York, NY, 10179

5. **Notices.**

(a) Address for notices or communications to Counterparty:

Allscripts Healthcare Solutions, Inc.
222 Merchandise Mart Plaza, Suite 2024
Chicago, IL 60654
Attention: Richard J. Poulton
Telephone No.: 312.506.1216
Email: rick.poulton@allscripts.com; legal.notices@allscripts.com

(b) Address for notices or communications to JPMorgan:

JPMorgan Chase Bank, National Association
EDG Marketing Support
Email: edg_notices@jpmorgan.com
edg_ny_corporate_sales_support@jpmorgan.com

With a copy to:

Attention: Sanjeet S. Dewal
Title: Managing Director
Telephone No: (212) 622-8783
Email Address: sanjeet.s.dewal@jpmorgan.com

6. **<u>Representations, Warranties and Agreements</u>.**

(a) *Additional Representations, Warranties and Covenants of Each Party*. In addition to the representations, warranties and covenants in the Agreement, each party represents, warrants and covenants to the other party that:

(i) It is an "eligible contract participant" (as such term is defined in the Commodity Exchange Act, as amended).

(ii) The offer and sale of each Transaction to it is intended to be exempt from registration under the Securities Act of 1933, as amended (the "**Securities Act**"), by virtue of Section 4(a)(2) thereof. Accordingly, each party represents and warrants to the other that (A) it has the financial ability to bear the economic risk of its investment in each Transaction and is able to bear a total loss of its investment, (B) it is an "accredited investor" as that term is defined under Regulation D under the Securities Act and (C) the disposition of each Transaction is restricted under this Master Confirmation, the Securities Act and state securities laws.

(b) *Additional Representations, Warranties and Covenants of Counterparty*. In addition to the representations, warranties and covenants in the Agreement, Counterparty represents, warrants and covenants to JPMorgan that:

(i) As of the Trade Date for each Transaction hereunder, Counterparty is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware. Each of this Master Confirmation and the Supplemental Confirmation for such Transaction has been duly authorized, executed and delivered by Counterparty and (assuming due authorization, execution and delivery thereof by JPMorgan) this Master Confirmation, as supplemented by such Supplemental Confirmation, constitutes a valid and legally binding obligation of Counterparty. Counterparty has all corporate power to enter into this Master Confirmation and such Supplemental Confirmation and to consummate the transactions contemplated hereby and thereby and to purchase the Shares and deliver any Settlement Shares in accordance with the terms hereof and thereof.

(ii) As of the Trade Date for each Transaction hereunder, the execution and delivery by Counterparty of, and the performance by Counterparty of its obligations under, this Master Confirmation and the Supplemental Confirmation for such Transaction, and the consummation of the transactions herein and therein contemplated, do not conflict with or violate (A) any provision of the certificate of incorporation, by-laws or other constitutive documents of Counterparty, (B) any statute or order, rule, regulation or judgment of any court or governmental agency or body having jurisdiction over Counterparty or any of its subsidiaries or any of their respective assets or (C) any contractual restriction binding on or affecting Counterparty or any of its subsidiaries or any of its assets.

(iii) As of the Trade Date for each Transaction hereunder, all governmental and other consents that are required to have been obtained by Counterparty with respect to performance, execution and delivery of this Master Confirmation and the Supplemental Confirmation for such Transaction have been obtained and are in full force and effect and all conditions of any such consents have been complied with.

(iv) As of the Trade Date for each Transaction hereunder, (A) such Transaction is being entered into pursuant to a publicly disclosed Share buy-back program and its Board of Directors has approved the use of derivatives to effect the Share buy-back program, and (B) there is no internal policy of Counterparty, whether written or oral, that would prohibit Counterparty from entering into any aspect of such Transaction, including, without limitation, the purchases of Shares to be made pursuant to such Transaction.

(v) As of the Trade Date for each Transaction hereunder, the purchase or writing of such Transaction and the transactions contemplated hereby will not violate Rule 13e-1 or Rule 13e-4 under the Exchange Act.

(vi) As of the Trade Date for each Transaction hereunder, it is not entering into such Transaction, and as of the date of any election with respect to any Transaction hereunder, it is not making such election, in each case (A) on the basis of, and is not aware of, any material non-public information regarding Counterparty or the Shares, (B) in anticipation of, in connection with, or to facilitate, a distribution of its securities, a self tender offer or a third-party tender offer in violation of the Exchange Act or (C) to create actual or apparent trading activity in the Shares (or any security convertible into or exchangeable for the Shares) or to raise or depress or otherwise manipulate the price of the Shares (or any security convertible into or exchangeable for the Shares).

(vii) Counterparty (A) is capable of evaluating investment risks independently, both in general and with regard to all transactions and investment strategies involving a security or securities; (B) will exercise independent judgment in evaluating the recommendations of any broker-dealer or its associated persons, unless it has otherwise notified the broker-dealer in writing; and (C) has total assets of at least USD 50,000,000 as of the date hereof.

(viii) As of the Trade Date for each Transaction hereunder, and as of the date of any election with respect to any Transaction hereunder, Counterparty is in compliance with its reporting obligations under the Exchange Act and its most recent Annual Report on Form 10-K, together with all reports subsequently filed by it pursuant to the Exchange Act, taken together and as amended and supplemented to the date of this representation, do not, as of their respective filing dates, contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading.

(ix) Counterparty has made, and will make, all filings required to be made by it with the Securities and Exchange Commission, any securities exchange or any other regulatory body with respect to each Transaction.

(x) (A) The Shares are not, as of the Calculation Period Start Date, and (B) Counterparty will not, at any time during any Regulation M Period (as defined below) for any Transaction, cause the Shares to be, subject to a "restricted period" (as defined in Regulation M under the Exchange Act) unless, in the case of clause (B), Counterparty has provided written notice to JPMorgan of such restricted period not later than the Scheduled Trading Day immediately preceding the first day of such "restricted period"; Counterparty acknowledges that any such notice may cause a Disrupted Day to occur pursuant to Section 8 hereof; accordingly, Counterparty acknowledges that its delivery of such notice must comply with the standards set forth in Section 9 hereof. Counterparty is not currently contemplating any "distribution" (as defined in Regulation M under the Exchange Act) of Shares, or any security for which Shares are a "reference security" (as defined in Regulation M under the Exchange Act). "**Regulation M Period**" means, for any Transaction, (A) the Relevant Period (as defined below) for such Transaction, (B) the Settlement Valuation Period, if any, for such Transaction and (C) the Seller Termination Purchase Period (as defined below), if any, for such Transaction. "**Relevant Period**" means, for any Transaction, the period commencing on the Calculation Period Start Date for such Transaction and ending on the later of (1) the earlier of (x) the Scheduled Termination Date and (y) the last Additional Relevant Day (as specified in the related Supplemental Confirmation) for such Transaction, or such earlier day as elected by JPMorgan and communicated to Counterparty on such day (or, if later, the First Acceleration Date without regard to any acceleration thereof pursuant to "Special Provisions for Acquisition Transaction Announcements" below) and (2) if Section 16 hereof is applicable to such Transaction, the date on which all deliveries owed pursuant to Section 16 hereof have been made.

(xi) As of the Trade Date, the Prepayment Date, the Initial Share Delivery Date, the Settlement Date, any Cash Settlement Payment Date and any Settlement Method Election Date for each Transaction, Counterparty is not, and will not be, "insolvent" (as such term is defined under Section 101(32) of the U.S. Bankruptcy Code (Title 11 of the United States Code) (the "**Bankruptcy Code**")) and Counterparty would be able to purchase a number of Shares with a value equal to the Prepayment Amount in compliance with the laws of the jurisdiction of Counterparty's incorporation.

(xii) Counterparty is not, and after giving effect to each Transaction will not be, required to register as an "investment company" as such term is defined in the Investment Company Act of 1940, as amended.

(xiii) Counterparty shall cooperate with JPMorgan, and execute and deliver, or use its commercially reasonable efforts to cause to be executed and delivered, all such other instruments, and to obtain all consents, approvals or authorizations of any person, and take all such other actions as JPMorgan may reasonably request from time to time, consistent with the terms of the Agreement, this Master Confirmation and any Supplemental Confirmation, to effectuate the purposes of the Agreement, this Master Confirmation, any Supplemental Confirmation and any Transaction.

(xiv) Counterparty has not entered, and will not enter, into any repurchase transaction other than any Other Specified Repurchase Agreement (as defined below) with respect to the Shares (or any security convertible into or exchangeable for the Shares) (including, without limitation, any agreements similar to the Transactions described herein) where any initial hedge period, calculation period, relevant period, settlement valuation period or seller termination purchase period (each however defined) in such other transaction will overlap at any time (including, without limitation, as a result of extensions in such initial hedge period, calculation period, relevant period, settlement valuation period or seller termination purchase period as provided in the relevant agreements) with any Relevant Period, any Settlement Valuation Period (if applicable) or any Seller Termination Purchase Period (if applicable) under this Master Confirmation. In the event that the initial hedge period, relevant period, calculation period or settlement valuation period in any other transaction (other than any Other Specified Repurchase Agreement) overlaps with any Relevant Period, any Settlement Valuation Period (if applicable) or any Seller Termination Purchase Period (if applicable) under this Master Confirmation as a result of any postponement of the Scheduled Termination Date or extension of the Settlement Valuation Period pursuant to "Valuation Disruption" above or any analogous provision in such other transaction, Counterparty shall promptly amend such other transaction to avoid any such overlap.

(xv) Counterparty shall, at least one day prior to the first day of the Calculation Period, the Settlement Valuation Period, if any, or the Seller Termination Purchase Period, if any, for any Transaction, notify JPMorgan of the total number of Shares purchased in Rule 10b-18 purchases of blocks pursuant to the once-a-week block exception set forth in paragraph (b)(4) of Rule 10b-18 under the Exchange Act ("**Rule 10b-18**") by or for Counterparty or any of its "affiliated purchasers" (as defined in Rule 10b-18) during each of the four calendar weeks preceding such day and during the calendar week in which such day occurs ("Rule 10b-18 purchase" and "blocks" each being used as defined in Rule 10b-18), which notice shall be substantially in the form set forth in Schedule B hereto.

(xvi) As of the Trade Date for each Transaction hereunder, and as of the date of any election with respect to any Transaction hereunder, there has not been any Merger Announcement (as defined below).

(xvii) The assets of Counterparty do not constitute "plan assets" under the Employee Retirement Income Security Act of 1974, as amended, the Department of Labor Regulations promulgated thereunder or similar law.

7. **Additional Representations.** Warranties and Covenants of JPMorgan. In addition to the representations, warranties and covenants in the Agreement, JPMorgan represents, warrants and covenants to Counterparty that JPMorgan shall use its commercially reasonable efforts, during the Calculation Period, any Settlement Valuation Period and any Seller Termination Purchase Period for each Transaction, to make all purchases of Shares in connection with such Transaction in a manner that would comply with the limitations set forth in clauses (b)(1), (b)(2), (b)(3) and (b)(4) and (c) of Rule 10b-18, as if such rule were applicable to such purchases and taking into account any applicable Securities and Exchange Commission no-action letters as appropriate, and subject to any delays between the execution and reporting of a trade of the Shares on the Exchange and other circumstances beyond JPMorgan's control; *provided* that, during a Calculation Period, the foregoing agreement shall not apply to purchases made to dynamically hedge for JPMorgan's own account or the account of its affiliate(s) the optionality arising under a Transaction (including, for the avoidance of doubt, timing optionality); and *provided further* that, without limiting the generality of this Section 7, (x) JPMorgan shall not be responsible for any failure to comply with Rule 10b-18(b)(3) to the extent any transaction that was executed (or deemed to be executed) by or on behalf of Counterparty or an "affiliated purchaser" (as defined under Rule 10b-18) pursuant to a separate agreement is not deemed to be an "independent bid" or an "independent transaction" for purposes of Rule 10b-18(b)(3) and (y) JPMorgan shall not be responsible for any failure to comply with Rule 10b-18(b)(1) to the extent Counterparty fails to comply with Section 10 hereof.

8. **Regulatory Disruption.** In the event that JPMorgan concludes, in its sole discretion, that it is appropriate with respect to any legal, regulatory or self-regulatory requirements or related policies and procedures (whether or not such requirements, policies or procedures are imposed by law or have been voluntarily adopted by JPMorgan), for it to refrain from or decrease any market activity on any Scheduled Trading Day or Days during the Calculation Period or, if applicable, the Settlement Valuation Period, JPMorgan may by written notice to Counterparty elect to deem that a Market Disruption Event has occurred and will be continuing on such Scheduled Trading Day or Days.

9. **10b5-1 Plan.** Counterparty represents, warrants and covenants to JPMorgan that:

(a) Counterparty is entering into this Master Confirmation and each Transaction hereunder in good faith and not as part of a plan or scheme to evade the prohibitions of Rule 10b5-1 under the Exchange Act ("**Rule 10b5-1**") or any other antifraud or anti-manipulation provisions of the federal or applicable state securities laws and that it has not entered into or altered and will not enter into or alter any corresponding or hedging transaction or position with respect to the Shares. For the avoidance of doubt, the parties hereto acknowledge that entry into any Other Specified Repurchase Agreement (as defined below) shall not fall within the ambit of the previous sentence. Counterparty acknowledges that it is the intent of the parties that each Transaction entered into under this Master Confirmation comply with the requirements of paragraphs (c)(1)(i)(A) and (B) of Rule 10b5-1 and each Transaction entered into under this Master Confirmation shall be interpreted to comply with the requirements of Rule 10b5-1(c). "**Other Specified Repurchase Agreement**" means, for any Transaction, any other prepaid variable share repurchase transaction entered into on the Trade Date for such Transaction.

(b) During the Calculation Period and the Settlement Valuation Period, if any, for any Transaction and in connection with the delivery of any Alternative Delivery Units for any Transaction, JPMorgan (or its agent or Affiliate) may effect transactions in Shares in connection with such Transaction. The timing of such transactions by JPMorgan, the price paid or received per Share pursuant to such transactions and the manner in which such transactions are made, including, without limitation, whether such transactions are made on any securities exchange or privately, shall be within the sole judgment of JPMorgan. Counterparty acknowledges and agrees that all such transactions shall be made in JPMorgan's sole judgment and for JPMorgan's own account.

(c) Counterparty does not have, and shall not attempt to exercise, any control or influence over how, when or whether JPMorgan (or its agent or Affiliate) makes any "purchases or sales" (within the meaning of Rule 10b5-1(c)(1)(i)(B)(3)) in connection with any Transaction, including, without limitation, over how, when or whether JPMorgan (or its agent or Affiliate) enters into any hedging transactions. Counterparty represents and warrants that it has consulted with its own advisors as to

the legal aspects of its adoption and implementation of this Master Confirmation and each Supplemental Confirmation under Rule 10b5-1.

(d) Counterparty acknowledges and agrees that any amendment, modification, waiver or termination of this Master Confirmation or any Supplemental Confirmation must be effected in accordance with the requirements for the amendment or termination of a "plan" as defined in Rule 10b5-1(c). Without limiting the generality of the foregoing, any such amendment, modification, waiver or termination shall be made in good faith and not as part of a plan or scheme to evade the prohibitions of Rule 10b-5, and no such amendment, modification or waiver shall be made at any time at which Counterparty or any officer, director, manager or similar person of Counterparty is aware of any material non-public information regarding Counterparty or the Shares.

(e) Counterparty shall not, directly or indirectly, communicate any information relating to the Shares or any Transaction (including, without limitation, any notices required by Section 11(a) hereof) to any employee of JPMorgan, other than as set forth in the Communications Procedures attached as Annex B hereto.

10. **<u>Counterparty Purchases</u>.** Counterparty (or any "affiliate" or "affiliated purchaser" as defined in Rule 10b-18) shall not, without the prior written consent of JPMorgan, directly or indirectly (including, without limitation, by means of a derivative instrument) purchase, offer to purchase, place any bid or limit order that would effect a purchase of, or commence any tender offer relating to, any Shares (or equivalent interest, including, without limitation, a unit of beneficial interest in a trust or limited partnership or a depository share), listed contracts on the Shares or securities that are convertible into, or exchangeable or exercisable for Shares (including, without limitation, any Rule 10b-18 purchases of blocks (as defined in Rule 10b-18)) during any Relevant Period, any Settlement Valuation Period (if applicable) or any Seller Termination Purchase Period (if applicable), under this Master Confirmation except pursuant to any Other Specified Repurchase Agreement that is intended to comply with the requirements of Rule 10b5-1(c) of the Exchange Act. However, the foregoing shall not (a) limit Counterparty's ability to purchase Shares in connection with any company employee, officer or director equity plan or any dividend reinvestment plan, in each case, that is not expected to result in market transactions, (b) limit Counterparty's ability to withhold Shares to cover tax liabilities associated with any such plan, (c) prohibit any purchases effected by or for an issuer "plan" by an "agent independent of the issuer" (each as defined in Rule 10b-18), (d) otherwise restrict Counterparty's or any of its affiliates' ability to repurchase Shares under privately negotiated, off exchange transactions with any of its employees, officers, directors, affiliates or any third party that are not expected to result in market transactions or (e) limit Counterparty's ability to grant stock and options to "affiliated purchasers" (as defined in Rule 10b-18) or the ability of such affiliated purchasers to acquire such stock or options in connection with Counterparty's compensation policies for directors, officers and employees or any agreements with respect to the compensation of directors, officers or employees of any entities that are acquisition targets of Counterparty.

11. **<u>Special Provisions for Merger Transactions</u>.** Notwithstanding anything to the contrary herein or in the Equity Definitions:

(a) Counterparty agrees that it:

(i) will not during the period commencing on the Trade Date for any Transaction and ending on the last day of the Relevant Period or, if applicable, the later of the last day of the Settlement Valuation Period and the last day of the Seller Termination Purchase Period, for such Transaction make, or permit to be made, any public announcement (as defined in Rule 165(f) under the Securities Act) of any Merger Transaction or potential Merger Transaction (a "**Merger Announcement**") unless such Merger Announcement is made prior to the opening or after the close of the regular trading session on the Exchange for the Shares;

(ii) shall promptly (but in any event prior to the next opening of the regular trading session on the Exchange) notify JPMorgan following any such Merger Announcement that such Merger Announcement has been made; and

(iii) shall promptly (but in any event prior to the next opening of the regular trading session on the Exchange) provide JPMorgan with written notice specifying (i) Counterparty's average daily Rule 10b-18 Purchases (as defined in Rule 10b-18) during the three full calendar months immediately preceding the announcement date of any Merger Transaction or potential Merger Transaction that were not effected through JPMorgan or its Affiliates and (ii) the number of Shares purchased pursuant to the proviso in Rule 10b-18(b)(4) under the Exchange Act for the three full calendar months preceding the announcement date of any Merger Transaction or potential Merger Transaction. Such written notice shall be deemed to be a certification by Counterparty to JPMorgan that such information is true and correct. In addition, Counterparty shall promptly notify JPMorgan of the earlier to occur of the completion of such transaction and the completion of the vote by target shareholders.

(b) Counterparty acknowledges that any such Merger Announcement or delivery of a notice with respect thereto may cause the terms of any Transaction to be adjusted or such Transaction to be terminated; accordingly, Counterparty acknowledges that its delivery of such notice must comply with the standards set forth in Section 9 hereof.

(c) Upon the occurrence of any Merger Announcement (whether made by Counterparty or a third party), JPMorgan in its good faith and reasonable discretion may (i) make adjustments to the terms of any Transaction (other than the dates identified as Calculation Dates in the related Supplemental Confirmation), including, without limitation, the Scheduled Termination Date or the Forward Price Adjustment Amount, and/or suspend the Calculation Period and/or any Settlement Valuation Period or (ii) treat the occurrence of such Merger Announcement as an Additional Termination Event with Counterparty as the sole Affected Party and the Transactions hereunder as the Affected Transactions and with the amount under Section 6(e) of the Agreement determined taking into account the fact that the Calculation Period or Settlement Valuation Period, as the case may be, had fewer Scheduled Trading Days than originally anticipated.

"**Merger Transaction**" means any merger, acquisition or similar transaction involving a recapitalization as contemplated by Rule 10b-18(a)(13)(iv) under the Exchange Act.

12. **<u>Special Provisions for Acquisition Transaction Announcements</u>.** Notwithstanding anything to the contrary herein or in the Equity Definitions:

(a) If an Acquisition Transaction Announcement occurs on or prior to the Final Settlement Date for any Transaction, then the Calculation Agent shall make such adjustments to the exercise, settlement, payment or any other terms of such Transaction as the Calculation Agent determines appropriate (including, without limitation and for the avoidance of doubt, adjustments that would allow the Number of Shares to be Delivered to be less than zero), at such time or at multiple times as the Calculation Agent determines appropriate, to account for the economic effect on such Transaction of such event (including adjustments to account for changes in volatility, expected dividends, stock loan rate, value of any commercially reasonable Hedge Positions in connection with the Transaction and liquidity relevant to the Shares or to such Transaction). If an Acquisition Transaction Announcement occurs after the Trade Date, but prior to the First Acceleration Date of any Transaction, the First Acceleration Date shall be the date of such Acquisition Transaction Announcement. If the Number of Shares to be Delivered for any settlement of any Transaction is a negative number, then the terms of the Counterparty Settlement Provisions in Annex A hereto shall apply.

(b) "**Acquisition Transaction Announcement**" means (i) the announcement of an Acquisition Transaction or an event that, if consummated, would result in an Acquisition Transaction, (ii) an announcement that Counterparty or any of its subsidiaries has entered into an agreement, a letter of intent or an understanding designed to result in an Acquisition Transaction, (iii) the announcement

of the intention to solicit or enter into, or to explore strategic alternatives or other similar undertaking that would reasonably be expected to include, an Acquisition Transaction, (iv) any other announcement that in the good faith and commercially reasonable judgment of the Calculation Agent may result in an Acquisition Transaction, or (v) any announcement of any change or amendment to any previous Acquisition Transaction Announcement (including any announcement of the abandonment of any such previously announced Acquisition Transaction, agreement, letter of intent, understanding or intention). For the avoidance of doubt, announcements as used in the definition of Acquisition Transaction Announcement refer to any public announcement whether made by the Issuer or a third party.

(c) "**Acquisition Transaction**" means (i) any Merger Event (for purposes of this definition the definition of Merger Event shall be read with the references therein to "100%" being replaced by "25%" and references to "50%" being replaced by "75%" and without reference to the clause beginning immediately following the definition of Reverse Merger therein to the end of such definition), Tender Offer or Merger Transaction or any other transaction involving the merger of Counterparty with or into any third party, (ii) the sale or transfer of all or substantially all of the assets of Counterparty, (iii) a recapitalization, reclassification, binding share exchange or other similar transaction with respect to Counterparty, (iv) any acquisition by Counterparty or any of its subsidiaries where the aggregate consideration transferable by Counterparty or its subsidiaries exceeds 25% of the market capitalization of Counterparty, (v) any lease, exchange, transfer, disposition (including, without limitation, by way of spin-off or distribution) of assets (including, without limitation, any capital stock or other ownership interests in subsidiaries) or other similar event by Counterparty or any of its subsidiaries where the aggregate consideration transferable or receivable by or to Counterparty or its subsidiaries exceeds 25% of the market capitalization of Counterparty or (vi) any transaction in which Counterparty or its board of directors has a legal obligation to make a recommendation to its shareholders in respect of such transaction (whether pursuant to Rule 14e-2 under the Exchange Act or otherwise).

13. Acknowledgments.

(a) The parties hereto intend for:

(i) each Transaction to be a "securities contract" as defined in Section 741(7) of the Bankruptcy Code and a "forward contract" as defined in Section 101(25) of the Bankruptcy Code, and the parties hereto to be entitled to the protections afforded by, among other Sections, Sections 362(b)(6), 362(b)(27), 362(o), 546(e), 546(j), 555, 556, 560 and 561 of the Bankruptcy Code;

(ii) the Agreement to be a "master netting agreement" as defined in Section 101(38A) of the Bankruptcy Code;

(iii) a party's right to liquidate, terminate or accelerate any Transaction, net out or offset termination values or payment amounts, and to exercise any other remedies upon the occurrence of any Event of Default or Termination Event under the Agreement with respect to the other party or any Extraordinary Event that results in the termination or cancellation of any Transaction to constitute a "contractual right" (as defined in the Bankruptcy Code); and

(iv) all payments for, under or in connection with each Transaction, all payments for the Shares (including, for the avoidance of doubt, payment of the Prepayment Amount) and the transfer of such Shares to constitute "settlement payments" and "transfers" (as defined in the Bankruptcy Code).

(b) Counterparty acknowledges that:

(i) during the term of any Transaction, JPMorgan and its Affiliates may buy or sell Shares or other securities or buy or sell options or futures contracts or enter into swaps or other derivative securities to establish, adjust or unwind its hedge position with respect to such Transaction;

(ii) JPMorgan and its Affiliates may also be active in the market for the Shares and Share-linked transactions other than in connection with hedging activities in relation to any Transaction;

(iii) JPMorgan shall make its own determination as to whether, when or in what manner any hedging or market activities in Counterparty's securities shall be conducted and shall do so in a manner that it deems appropriate to hedge its price and market risk with respect to the Forward Price and the VWAP Price;

(iv) any market activities of JPMorgan and its Affiliates with respect to the Shares may affect the market price and volatility of the Shares, as well as the Forward Price, the VWAP Price and the Settlement Price, each in a manner that may be adverse to Counterparty; and

(v) each Transaction is a derivatives transaction in which it has granted JPMorgan an option; JPMorgan may purchase shares for its own account at an average price that may be greater than, or less than, the price paid by Counterparty under the terms of the related Transaction.

14. **No Collateral, Netting or Setoff.** Notwithstanding any provision of the Agreement or any other agreement between the parties to the contrary, the obligations of Counterparty hereunder are not secured by any collateral. Obligations under any Transaction shall not be netted, recouped or set off (including pursuant to Section 6 of the Agreement) against any other obligations of the parties, whether arising under the Agreement, this Master Confirmation or any Supplemental Confirmation, or under any other agreement between the parties hereto, by operation of law or otherwise, and no other obligations of the parties shall be netted, recouped or set off (including pursuant to Section 6 of the Agreement) against obligations under any Transaction, whether arising under the Agreement, this Master Confirmation or any Supplemental Confirmation, or under any other agreement between the parties hereto, by operation of law or otherwise, and each party hereby waives any such right of setoff, netting or recoupment.

15. **Delivery of Shares.** Notwithstanding anything to the contrary herein, JPMorgan may, by prior notice to Counterparty, satisfy its obligation to deliver any Shares or other securities on any date due (an "**Original Delivery Date**") by making separate deliveries of Shares or such securities, as the case may be, at more than one time on or prior to such Original Delivery Date, so long as the aggregate number of Shares and other securities so delivered on or prior to such Original Delivery Date is equal to the number required to be delivered on such Original Delivery Date.

16. **Alternative Termination Settlement.** In the event that (a) an Early Termination Date (whether as a result of an Event of Default or a Termination Event) occurs or is designated with respect to any Transaction or (b) any Transaction is cancelled or terminated upon the occurrence of an Extraordinary Event (except as a result of (i) a Nationalization, Insolvency or Merger Event in which the consideration to be paid to holders of Shares consists solely of cash, (ii) a Merger Event or Tender Offer that is within Counterparty's control, or (iii) an Event of Default in which Counterparty is the Defaulting Party or a Termination Event in which Counterparty is the Affected Party other than an Event of Default of the type described in Section 5(a)(iii), (v), (vi), (vii) or (viii) of the Agreement or a Termination Event of the type described in Section 5(b) of the Agreement, in each case that resulted from an event or events outside Counterparty's control), if either party would owe any amount to the other party pursuant to Section 6(d)(ii) of the Agreement or any Cancellation Amount pursuant to Article 12 of the Equity Definitions (any such amount, a "**Payment Amount**"), then, in lieu of any payment of such Payment Amount, unless Counterparty makes an election to the contrary no later than the Early Termination Date or the date on which such Transaction is terminated or cancelled, Counterparty or JPMorgan, as the case may be, shall deliver to the other party a number of Shares (or, in the case of a Nationalization, Insolvency or Merger Event, a number of units, each comprising the number or amount of the securities or property that a hypothetical holder of one Share would receive in such Nationalization,

Insolvency or Merger Event, as the case may be (each such unit, an "**Alternative Delivery Unit**")) with a value equal to the Payment Amount, as determined by the Calculation Agent over a commercially reasonable period of time (and the parties agree that, in making such determination of value, the Calculation Agent may take into account a number of factors, including, without limitation, the market price of the Shares or Alternative Delivery Units on the Early Termination Date or the date of early cancellation or termination, as the case may be, and, if such delivery is made by JPMorgan, the prices at which JPMorgan purchases Shares or Alternative Delivery Units on any Calculation Date to fulfill its delivery obligations under this Section 16); *provided* that in determining the composition of any Alternative Delivery Unit, if the relevant Nationalization, Insolvency or Merger Event involves a choice of consideration to be received by holders, such holder shall be deemed to have elected to receive the maximum possible amount of cash; and *provided further* that Counterparty may elect that the provisions of this Section 16 above providing for the delivery of Shares or Alternative Delivery Units, as the case may be, shall not apply only if Counterparty represents and warrants to JPMorgan, in writing on the date it notifies JPMorgan of such election, that, as of such date, Counterparty is not aware of any material non-public information regarding Counterparty or the Shares and is making such election in good faith and not as part of a plan or scheme to evade compliance with the federal securities laws. If delivery of Shares or Alternative Delivery Units, as the case may be, pursuant to this Section 16 is to be made by Counterparty, paragraphs 2 through 7 of Annex A hereto shall apply as if (A) such delivery were a settlement of such Transaction to which Net Share Settlement applied, (B) the Cash Settlement Payment Date were the Early Termination Date or the date of early cancellation or termination, as the case may be, and (C) the Forward Cash Settlement Amount were equal to (x) zero *minus* (y) the Payment Amount owed by Counterparty. For the avoidance of doubt, if Counterparty validly elects for the provisions of this Section 16 relating to the delivery of Shares or Alternative Delivery Units, as the case may be, not to apply to any Payment Amount, the provisions of Article 12 of the Equity Definitions, or the provisions of Section 6(d)(ii) of the Agreement, as the case may be, shall apply. If delivery of Shares or Alternative Delivery Units, as the case may be, is to be made by JPMorgan pursuant to this Section 1616, the period during which JPMorgan purchases Shares or Alternative Delivery Units to fulfill its delivery obligations under this Section 166 shall be referred to as the "**Seller Termination Purchase Period**"; *provided* that the parties hereby agree that such purchases shall be made solely on Calculation Dates for the relevant Transaction.

17. **Calculations and Payment Date upon Early Termination.** The parties acknowledge and agree that in calculating (a) the Close-Out Amount pursuant to Section 6 of the Agreement and (b) the amount due upon cancellation or termination of any Transaction (whether in whole or in part) pursuant to Article 12 of the Equity Definitions as a result of an Extraordinary Event, JPMorgan may (but need not) determine such amount based on (i) expected losses assuming a commercially reasonable (including, without limitation, with regard to reasonable legal and regulatory guidelines and taking into account the existence of any Other Specified Repurchase Transaction) risk bid were used to determine loss or (ii) the price at which one or more market participants would offer to sell to the Seller a block of Shares equal in number to the Seller's hedge position in relation to the Transaction. Notwithstanding anything to the contrary in Section 6(d)(ii) of the Agreement or Article 12 of the Equity Definitions, all amounts calculated as being due in respect of an Early Termination Date under Section 6(e) of the Agreement or upon cancellation or termination of the relevant Transaction under Article 12 of the Equity Definitions will be payable on the day that notice of the amount payable is effective; *provided* that if Counterparty elects to receive or deliver Shares or Alternative Delivery Units in accordance with Section 16 hereof, such Shares or Alternative Delivery Units shall be delivered on a date selected in a good faith and commercially reasonable manner by JPMorgan as promptly as practicable.

18. **Limit on Beneficial Ownership.** Notwithstanding any other provisions hereof, JPMorgan may not be entitled to take delivery of any Shares deliverable hereunder to the extent (but only to the extent) that, after such receipt of any Shares hereunder, the Equity Percentage would exceed 7.5%. Any purported delivery hereunder shall be void and have no effect to the extent (but only to the extent) that, after such delivery the Equity Percentage would exceed 7.5%. If any delivery owed to JPMorgan hereunder is not made, in whole or in part, as a result of this provision, Counterparty's obligation to make such delivery shall not be extinguished and Counterparty shall make such delivery as promptly as practicable after, but in no event later than one Business Day after, JPMorgan gives notice to Counterparty that, after such delivery, the Equity Percentage would not exceed 7.5%. The "Equity Percentage" as of any day is the fraction, expressed as a percentage, (A) the numerator of which is the number of Shares that JPMorgan and any of its affiliates or any other person subject to aggregation with JPMorgan for purposes of the "beneficial ownership" test under

Section 13 of the Exchange Act, or any "group" (within the meaning of Section 13) of which JPMorgan is or may be deemed to be a part beneficially owns (within the meaning of Section 13 of the Exchange Act), without duplication, on such day (or, to the extent that for any reason the equivalent calculation under Section 16 of the Exchange Act and the rules and regulations thereunder results in a higher number, such higher number) and (B) the denominator of which is the number of Shares outstanding on such day.

19. **Maximum Share Delivery.** Notwithstanding anything to the contrary in this Master Confirmation, in no event shall JPMorgan be required to deliver any Shares, or any Shares or other securities comprising Alternative Delivery Units, in respect of any Transaction in excess of the Maximum Number of Shares set forth in the Supplemental Confirmation for such Transaction.

20. **Additional Termination Events.**

(a) The occurrence of an event described in paragraph III of Annex B hereto will constitute an Additional Termination Event, with Counterparty as the sole Affected Party and the Transactions specified in such paragraph III as the Affected Transactions.

(b) Notwithstanding anything to the contrary in Section 6 of the Agreement, if a Termination Price is specified in the Supplemental Confirmation for any Transaction, then an Additional Termination Event will occur without any notice or action by JPMorgan or Counterparty if the price of the Shares on the Exchange at any time falls below such Termination Price, with Counterparty as the sole Affected Party and such Transaction as the sole Affected Transaction.

21. **Non-confidentiality.** JPMorgan and Counterparty hereby acknowledge and agree that, subject to Section 9(e) hereof, each is authorized to disclose every aspect of this Master Confirmation, any Supplemental Confirmation and the transactions contemplated hereby and thereby to any and all persons, without limitation of any kind, and there are no express or implied agreements, arrangements or understandings to the contrary.

22. **[RESERVED].**

23. **[RESERVED].**

24. **Assignment and Transfer.** Notwithstanding anything to the contrary in the Agreement, JPMorgan may not assign any of its rights or duties hereunder to any one or more of its Affiliates without the prior written consent of Counterparty, which consent will not be unreasonably withheld or delayed; *provided* that such assignment shall not be permitted if Counterparty will either (x) be required to pay an additional amount in respect of an Indemnifiable Tax under Section 2(d)(i)(4) of the Agreement under the law as of the date of the transfer or assignment, or (y) receive a payment from which an amount has been deducted or withheld for or on account of any Tax in respect of which the other party is not required to pay an additional amount, in either case, as a result of such assignment.. Notwithstanding any other provision in this Master Confirmation to the contrary requiring or allowing JPMorgan to purchase, sell, receive or deliver any Shares or other securities to or from Counterparty, JPMorgan may designate any of its Affiliates to purchase, sell, receive or deliver such Shares or other securities and otherwise to perform JPMorgan's obligations in respect of any Transaction and any such designee may assume such obligations. JPMorgan may assign the right to receive Settlement Shares to any third party who may legally receive Settlement Shares. JPMorgan shall be discharged of its obligations to Counterparty only to the extent of any such performance. For the avoidance of doubt, JPMorgan hereby acknowledges that notwithstanding any such designation hereunder, to the extent any of JPMorgan's obligations in respect of any Transaction are not completed by its designee, JPMorgan shall be obligated to continue to perform or to cause any other of its designees to perform in respect of such obligations.

25. **Amendments to the Equity Definitions.**

(a) Section 11.2(a) of the Equity Definitions is hereby amended by deleting the words "a diluting or concentrative" and replacing them with the word "an"; and adding the phrase "or such Transaction" at the end of the sentence.

(b) Section 11.2(c) of the Equity Definitions is hereby amended by (i) replacing the words “a diluting or concentrative” with “an” in the fifth line thereof, (ii) adding the phrase “or such Transaction” after the words “the relevant Shares” in the same sentence, (iii) deleting the words “diluting or concentrative” in the sixth to last line thereof, and (iv) deleting the phrase “(provided that no adjustments will be made to account solely for changes in volatility, expected dividends, stock loan rate or liquidity relative to the relevant Shares)” and replacing it with the phrase “(and, for the avoidance of doubt, adjustments may be made to account solely for changes in volatility, expected dividends, stock loan rate or liquidity relative to the relevant Shares).”

(c) Section 11.2(e)(vii) of the Equity Definitions is hereby amended by deleting the words “a diluting or concentrative” and replacing them with the words “a material”; and adding the phrase “or the relevant Transaction” at the end of the sentence.

(d) Section 12.6(a)(ii) of the Equity Definitions is hereby amended by (i) deleting from the fourth line thereof the word “or” after the word “official” and inserting a comma therefor, and (ii) deleting the semi-colon at the end of subsection (B) thereof and inserting the following words therefor “or (C) at JPMorgan’s option, the occurrence of any of the events specified in Section 5(a)(vii) (1) through (9) of the ISDA Master Agreement with respect to that Issuer.”

(e) Section 12.9(b)(iv) of the Equity Definitions is hereby amended by:

(i) deleting (1) subsection (A) in its entirety, (2) the phrase “or (B)” following subsection (A) and (3) the phrase “in each case” in subsection (B); and

(ii) replacing the phrase “neither the Non-Hedging Party nor the Lending Party lends Shares” with the phrase “such Lending Party does not lend Shares” in the penultimate sentence.

(f) Section 12.9(b)(v) of the Equity Definitions is hereby amended by:

(i) adding the word “or” immediately before subsection “(B)” and deleting the comma at the end of subsection (A); and

(ii) (1) deleting subsection (C) in its entirety, (2) deleting the word “or” immediately preceding subsection (C), (3) deleting the penultimate sentence in its entirety and replacing it with the sentence “The Hedging Party will determine the Cancellation Amount payable by one party to the other” and (4) deleting clause (X) in the final sentence.

(g) Section 12.9(b)(vi) of the Equity Definitions is hereby amended by:

(i) adding the word “or” immediately before subsection “(B)” and deleting the comma at the end of subsection (A); and

(ii) (1) deleting subsection (C) in its entirety, (2) deleting the word “or” immediately preceding subsection (C) and (3) deleting the final sentence in its entirety and replacing it with the sentence “The Hedging Party will determine the Cancellation Amount payable by one party to the other”.

26. **Extraordinary Dividend.** If Counterparty declares any Extraordinary Dividend that has an ex-dividend date during the period commencing on the Trade Date for any Transaction and ending of the last day of the Relevant Period or, if applicable, the later of the last day of the Settlement Valuation Period and the last day of the Seller Termination Purchase Period, for such Transaction, then prior to or on the date on which such Extraordinary Dividend is paid by Counterparty to holders of record, Counterparty shall pay to JPMorgan, for each Transaction under this Master Confirmation, an amount in cash equal to the product of (i) the amount of such Extraordinary Dividend and (ii) the theoretical short delta number of shares as of the opening of business on the related ex-dividend date, as determined by the Calculation Agent, required for JPMorgan to hedge its exposure to such Transaction.

27. **Tax Matters.**

(a) For the purpose of Section 3(e) of the Agreement, each of Counterparty and JPMorgan hereby represents that it is not required by any applicable law, as modified by the practice of any relevant governmental revenue authority, of any Relevant Jurisdiction to make any deduction or withholding for or on account of any Tax from any payment (other than interest under Section 9(h) of the Agreement or amounts payable hereunder that may be considered to be interest for United States federal income tax purposes) to be made by it to the other party under the Agreement. In making this representation, it may rely on (i) the accuracy of any representations made by the other party pursuant to Section 3(f) of the Agreement, (ii) the satisfaction of the agreement contained in Section 4(a)(i) or 4(a)(iii) of the Agreement and the accuracy and effectiveness of any document provided by the other party pursuant to Section 4(a)(i) or 4(a)(iii) of the Agreement and (iii) the satisfaction of the agreement of the other party contained in Section 4(d) of the Agreement, except that it will not be a breach of this representation where reliance is placed on clause (ii) above and the other party does not deliver a form or document under Section 4(a)(iii) by reason of material prejudice to its legal or commercial position.

(b) For the purpose of Section 3(f) of the Agreement,

(i) Counterparty makes the following representation to JPMorgan:

Counterparty is a "U.S. person" (as that term is used in Section 1.1441-4(a)(3)(ii) of United States Treasury Regulations) for United States federal income tax purposes.

(ii) JPMorgan makes the following representation to Counterparty:

JPMorgan is a "U.S. person" (as that term is used in Section 1.1441-4(a)(3)(ii) of United States Treasury Regulations) for United States federal income tax purposes.

(c) "Tax" and "Indemnifiable Tax", each as defined in Section 14 of the Agreement, shall not include any U.S. federal withholding tax imposed or collected pursuant to Sections 1471 through 1474 of the U.S. Internal Revenue Code of 1986, as amended (the "**Code**"), any current or future regulations or official interpretations thereof, any agreement entered into pursuant to Section 1471(b) of the Code, or any fiscal or regulatory legislation, rules or practices adopted pursuant to any intergovernmental agreement entered into in connection with the implementation of such Sections of the Code (a "**FATCA Withholding Tax**"). For the avoidance of doubt, a FATCA Withholding Tax is a Tax the deduction or withholding of which is required by applicable law for the purposes of Section 2(d) of the Agreement.

(d) Each party shall provide to the other party a valid U.S. Internal Revenue Service Form W-9 or any successor thereto, (i) on or before the date of execution of this Master Confirmation and (ii) promptly upon learning that any such tax form previously provided by such party has become obsolete or incorrect. Additionally, each party shall, promptly upon request by the other party, provide such other tax forms and documents reasonably requested by the other party.

28. **Status of Claims in Bankruptcy.** JPMorgan acknowledges and agrees that neither this Master Confirmation nor any Supplemental Confirmation is intended to convey to JPMorgan rights against Counterparty with respect to any Transaction that are senior to the claims of common stockholders of Counterparty in any United States bankruptcy proceedings of Counterparty; *provided* that nothing herein shall limit or shall be deemed to limit JPMorgan's right to pursue remedies in the event of a breach by Counterparty of its obligations and agreements with respect to any Transaction; *provided further* that nothing herein shall limit or shall be deemed to limit JPMorgan's rights in respect of any transactions other than any Transaction.

29. **Wall Street Transparency and Accountability Act.** In connection with Section 739 of the Wall Street Transparency and Accountability Act of 2010 ("**WSTAA**"), the parties hereby agree that neither the enactment of WSTAA or any regulation under the WSTAA, nor any requirement under WSTAA or an amendment made by WSTAA, nor any similar legal certainty provision in any legislation enacted, or rule or regulation promulgated, on or after the date of this Master Confirmation, shall limit or otherwise impair either party's otherwise applicable rights to terminate, renegotiate, modify, amend or supplement any Supplemental Confirmation, this Master Confirmation or the Agreement, as applicable, arising from a termination event, force majeure, illegality, increased costs, regulatory change or similar event under any Supplemental Confirmation, this Master Confirmation, the Equity Definitions incorporated herein, or the Agreement (including, without limitation, rights arising from Change in Law, Loss of Stock Borrow, Increased Cost of Stock Borrow, Hedging Disruption, Increased Cost of Hedging, or Illegality).

30. **Communications with Employees of J.P. Morgan Securities LLC.** If Counterparty interacts with any employee of J.P. Morgan Securities LLC with respect to any Transaction, Counterparty is hereby notified that such employee will act solely as an authorized representative of JPMorgan Chase Bank, N.A. (and not as a representative of J.P. Morgan Securities LLC) in connection with such Transaction.

31. **Waiver of Jury Trial.** EACH PARTY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY SUIT, ACTION OR PROCEEDING RELATING TO THE AGREEMENT, THIS MASTER CONFIRMATION, EACH SUPPLEMENTAL CONFIRMATION, THE TRANSACTIONS HEREUNDER AND ALL MATTERS ARISING IN CONNECTION WITH THE AGREEMENT, THIS MASTER CONFIRMATION AND ANY SUPPLEMENTAL CONFIRMATION AND THE TRANSACTIONS HEREUNDER. EACH PARTY (I) CERTIFIES THAT NO REPRESENTATIVE, AGENT OR ATTORNEY OF THE OTHER PARTY HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT, IN THE EVENT OF SUCH A SUIT, ACTION OR PROCEEDING, SEEK TO ENFORCE THE FOREGOING WAIVER AND (II) ACKNOWLEDGES THAT IT AND THE OTHER PARTY HAVE BEEN INDUCED TO ENTER INTO THE TRANSACTIONS, AS APPLICABLE, BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS PROVIDED HEREIN.

32. **Counterparts.**

(a) This Master Confirmation may be executed in any number of counterparts, all of which shall constitute one and the same instrument, and any party hereto may execute this Master Confirmation by signing and delivering one or more counterparts. Counterparts may be delivered via facsimile, electronic mail (including any electronic signature covered by the U.S. federal ESIGN Act of 2000, Uniform Electronic Transactions Act, the Electronic Signatures and Records Act or other applicable law, e.g., DocuSign and AdobeSign (any such signature, an "Electronic Signature")) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes. The words "execution," "signed," "signature" and words of like import in this Master Confirmation or in any other certificate, agreement or document related to this Master Confirmation shall include any Electronic Signature, except to the extent electronic notices are expressly prohibited under this Master Confirmation or the Agreement

(b) Notwithstanding anything to the contrary in the Agreement, either party may deliver to the other party a notice relating to any Event of Default or Termination Event under this Master Confirmation by e-mail.

33. **U.S. Resolution Stay Protocol.** The parties acknowledge and agree that (i) to the extent that prior to the date hereof both parties have adhered to the 2018 ISDA U.S. Resolution Stay Protocol (the "**Protocol**"), the terms of the Protocol are incorporated into and form a part of the Agreement, and for such purposes the Agreement shall be deemed a Protocol Covered Agreement, JPMorgan shall be deemed a Regulated Entity and Counterparty shall be deemed an Adhering Party; (ii) to the extent that prior to the date hereof the parties have executed a separate agreement the effect of which is to amend the qualified financial contracts between them to conform with the requirements of the QFC Stay Rules (the "**Bilateral Agreement**"), the terms of the Bilateral Agreement are incorporated into and form a part of the Agreement, and for such purposes the Agreement shall be deemed a Covered Agreement, JPMorgan shall be deemed a Covered Entity and

Counterparty shall be deemed a Counterparty Entity; or (iii) if clause (i) and clause (ii) do not apply, the terms of Section 1 and Section 2 and the related defined terms (together, the "**Bilateral Terms**") of the form of bilateral template entitled "Full-Length Omnibus (for use between U.S. G-SIBs and Corporate Groups)" published by ISDA on November 2, 2018 (currently available on the 2018 ISDA U.S. Resolution Stay Protocol page at www.isda.org and, a copy of which is available upon request), the effect of which is to amend the qualified financial contracts between the parties thereto to conform with the requirements of the QFC Stay Rules, are hereby incorporated into and form a part of the Agreement, and for such purposes the Agreement shall be deemed a "Covered Agreement," JPMorgan shall be deemed a "Covered Entity" and Counterparty shall be deemed a "Counterparty Entity." In the event that, after the date of the Agreement, both parties hereto become adhering parties to the Protocol, the terms of the Protocol will replace the terms of this paragraph. In the event of any inconsistencies between the Agreement and the terms of the Protocol, the Bilateral Agreement or the Bilateral Terms (each, the "**QFC Stay Terms**"), as applicable, the QFC Stay Terms will govern. Terms used in this paragraph without definition shall have the meanings assigned to them under the QFC Stay Rules. For purposes of this paragraph, references to "the Agreement" include any related credit enhancements entered into between the parties or provided by one to the other. In addition, the parties agree that the terms of this paragraph shall be incorporated into any related covered affiliate credit enhancements, with all references to JPMorgan replaced by references to the covered affiliate support provider.

"**QFC Stay Rules**" means the regulations codified at 12 C.F.R. 252.2, 252.81–8, 12 C.F.R. 382.1-7 and 12 C.F.R. 47.1-8, which, subject to limited exceptions, require an express recognition of the stay-and-transfer powers of the FDIC under the Federal Deposit Insurance Act and the Orderly Liquidation Authority under Title II of the Dodd Frank Wall Street Reform and Consumer Protection Act and the override of default rights related directly or indirectly to the entry of an affiliate into certain insolvency proceedings and any restrictions on the transfer of any covered affiliate credit enhancements.

34. **CARES Act.** Counterparty represents and warrants that it has not applied, and throughout the term of any Transaction shall not apply, for a loan, loan guarantee, direct loan (as that term is defined in the Coronavirus Aid, Relief, and Economic Security Act (the "**CARES Act**")) or other investment, or to receive any financial assistance or relief (howsoever defined) under any program or facility that (a) is established under applicable law (whether in existence as of the Trade Date for such Transaction or subsequently enacted, adopted or amended), including without limitation the CARES Act and the Federal Reserve Act, as amended, and (b) requires under applicable law (or any regulation, guidance, interpretation or other pronouncement thereunder), as a condition of such loan, loan guarantee, direct loan (as that term is defined in the CARES Act), investment, financial assistance or relief, that Counterparty agree, attest, certify or warrant that it has not, as of the date specified in such condition, repurchased, or will not repurchase, any equity security of Counterparty, and that it has not, as of the date specified in such condition, made a capital distribution or will not make a capital distribution. Counterparty further represents and warrants that the Prepayment Amount for any Transaction is not being paid, in whole or in part, directly or indirectly, with funds received under or pursuant to any program or facility, including the U.S. Small Business Administration's "Paycheck Protection Program", that (a) is established under applicable law (whether in existence as of the Trade Date for such Transaction or subsequently enacted, adopted or amended), including without limitation the CARES Act and the Federal Reserve Act, as amended, and (b) requires under such applicable law (or any regulation, guidance, interpretation or other pronouncement of a governmental authority with jurisdiction for such program or facility) that such funds be used for specified or enumerated purposes that do not include the purchase of Shares pursuant to any Transaction (either by specific reference thereto or by general reference to transactions with the attributes thereof in all relevant respects).

Please confirm that the foregoing correctly sets forth the terms of our agreement by executing this Master Confirmation and returning it to us.

Very truly yours,

JPMORGAN CHASE BANK, NATIONAL ASSOCIATION

By: /s/ Sanjeet Dewal
Authorized Signatory
Name: Sanjet Dewal
Managing Director

Accepted and confirmed
as of the date first set
forth above:

ALLSCRIPTS HEALTHCARE SOLUTIONS, INC.

By: /s/ Richard J. Poulton
Authorized Signatory
Name: Richard J. Poulton

SCHEDULE A

FORM OF SUPPLEMENTAL CONFIRMATION

[__________], 20[__]

From: JPMorgan Chase Bank, National Association
New York Branch
383 Madison Avenue
New York, NY, 10179

To: Allscripts Healthcare Solutions, Inc.
222 Merchandise Mart Plaza, Suite 2024
Chicago, IL 60654
Attention: Richard J. Poulton
Telephone No.:312.506.1216
Email:rick.poulton@allscripts.com; legal.notices@allscripts.com

Re: Supplemental Confirmation—Uncollared Accelerated Share Repurchase

The purpose of this Supplemental Confirmation is to confirm the terms and conditions of the Transaction entered into between JPMorgan Chase Bank, National Association ("**JPMorgan**") and Allscripts Healthcare Solutions, Inc., a Delaware corporation ("**Counterparty**") on the Trade Date specified below. This Supplemental Confirmation is a binding contract between JPMorgan and Counterparty as of the relevant Trade Date for the Transaction referenced below.

1. This Supplemental Confirmation supplements, forms part of, and is subject to the Master Confirmation, dated as of November 30, 2020 (the "**Master Confirmation**"), between JPMorgan and Counterparty, as amended and supplemented from time to time. All provisions contained in the Master Confirmation govern this Supplemental Confirmation except as expressly modified below.

2. The terms of the Transaction to which this Supplemental Confirmation relates are as follows:

Trade Date:	[__________], 20[__]
Forward Price Adjustment Amount:	USD [___]
Calculation Period Start Date:	[__________], 20[__]
Scheduled Termination Date:	[__________], 20[__]
First Acceleration Date:	[__________], 20[__]
Prepayment Amount:	USD [___]
Prepayment Date:	[__________], 20[__]
Initial Shares:	[___] Shares; *provided* that if, in connection with the Transaction, JPMorgan is unable to borrow or otherwise acquire a number of Shares equal to the Initial Shares for delivery to Counterparty on the Initial Share Delivery Date, the Initial Shares delivered on the Initial Share Delivery Date shall be reduced to such number of Shares that JPMorgan is able to so borrow or otherwise acquire. All Shares delivered to Counterparty in respect of the Transaction pursuant to this paragraph shall be the "Initial Shares"

for purposes of “Number of Shares to be Delivered” in the Master Confirmation.

Initial Share Delivery Date:	[__________], 20[__]
Maximum Stock Loan Rate:	[__] basis points per annum
Initial Stock Loan Rate:	[__] basis points per annum
Maximum Number of Shares:	[__][1] Shares
Floor Price:	USD 0.01 per Share
Termination Price:	USD [___] per Share
Additional Relevant Days:	The [___] Exchange Business Days immediately following the Calculation Period.
Reserved Shares:	Notwithstanding anything to the contrary in the Master Confirmation, as of the date of this Supplemental Confirmation, the Reserved Shares shall be equal to [___] Shares.

Calculation Dates:

[_]		[_]		[_]	

If necessary, the Calculation Agent may add additional Calculation Dates beginning with [__________], 20[__] and continuing with every other Scheduled Trading Day thereafter.

3. Counterparty represents and warrants to JPMorgan that neither it nor any “affiliated purchaser” (as defined in Rule 10b-18 under the Exchange Act) has made any purchases of blocks pursuant to the proviso in Rule 10b-18(b)(4) under the Exchange Act during either (i) the four full calendar weeks immediately preceding the Trade Date or (ii) during the calendar week in which the Trade Date occurs, except as set forth in any notice delivered pursuant to Section 6(b)(xv) of the Master Confirmation.

4. This Supplemental Confirmation may be executed in any number of counterparts, all of which shall constitute one and the same instrument, and any party hereto may execute this Supplemental Confirmation by signing and delivering one or more counterparts.

[1] To be approximately 50% of the total number of Shares outstanding on the Trade Date.

Please confirm that the foregoing correctly sets forth the terms of our agreement by executing this Supplemental Confirmation and returning it to us.

Very truly yours,

JPMORGAN CHASE BANK, NATIONAL ASSOCIATION

By: ______________________________
Authorized Signatory
Name:

Accepted and confirmed
as of the Trade Date:

ALLSCRIPTS HEALTHCARE SOLUTIONS, INC.

By: ______________________________
Authorized Signatory
Name:

SCHEDULE B

FORM OF CERTIFICATE OF RULE 10B-18 PURCHASES

[Letterhead of Counterparty]

JPMorgan Chase Bank, National Association
New York Branch
383 Madison Avenue
New York, NY, 10179

Re: Uncollared Accelerated Share Repurchase

Ladies and Gentlemen:

In connection with our entry into the Master Confirmation, dated as of November 30, 2020, between JPMorgan Chase Bank, National Association and Allscripts Healthcare Solutions, Inc., a Delaware corporation, as amended and supplemented from time to time (the "**Master Confirmation**") and the Supplemental Confirmation thereto, dated as of November 30, 2020, we hereby represent that set forth below is the total number of shares of our common stock purchased by or for us or any of our affiliated purchasers in Rule 10b-18 purchases of blocks (all as defined in Rule 10b-18 under the Securities Exchange Act of 1934) pursuant to the once-a-week block exception set forth in Rule 10b-18(b)(4) during the four full calendar weeks immediately preceding the first day of the [Calculation Period][Settlement Valuation Period][Seller Termination Purchase Period] (as defined in the Master Confirmation) and the week during which the first day of such [Calculation Period][Settlement Valuation Period][Seller Termination Purchase Period] occurs.

Number of Shares: ___________________

We understand that you will use this information in calculating trading volume for purposes of Rule 10b-18.

Confirmed as of the date first written above:

ALLSCRIPTS HEALTHCARE SOLUTIONS, INC.

By: ____
Authorized Signatory
Name:

[Signature Page to Rule 10b-18 Certificate]

ANNEX A

COUNTERPARTY SETTLEMENT PROVISIONS

1. The following Counterparty Settlement Provisions shall apply to any Transaction to the extent indicated under the Master Confirmation:

Settlement Currency:	USD
Settlement Method Election:	Applicable; *provided* that (i) Section 7.1 of the Equity Definitions is hereby amended by deleting the word "Physical" in the sixth line thereof and replacing it with the words "Net Share" and (ii) the Electing Party may make a settlement method election only if the Electing Party represents and warrants to JPMorgan in writing on the date it notifies JPMorgan of its election that, as of such date, the Electing Party is not aware of any material non-public information regarding Counterparty or the Shares and is electing the settlement method in good faith and not as part of a plan or scheme to evade compliance with the federal securities laws.
Electing Party:	Counterparty
Settlement Method Election Date:	The earlier of (i) the Scheduled Termination Date and (ii) the second Exchange Business Day immediately following the Accelerated Termination Date (in which case the election under Section 7.1 of the Equity Definitions shall be made no later than 10 minutes prior to the open of trading on the Exchange on such second Exchange Business Day), as the case may be.
Default Settlement Method:	Cash Settlement
Forward Cash Settlement Amount:	An amount equal to (a) the Number of Shares to be Delivered, *multiplied by* (b) the Settlement Price.
Settlement Price:	An amount equal to the average of the VWAP Prices for the Calculation Dates in the Settlement Valuation Period, *plus* USD 0.02, subject to Valuation Disruption as specified in the Master Confirmation (in each case, *plus* interest on such amount during the Settlement Valuation Period at the rate of interest for Counterparty's long term, unsecured and unsubordinated indebtedness, as determined by the Calculation Agent).
Settlement Valuation Period:	A number of Scheduled Trading Days selected by JPMorgan in its reasonable discretion, beginning on the Scheduled Trading Day immediately following the earlier of (i) the Scheduled Termination Date or (ii) the Exchange Business Day immediately following the Termination Date.
Cash Settlement:	If Cash Settlement is applicable, then Buyer shall pay to JPMorgan the absolute value of the Forward Cash Settlement Amount on the Cash Settlement Payment Date.
Cash Settlement Payment Date:	The Exchange Business Day immediately following the last day of the Settlement Valuation Period.
Net Share Settlement Procedures:	If Net Share Settlement is applicable, Net Share Settlement shall be made in accordance with paragraphs 2 through 7 below.

2. Net Share Settlement shall be made by delivery on the Cash Settlement Payment Date of a number of Shares satisfying the conditions set forth in paragraph 3 below (the "**Registered Settlement Shares**"), or a number of Shares not satisfying such conditions (the "**Unregistered Settlement Shares**"), in either case with a value equal to 101% (in the case of Registered Settlement Shares) or 105% (in the case of Unregistered Settlement Shares) of the absolute value of the Forward Cash Settlement Amount, with such Shares' value based on the value thereof to JPMorgan (which value shall, in the case of Unregistered Settlement Shares, take into account a commercially reasonable illiquidity discount), in each case as determined by the Calculation Agent. If all of the conditions for delivery of either Registered Settlement Shares or Unregistered Settlement Shares have not been satisfied, Cash Settlement shall be applicable in accordance with paragraph 1 above notwithstanding Counterparty's election of Net Share Settlement.

3. Counterparty may only deliver Registered Settlement Shares pursuant to paragraph 2 above if:

(a) a registration statement covering public resale of the Registered Settlement Shares by JPMorgan (the "**Registration Statement**") shall have been filed with the Securities and Exchange Commission under the Securities Act and been declared or otherwise become effective on or prior to the date of delivery, and no stop order shall be in effect with respect to the Registration Statement; a printed prospectus relating to the Registered Settlement Shares (including, without limitation, any prospectus supplement thereto, the "**Prospectus**") shall have been delivered to JPMorgan, in such quantities as JPMorgan shall reasonably have requested, on or prior to the date of delivery;

(b) the form and content of the Registration Statement and the Prospectus (including, without limitation, any sections describing the plan of distribution) shall be satisfactory to JPMorgan;

(c) as of or prior to the date of delivery, JPMorgan and its agents shall have been afforded a reasonable opportunity to conduct a due diligence investigation with respect to Counterparty customary in scope for underwritten offerings of equity securities of similar size and the results of such investigation are satisfactory to JPMorgan, in its discretion; and

(d) as of the date of delivery, an agreement (the "**Underwriting Agreement**") shall have been entered into with JPMorgan in connection with the public resale of the Registered Settlement Shares by JPMorgan substantially similar to underwriting agreements customary for underwritten offerings of equity securities of similar size, in form and substance satisfactory to JPMorgan, which Underwriting Agreement shall include, without limitation, provisions substantially similar to those contained in such underwriting agreements relating, without limitation, to the indemnification of, and contribution in connection with the liability of, JPMorgan and its Affiliates and the provision of customary opinions, accountants' comfort letters and lawyers' negative assurance letters.

4. If Counterparty delivers Unregistered Settlement Shares pursuant to paragraph 2 above:

(a) all Unregistered Settlement Shares shall be delivered to JPMorgan (or any Affiliate of JPMorgan designated by JPMorgan) pursuant to the exemption from the registration requirements of the Securities Act provided by Section 4(a)(2) thereof;

(b) as of or prior to the date of delivery, JPMorgan and any potential purchaser of any such shares from JPMorgan (or any Affiliate of JPMorgan designated by JPMorgan) identified by JPMorgan shall be afforded a commercially reasonable opportunity to conduct a due diligence investigation with respect to Counterparty customary in scope for private placements of equity securities (including, without limitation, the right to have made available to them for inspection all financial and other records, pertinent corporate documents and other information reasonably requested by them);

(c) as of the date of delivery, Counterparty shall enter into an agreement (a "**Private Placement Agreement**") with JPMorgan (or any Affiliate of JPMorgan designated by JPMorgan) in connection with the private placement of such shares by Counterparty to JPMorgan (or any such Affiliate) and the private resale of such shares by JPMorgan (or any such Affiliate), substantially similar to private placement purchase agreements customary for private placements of equity securities, in form and substance commercially reasonably satisfactory to JPMorgan, which Private Placement Agreement shall include, without limitation, provisions substantially similar to those contained in such private placement purchase agreements relating, without limitation, to the indemnification of, and contribution in connection with the liability of, JPMorgan and its Affiliates and the provision of customary opinions,

accountants' comfort letters and lawyers' negative assurance letters, and shall provide for the payment by Counterparty of all fees and expenses of JPMorgan (and any such Affiliate) in connection with such resale, including, without limitation, all fees and expenses of counsel for JPMorgan, and shall contain representations, warranties, covenants and agreements of Counterparty reasonably necessary or advisable to establish and maintain the availability of an exemption from the registration requirements of the Securities Act for such resales; and

(d) in connection with the private placement of such shares by Counterparty to JPMorgan (or any such Affiliate) and the private resale of such shares by JPMorgan (or any such Affiliate), Counterparty shall, if so requested by JPMorgan, prepare, in cooperation with JPMorgan, a private placement memorandum in form and substance reasonably satisfactory to JPMorgan.

5. JPMorgan, itself or through an Affiliate (the "**Selling Agent**") or any underwriter(s), will sell all, or such lesser portion as may be required hereunder, of the Registered Settlement Shares or Unregistered Settlement Shares and any Makewhole Shares (as defined below) (together, the "**Settlement Shares**") delivered by Counterparty to JPMorgan pursuant to paragraph 6 below commencing on the Cash Settlement Payment Date and continuing until the date on which the aggregate Net Proceeds (as such term is defined below) of such sales, as determined by JPMorgan, is equal to the absolute value of the Forward Cash Settlement Amount (such date, the "**Final Resale Date**"). If the proceeds of any sale(s) made by JPMorgan, the Selling Agent or any underwriter(s), net of any fees and commissions (including, without limitation, underwriting or placement fees) customary for similar transactions under the circumstances at the time of the offering, together with carrying charges and expenses incurred in connection with the offer and sale of the Shares (including, without limitation, the covering of any over-allotment or short position (syndicate or otherwise)) (the "Net Proceeds") exceed the absolute value of the Forward Cash Settlement Amount, JPMorgan will refund, in USD, such excess to Counterparty on the date that is three (3) Currency Business Days following the Final Resale Date, and, if any portion of the Settlement Shares remains unsold, JPMorgan shall return to Counterparty on that date such unsold Shares.

6. If the Calculation Agent determines that the Net Proceeds received from the sale of the Registered Settlement Shares or Unregistered Settlement Shares or any Makewhole Shares, if any, pursuant to this paragraph 6 are less than the absolute value of the Forward Cash Settlement Amount (the amount in USD by which the Net Proceeds are less than the absolute value of the Forward Cash Settlement Amount being the "**Shortfall**" and the date on which such determination is made, the "**Deficiency Determination Date**"), Counterparty shall on the Exchange Business Day next succeeding the Deficiency Determination Date (the "**Makewhole Notice Date**") deliver to JPMorgan, through the Selling Agent, a notice of Counterparty's election that Counterparty shall either (i) pay an amount in cash equal to the Shortfall on the day that is one Currency Business Day after the Makewhole Notice Date, or (ii) deliver additional Shares. If Counterparty elects to deliver to JPMorgan additional Shares, then Counterparty shall deliver additional Shares in compliance with the terms and conditions of paragraph 3 or paragraph 4 above, as the case may be (the "**Makewhole Shares**"), on the first Clearance System Business Day which is also an Exchange Business Day following the Makewhole Notice Date in such number as the Calculation Agent reasonably believes would have a market value on that Exchange Business Day equal to the Shortfall. Such Makewhole Shares shall be sold by JPMorgan in accordance with the provisions above; provided that if the sum of the Net Proceeds from the sale of the originally delivered Shares and the Net Proceeds from the sale of any Makewhole Shares is less than the absolute value of the Forward Cash Settlement Amount then Counterparty shall, at its election, either make such cash payment or deliver to JPMorgan further Makewhole Shares until such Shortfall has been reduced to zero.

7. Notwithstanding the foregoing, in no event shall the aggregate number of Settlement Shares for any Transaction be greater than the Reserved Shares minus the amount of any Shares actually delivered by Counterparty under any other Transaction under this Master Confirmation (the result of such calculation, the "**Capped Number**"). Counterparty represents and warrants (which shall be deemed to be repeated on each day that a Transaction is outstanding) that the Capped Number is equal to or less than the number of Shares determined according to the following formula:

$$A – B$$

Where A = the number of authorized but unissued shares of Counterparty that are not reserved for future issuance on the date of the determination of the Capped Number; and

B = the maximum number of Shares required to be delivered to third parties if Counterparty elected Net Share Settlement of all transactions in the Shares (other than Transactions in the Shares under this Master Confirmation) with all third parties that are then currently outstanding and unexercised.

"**Reserved Shares**" means initially, 14,619,883 Shares. The Reserved Shares may be increased or decreased in a Supplemental Confirmation.

If at any time, as a result of this paragraph 7, Counterparty fails to deliver to JPMorgan any Settlement Shares, Counterparty shall, to the extent that Counterparty has at such time authorized but unissued Shares not reserved for other purposes, promptly notify JPMorgan thereof and deliver to JPMorgan a number of Shares not previously delivered as a result of this paragraph 7. Counterparty agrees to use its commercially reasonable efforts to cause the number of authorized but unissued Shares to be increased, if necessary, to an amount sufficient to permit Counterparty to fulfill its obligation to deliver any Settlement Shares.

ANNEX B

COMMUNICATIONS PROCEDURES

November 30, 2020

I. Introduction

Allscripts Healthcare Solutions, Inc. ("**Counterparty**") and JPMorgan Chase Bank, National Association ("**JPMorgan**") have adopted these communications procedures (the "**Communications Procedures**") in connection with entering into the Master Confirmation (the "**Master Confirmation**"), dated as of November 30, 2020, between JPMorgan and Counterparty relating to Uncollared Accelerated Share Repurchase transactions. These Communications Procedures supplement, form part of, and are subject to the Master Confirmation.

II. Communications Rules

For each Transaction, from the Trade Date for such Transaction until the date all payments or deliveries of Shares have been made with respect to such Transaction, Counterparty and its Employees and Designees shall not engage in any Program-Related Communication with, or disclose any Material Non-Public Information to, any EDG Trading Personnel. Except as set forth in the preceding sentence, the Master Confirmation shall not limit Counterparty and its Employees and Designees in their communication with Affiliates and Employees of JPMorgan, including, without limitation, Employees who are EDG Permitted Contacts.

III. Termination

If, in the sole judgment of any EDG Trading Personnel or any Affiliate or Employee of JPMorgan participating in any Communication with Counterparty or any Employee or Designee of Counterparty, such Communication would not be permitted by these Communications Procedures, such EDG Trading Personnel or Affiliate or Employee of JPMorgan shall immediately terminate such Communication. In such case, or if such EDG Trading Personnel or Affiliate or Employee of JPMorgan determines following completion of any Communication with Counterparty or any Employee or Designee of Counterparty that such Communication was not permitted by these Communications Procedures, such EDG Trading Personnel or such Affiliate or Employee of JPMorgan shall promptly consult with his or her supervisors and with counsel for JPMorgan regarding such Communication. If, in the reasonable judgment of JPMorgan's counsel following such consultation, there is more than an insignificant risk that such Communication could materially jeopardize the availability of the affirmative defenses provided in Rule 10b5-1 under the Exchange Act with respect to any ongoing or contemplated activities of JPMorgan or its Affiliates in respect of any Transaction pursuant to the Master Confirmation, it shall be an Additional Termination Event pursuant to Section 20(a) of the Master Confirmation, with Counterparty as the sole Affected Party and all Transactions under the Master Confirmation as Affected Transactions.

IV. Definitions

Capitalized terms used and not otherwise defined herein shall have the meanings ascribed to them in the Master Confirmation. As used herein, the following words and phrases shall have the following meanings:

"**Communication**" means any contact or communication (whether written, electronic, oral or otherwise) between Counterparty or any of its Employees or Designees, on the one hand, and JPMorgan or any of its Affiliates or Employees, on the other hand.

"**Designee**" means a person designated, in writing or orally, by Counterparty to communicate with JPMorgan on behalf of Counterparty.

"**EDG Permitted Contact**" means any of Mr. David Aidelson, Mr. Elliot Chalom, Ms. Yana Chernobilsky, Mr. Sanjeet S. Dewal, Mr. Ganaraj S. Hegde, Mr. Noah L. Wynkoop or any of their designees; *provided* that JPMorgan may amend the list of EDG Permitted Contacts by delivering a revised list of EDG Permitted Contacts to Counterparty.

"**EDG Trading Personnel**" means Mr. Michael Captain, Ms. Jennifer Hilibrand, Mr. Spyros Kallipolitis, Mr. Michael Tatro and any other Employee of the public side of the Equity Derivatives Group of JPMorgan Chase & Co.; *provided* that JPMorgan may amend the list of EDG Trading Personnel by delivering a revised list of EDG Trading Personnel to Counterparty; and *provided further* that, for the avoidance of doubt, the persons listed as EDG Permitted Contacts are not EDG Trading Personnel.

"**Employee**" means, with respect to any entity, any owner, principal, officer, director, employee or other agent or representative of such entity, and any Affiliate of any of such owner, principal, officer, director, employee, agent or representative.

"**Material Non-Public Information**" means information relating to Counterparty or the Shares that (a) has not been widely disseminated by wire service, in one or more newspapers of general circulation, by communication from Counterparty to its shareholders or in a press release, or contained in a public filing made by Counterparty with the Securities and Exchange Commission and (b) a reasonable investor might consider to be of importance in making an investment decision to buy, sell or hold Shares. For the avoidance of doubt and solely by way of illustration, information should be presumed "material" if it relates to such matters as dividend increases or decreases, earnings estimates, changes in previously released earnings estimates, significant expansion or curtailment of operations, a significant increase or decline of orders, significant merger or acquisition proposals or agreements, significant new products or discoveries, extraordinary borrowing, major litigation, liquidity problems, extraordinary management developments, purchase or sale of substantial assets and similar matters.

"**Program-Related Communication**" means any Communication the subject matter of which relates to the Master Confirmation or any Transaction under the Master Confirmation or any activities of JPMorgan (or any of its Affiliates) in respect of the Master Confirmation or any Transaction under the Master Confirmation.

EXHIBIT 21.1

ALLSCRIPTS HEALTHCARE SOLUTIONS, INC.

SUBSIDIARIES

Subsidiary	Jurisdiction or State of Organization
Allscripts Holdings, LLC	Delaware
Allscripts Holdings 2, LLC	Delaware
Coniston Exchange, LLC	Delaware
Allscripts Healthcare US, LP	Delaware
Allscripts Healthcare, LLC	North Carolina
Allscripts Managed Services, LLC	Delaware
Allscripts Software, LLC	Delaware
California Healthcare Medical Billing, LLC	California
Allscripts Analytics, LLC	Delaware
Allscripts Next, LLC	Delaware
2bPrecise, LLC	Delaware
2bPrecise Ltd.	Israel
PF2 EIS LLC	Delaware
Practice Fusion, Inc.	Delaware
Ringadoc, Inc.	Delaware
Evalytica, LLC	California
Health Grid Holding Company LLC	Delaware
HealthGrid Coordinated Care Solutions LLC.	Delaware
Health Grid, LLC	Florida
Mahathi Software LLC.	Florida
PF2 Enterprise Information Solutions Canada	Canada
Allscripts Canada Corporation	Canada
Allscripts Healthcare IT (Canada) Corporation (f/k/a NantHealth Canada, Inc.)	Canada
Allscripts Healthcare International Holdings, LLC	Delaware
Allscripts (Mauritius) Limited	Mauritius
Allscripts (India) LLP	India
Nant Health Technologies Private Limited	India
Allscripts Healthcare IT (Malaysia) SDN. BHD.	Malaysia
Allscripts Healthcare IT (Singapore) PTE. LTD.	Singapore
Allscripts Healthcare IT (Australia) PTY. LTD.	Australia
Allscripts Healthcare (IT) UK LTD.	United Kingdom
Allscripts (United Kingdom) Limited	United Kingdom
dbMotion, Ltd.	Israel
dbMotion, Inc.	Delaware
Allscripts CV	Netherlands
Allscripts BV	Netherlands
Allscripts Healthcare IT (Mauritius) Limited	Mauritius
Core Medical Solutions Holdings PTY LTD.	Australia
Core Medical Solutions PTY. LTD.	Australia
Pulse8, LLC	Maryland

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We have issued our reports dated February 26, 2021, with respect to the consolidated financial statements and internal control over financial reporting included in the Annual Report of Allscripts Healthcare Solutions, Inc. on Form 10-K for the year ended December 31, 2020. We consent to the incorporation by reference of said reports in the Registration Statements of Allscripts Healthcare Solutions, Inc. on Forms S-8 (File No. 333-37238, File No. 333-90129, File No. 333-104416, File No. 333-107793, File No. 333-59212, File No. 333-135282, File No. 333-141600, File No. 333-154775, File No. 333-164294, File No. 333-167846, File No. 333-175053, File No. 333-175819, File No. 333-188902, File No. 333-196415, File No. 333-218174, File No. 333-225329, File No. 333-231748, File No. 333-238590 and File No. 333-238591).

/s/ GRANT THORNTON LLP

Raleigh, North Carolina
February 26, 2021

Exhibit 31.1

CERTIFICATION

I, Paul M. Black, certify that:

1. I have reviewed this Annual Report on Form 10-K of Allscripts Healthcare Solutions, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a. designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b. designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c. evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d. disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's Board of Directors (or persons performing the equivalent functions):

    a. all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting, which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    b. any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 26, 2021

/s/ Paul M. Black

Paul M. Black
Chief Executive Officer

Exhibit 31.2

CERTIFICATION

I, Richard J. Poulton, certify that:

1. I have reviewed this Annual Report on Form 10-K of Allscripts Healthcare Solutions, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a. designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b. designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c. evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d. disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's Board of Directors (or persons performing the equivalent functions):

    a. all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting, which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    b. any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 26, 2021

/s/ Richard J. Poulton

Richard J. Poulton
President and Chief Financial Officer

Exhibit 32.1

The following statement is being made to the Securities and Exchange Commission solely for purposes of Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. 1350), which carries with it certain criminal penalties in the event of a knowing or willful misrepresentation.

Securities and Exchange Commission
450 Fifth Street, NW
Washington, D.C. 20549

Re: Allscripts Healthcare Solutions, Inc.

Ladies and Gentlemen:

In accordance with the requirements of Section 906 of the Sarbanes-Oxley Act of 2002 (18 USC 1350), each of the undersigned hereby certifies that:

(i) this Annual Report on Form 10-K for the year ended December 31, 2020, which this statement accompanies, fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 78o(d)); and

(ii) the information contained in this Annual Report on Form 10-K for the year ended December 31, 2020, fairly presents, in all material respects, the financial condition and results of operations of Allscripts Healthcare Solutions, Inc.

Date: February 26, 2021

/s/ Paul M. Black	/s/ Richard J. Poulton
Paul M. Black	**Richard J. Poulton**
Chief Executive Officer	**President and Chief Financial Officer**

A signed original of this written statement required by Section 906 has been provided to Allscripts Healthcare Solutions, Inc. and will be retained by Allscripts Healthcare Solutions, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.