

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, 2016
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
(State or other jurisdiction of
incorporation or organization)

36-4392754
(I.R.S. Employer
Identification No.)

222 Merchandise Mart Plaza, Suite 2024, Chicago, IL 60654

(Address of principal executive offices and zip code)

(312) 506-1200

(Registrant's telephone number, including area code)

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

Title of Each Class:
Common Stock, par value \$0.01 per share

Name of Each Exchange on which Registered
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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

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

Large accelerated filer Accelerated filer
Non-accelerated filer (Do not check if a smaller reporting company) Smaller reporting company

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, 2016, the last business day of the registrant's most recently completed second fiscal quarter, was \$2,336,261,876. 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, 2017, there were 180,513,085 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 2017 annual meeting of stockholders (the "2017 Proxy Statement") are incorporated by reference into Part III of this Annual Report on Form 10-K where indicated. The 2017 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, 2016

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Each of the terms “we,” “us,” “our” or “company” as used herein refers collectively to Allscripts Healthcare Solutions, Inc. and 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

Allscripts Healthcare Solutions, Inc. (“Allscripts”) delivers information technology (“IT”) solutions and services to help healthcare organizations achieve optimal clinical, financial and operational results. Our solutions and services are sold to:

- Physicians
- Hospitals
- Governments
- Health systems
- Health plans
- Life-sciences companies
- Retail clinics
- Retail pharmacies
- Pharmacy benefit managers
- Insurance companies
- Employer wellness clinics
- Post-acute organizations
- Consumers
- Lab companies



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

During 2016, we completed the merger of our Homecare™ business with Netsmart, Inc., a behavioral health technology business. As a result, the new joint business entity (“Netsmart”) became one of the largest human services and post-acute technology providers in healthcare. We believe that post-acute care integration is a critical component of value-based care models. Netsmart provides software and technology solutions to the health and human services industry, which is comprised of behavioral health, addiction treatment, intellectual and developmental disability services, child and family services, and public health segments, as well as to post-acute home care organizations, private duty nursing, long term care and hospice.

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 industry needs, with the goal of helping clients to connect communities across multiple care settings, encourage efficiency and deepen the engagement of the patient in his/her 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 physician and community practices. Built on an open platform with advanced clinical decision support, our EHRs provide analysis and insights. Each of our EHR offerings delivers a single patient record, workflows and consolidated analytics. Our solutions are the technology for innovation to improve patient care delivery and outcomes. Our EHR solutions consist of the following:

Sunrise Acute EHR is an interdisciplinary clinical solution that helps the care team embed desired practices and protocols into their workflows. The solution—including Sunrise Ambulatory to support health systems on a single platform for both inpatient and outpatient care—provides decision guidance, including computerized provider order entry, note and flowsheet documentation, clinical summary views and other key workflows necessary for driving quality care. Offerings include:

- Sunrise Surgical Care
- Sunrise Anesthesia
- Sunrise Emergency Care
- Sunrise Pharmacy
- Sunrise Oncology
- Sunrise Laboratory
- Sunrise Radiology
- Sunrise Rehabilitation/Madonna
- Sunrise Wound Care/TRUE-see
- Sunrise Access Manager
- Sunrise Hospital IQ
- Sunrise Clinical Performance Management
- Sunrise Health Information Management
- Sunrise Patient Administration System (international)

Administrative and operational modules are likewise available. Functionality is also offered on mobile devices.

Allscripts TouchWorks EHR is designed 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, allows clinical staff to effectively coordinate and deliver both primary and specialized care. Functionality is also offered on mobile devices.

Allscripts Professional EHR is 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, and enables practices to adhere to government initiatives like Meaningful Use and the Medicare Access and CHIP Reauthorization Act.

Modules available with TouchWorks and Professional EHRs include:

- Allscripts eRecruit
- Allscripts Clinical Performance Reporting
- Allscripts Practice Management
- Allscripts eChart Courier
- Allscripts iAssist

Allscripts Payer & Life Sciences initiatives endeavor to optimize the value of our EHRs. We believe that a successful value-based care environment requires more efficient communication and collaboration among all stakeholders in the healthcare continuum. To that end, we collaborate with payers, providers, life-sciences companies, pharmacy benefit managers and other partners to develop new programs, processes and content to enhance clinical solutions and improve outcomes for patients. Data offerings from our providers enable payers and life-sciences organizations access to a real-world resource for research, insight and analysis. Programs include:

- Patient Assistance and Adherence
- Electronic Prior Authorization
- Medical Record Abstraction
- Gaps-in-Care
- Consumer Payment
- Clinical Trial Solutions

Financial Management

Allscripts financial solutions support revenue cycle, claims management, budgeting and analytic functions of a healthcare organization, among others. 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
- Allscripts EPSi
- Allscripts Revenue Cycle Management Services
- Allscripts Payerpath

Population Health Management

Allscripts CareInMotion™ is a community-connected population health management platform that delivers care coordination, patient engagement, connectivity, data aggregation and analytics.

- Allscripts **Care Coordination** solution includes Allscripts Care Management, Allscripts Care Director, CarePort, dbMotion Care Coordination Agent, Allscripts Referral Management and Chronic Care Management services.
- Our **Connectivity** solution is enabled by our open infrastructure, featuring dbMotion Solution, dbMotion Community and Allscripts Fusion.
- **Patient Engagement** is facilitated with Allscripts FollowMyHealth, FollowMyHealth TeleHealth and Remote Monitoring. Our patient engagement platform also serves as the foundation for emerging consumer health initiatives.
- Allscripts Population Health **Analytics** solution enables healthcare organizations to measure performance and outcomes, analyze utilization, manage risk, reduce cost and improve quality across the continuum of care.

Precision Medicine/ Consumer Solutions

Through precision medicine, healthcare is evolving from a one-size-fits-all model to a personalized approach aimed at customizing diagnostic, therapeutic and preventive interventions. **2bPrecise™** solutions seek to bring the intelligence and insights of precision medicine to the workflow of the clinician — while making this knowledge available for research and pharmacogenomics.

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. The following is a list of some of the services we provide:

- Allscripts Architecture Advisory Services
- Allscripts Comprehensive Care for Joint Replacement Consulting
- Allscripts Proactive Application Monitoring Service
- Assure
- Clinical Quality Program
- Consulting: MU3 Readiness Assessment and Rapid Design Services
- Consulting: FollowMyHealth Engagement and Optimization
- Consulting: Patient-centered Medical Home
- Consulting: TouchWorks EHR Optimization
- Education Services: Experiential Learning
- Education Services: Virtual Instructor-led Training
- Hosting Solutions
- Managed Services: Application Management and Staff Augmentation
- Managed Services: IT Service Management (Full IT Outsourcing)
- Managed Services: Managed Technology Deployment Model
- Managed Services: Service Deck
- Premier Support
- Revenue Cycle Consulting Services
- Security: Advanced Security Add On
- Sunrise Upgrade Center
- Support: Professional Safeguard
- TouchWorks Multi-Year Subscription Upgrade Service



Our strategy is centered on the vision of enabling smarter care at virtually every point of the healthcare continuum. Given the breadth of our portfolio and global client installed base, we believe we are well positioned to connect physicians and caregivers to patients and payers to the caregivers across all healthcare settings. Smarter care is a strategic imperative for healthcare organizations globally and requires a balance between managing costs while maintaining the highest quality of care. We believe that our solutions are well-positioned to facilitate such transformation in the future of healthcare by offering community connectivity, interoperability, data analytics, and consumer engagement features and functionality. 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.

- **Community Connectivity** – Our care coordination solutions improve safety and quality as a patient transitions from one care setting to another. We help build assessments, monitor results, track outcomes, and make modifications in a person’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 employ a wide array of interoperability tools to support our clients’ 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. Our unique Open platform is a proven, scalable and user-friendly technology that connects both clinical and financial data across every setting. We also offer Application Programming Interfaces (“APIs”) based on the Fast Healthcare Interoperability Resources (“FHIR”). With this unique Open 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** – Healthcare organizations need to analyze dependencies, trends, and patterns so that they can develop business and clinical intelligence to better manage patient populations. Data-driven decisions require real-time, 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 software also integrates with solutions across an organization, regardless of a provider’s software. With a patient engagement platform, individuals and their families have the opportunity to become active members of their care team, which improves results.

Healthcare IT Industry

The healthcare IT industry is facing significant opportunities and challenges due to ongoing regulations and changes in industry standards, and the transition to a new presidential administration in the United States is expected to also present opportunities and challenges. These include:

- **Provider Reimbursement:** In recent years, there have been significant changes to provider payment models by the United States federal government that have been followed by commercial payers and state governments. This led to increasing pressure on healthcare organizations to reduce costs and increase quality, replacing fee-for-service models in part by expanding advanced payment models, which could further encourage adoption of healthcare IT. The passage of the Medicare Access and CHIP Reauthorization Act (“MACRA”) in 2015 codified the creation of new payment models, such as ACOs, that will significantly expand the number of ambulatory healthcare professionals delivering care under payment programs that are driven by quality measures currently under development. 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. Another important driver of healthcare IT adoption in the primary care space is the Patient Centered Medical Home program, a voluntary program in which many of our clients are participating and that has a strong emphasis on quality measurement and patient engagement. Even where some of these programs will likely be adjusted in part by the incoming Secretary of Health and Human Services (“HHS”), Dr. Tom Price, particularly those that have been mandatory, 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. Further, activity related to the repeal, replacement or repair of the Affordable Care Act could have an impact on payments received by our clients for their services.
- **ARRA/HITECH:** In 2009, the United States federal government enacted the American Recovery & Reinvestment Act, which included the Health Information Technology for Economic and Clinical Health Act (“HITECH”). HITECH authorized the EHR Incentive program (the “Meaningful Use” program). This law provided significant incentive funding to physicians and hospitals that can prove they have adopted and are appropriately using technology such as our EHR solutions. The Meaningful Use program is currently in a state of evolution, as some of it has been incorporated into and changed by the MACRA regulations for ambulatory providers delivering care to Medicare patients; it is likely to continue as already released in the regulations associated with Stage 3 of Meaningful Use and the 2015 certification edition for Medicaid ambulatory practices and for eligible hospitals, at least for some period of time, though it may be amended or repealed as part of the new Congress’ efforts to reform Medicare and/or Medicaid.
- **ANSI-5010/ICD-10:** Under the Health Insurance Portability and Accountability Act of 1996 (“HIPAA”), HHS implemented a new version of the standards for HIPAA-covered electronic transactions, including claims, remittance advices, and requests and responses for eligibility, which are called ANSI-5010. Additionally, HIPAA required entities to upgrade to the tenth revision of the International Statistical Classification of Diseases and Related Health Problems from the World Health Organization, also known as ICD-10, for use in reporting medical diagnoses and inpatient procedures by no later than October 1, 2015. These changes in coding standards required our clients to upgrade to more advanced versions of our solutions.
- **PPACA:** The Patient Protection and Affordable Care Act (as amended, the “PPACA”), which was signed into law in 2010, has impacted us and our clients. The PPACA is expected to be repealed in part or in whole as a result of the change in presidential administration in the United States, but many components of the law, including those which have had a positive effect by requiring the expanded use of products such as ours to participate in certain federal programs, are expected to be included in any new legislation passed to replace it. Any provisions, 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 by reducing the resources available to our current and prospective clients to purchase our products. Further, ambiguity remains for the industry as a whole regarding the future of many programs initially authorized by the PPACA, which may slow purchasing decisions as healthcare organizations wait for clarity.

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. 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 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 21st Century Cures legislation passed in December 2016, could lead to additional demand for our solutions. We also seek replacement markets for health information exchanges and patient portals, despite their recent deployment.

Business Organization

We derive our revenues primarily from sales of our proprietary software (either as a perpetual 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 services, and managed services solutions such as outsourcing, private cloud hosting, and revenue cycle management.

During 2016, in an effort to further streamline and align our operating structure around our key ambulatory, acute and population health management solutions, we made several changes to our organizational and reporting structure. These changes included (i) the separation of the former Touchworks strategic business unit and its dedicated leadership team into acute and ambulatory businesses, and (ii) the transfer of several ancillary analytics-type products between our existing Clinical and Financial Solutions and Population Health reportable segments and (iii) the establishment of the FollowMyHealth® and EPSi™ business units. In conjunction with these changes, we formed new Ambulatory and Acute strategic business units, which are deemed to be operating segments within the Clinical and Financial Solutions reportable segment. The ancillary products are extensions of our key ambulatory and acute solutions and in the future will be managed within the new Ambulatory and Acute strategic business units. Our FollowMyHealth® and EPSi™ businesses, which were previously managed as part of our Population Health reportable and operating segment, became standalone business units and operating segments. Based on the qualitative and quantitative criteria under Accounting Standards Codification Topic 280, *Segment Reporting*, we concluded that the FollowMyHealth® and EPSi™ operating segments should continue to be included as part of the Population Health reportable segment. Effective on April 19, 2016, we completed the Netsmart Transaction (as defined in Note 2, “Business Combinations and Other Investments,” in Part II, Item 8, “Financial Statements and Supplementary Data” of this Form 10-K) which resulted in the formation of Netsmart through the merger of our Homecare™ business with Netsmart, Inc., a behavioral health technology business. Netsmart is deemed to be a separate operating and reportable segment and, therefore, is presented separately. Prior to the Netsmart Transaction, our Homecare™ business was included as part of the Population Health reportable segment. After the finalization of the above changes to our organization and reporting structure, we identified seven operating segments, which were aggregated into three reportable segments: (i) Clinical and Financial Solutions, (ii) Population Health and (iii) Netsmart.

Information regarding financial data by segment is set forth in Part II, Item 7 of this Form 10-K, “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and in Note 13, “Business Segments,” to our consolidated financial statements included in Part II, Item 8, “Financial Statements and Supplementary Data” of this Form 10-K.

Clients

As of December 31, 2016, approximately 180,000 physicians, 2,500 hospitals and 45,000 post-acute networks use our products and services. Our clients, including some of the most prestigious medical groups and hospitals in the United States, often serve as a reference source for prospective clients who are interested in purchasing our solutions. No single client accounted for more than 10% of our revenue in the years ended December 31, 2016, 2015 and 2014.

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 heavily into our research and development efforts. These efforts are primarily focused on 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.

Our total gross research and development spending was \$290.4 million, \$234.1 million and \$233.5 million for the years ended December 31, 2016, 2015 and 2014, respectively. These amounts consist of research and development expenses of \$187.9 million, \$184.8 million, and \$192.8 million, and capitalized software development costs of \$102.5 million, \$49.3 million and \$40.7 million, for each of these periods respectively. We expense research and development expenses as incurred, and we capitalize software development costs incurred 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. Non-capitalizable research and development costs and other software maintenance costs are expensed as incurred.

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.

Additionally, many of our prospective clients have invested substantial personnel and financial resources to implement and integrate competing solutions to ours. As a consequence, they may be reluctant or unwilling to migrate to our solutions. Third-party developers may be reluctant to build application services on our platform since they have invested in other competing technology platforms.

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.

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. 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) athenahealth Inc., Cerner Corporation, Change Healthcare, Computer Programs and Systems Inc., Curaspan Health Group, CureMD Healthcare, eClinicalWorks, Enli Health Intelligence, Epic Systems Corporation, Evolent Health, GE Healthcare Technologies, GE Management Systems, Healthagen, Healthcatalyst, Homecare Homebase (part of Hearst Health network), IBM Watson Health, Kareo, McKesson Corporation, MEDHOST, Inc., Medical Information Technology, Inc. (Meditech), PracticeFusion, Inc., Philips Wellcentive, Premier, Quadramed, Quality Systems, Inc., Roper Industries, T-Systems, The Advisory Board Company, The Trizetto Group, Inc. (a division of Cognizant Technology Solutions, Inc.), Vitera Healthcare Solutions and Wellsoft Corporation.

Backlog

We had a contract backlog of \$4.1 billion and \$3.7 billion as of December 31, 2016 and 2015, respectively, an increase of \$400 million or 11%. Contract backlog represents the value of bookings and support and maintenance contracts that have not yet been recognized as revenue. Total contract backlog increased primarily due to an increase in bookings related to subscription-based agreements and managed services, such as outsourcing, private cloud hosting and revenue cycle management. We estimate that approximately 34% of our aggregate contract backlog as of December 31, 2016 will be recognized as revenue during 2017.

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.

During the year ended December 31, 2016, our domestic and international sales accounted for 97% and 3%, respectively, of our total revenue. Information regarding financial data by geographic segment is set forth in Note 15, "Geographic Information," to our consolidated financial statements included in Part II, Item 8, "Financial Statements and Supplementary Data" of this Form 10-K.

Employees

As of December 31, 2016, we had approximately 7,500 employees worldwide. None of our employees are covered by a collective bargaining agreement or are represented by a labor union.

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 the SEC. The public may read and copy any materials filed by us with the SEC at the SEC's Public Reference Room at 100 F Street, Room 1580, Washington, DC 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC at www.sec.gov. The contents of these websites are not incorporated into this filing. Furthermore, our references to the URLs for these websites are intended to be inactive textual references only.

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 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 is intensely competitive and is characterized by rapidly evolving technology and solution standards and user needs and the frequent introduction of new products and services. There can be no assurance that we capture additional opportunities in the replacement market. 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. 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.

We compete on the basis of several 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 become greater. 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 Electronic Health Record, such as an Allscripts 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 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 do so 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. In the United States, there are federal and state privacy and security laws; fraud and abuse laws, including anti-kickback laws and limitations on physician referrals; numerous quality measurement programs being adopted by our clients; and laws related to distribution and marketing, including off-label promotion of prescription drugs, which may be directly or indirectly applicable to our operations and relationships or the business practices of our clients. 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. 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.

In addition, the healthcare regulatory environment may change in a way that restricts our existing operations or our growth. The healthcare industry generally and the EHR industry specifically are expected to continue to undergo significant legal and regulatory changes for the foreseeable future, including in connection with the change in administrations following the 2016 U.S. presidential election, which could have an adverse effect on our business, financial condition and operating results. We cannot predict the effect of possible future enforcement, legislation and regulation.

Specific risks include, but are not limited to, risks relating 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. The healthcare industry is subject to laws and regulations on fraud and abuse which, 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. Several areas directly related to the use of EHRs or our other offerings may be discussed and/or acted upon by the investigatory bodies within federal and state governments. 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. 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 and disqualify us from providing services to clients doing business with government programs, all 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. As part of the operation of our business, we, 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. National standards and procedures under HIPAA include the "Standards for Electronic Transactions and Code Sets" (the "Transaction Standards"); the "Security Standards" (the "Security Standards"); and the "Standards for Privacy of Individually Identifiable Health Information" (the "Privacy Standards"). The Transaction Standards require the use of specified data coding, formatting and content in all specified "HealthCare Transactions" conducted electronically. The Security Standards require the adoption of specified types of security measures for certain electronic health information, which is called Protected Health Information ("PHI"). The Privacy Standards grant a number of rights to individuals as to their PHI and restrict the use and disclosure of PHI by "Covered Entities," defined as "health plans," "healthcare providers," and "healthcare clearinghouses." Entities that perform services to or on behalf of Covered Entities where PHI is or is likely to be accessed are called Business Associates.

We believe we are 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. We also believe that in certain business relationships we are a Business Associate. Recent modifications to the HIPAA Privacy, Security, Breach Notification, and Enforcement Rules impose additional obligations and burdens on Covered Entities, Business Associates and their subcontractors relating to the privacy and security of PHI. Much of the Privacy Standards and all of the Security Standards now apply directly to Business Associates and their subcontractors. These new rules may increase the cost of compliance and could subject us to additional enforcement actions, which could further increase our costs and adversely affect the way in which we do business.

In addition, certain provisions of the Privacy Standards and Security Standards apply to Business Associates when they create, access or receive PHI in order to perform a function or activity on behalf of a Covered Entity. Covered Entities and Business Associates must enter a written "Business Associate Agreement", containing specified written satisfactory assurances, consistent with the Privacy and Security Standards and HITECH and its implementing regulations, that the third party will safeguard PHI that it creates or accesses and will fulfill other material obligations. Most of our clients are Covered Entities, and we and our subcontractors function in many of our relationships as a Business Associate of those clients. Under the HIPAA Omnibus Rule, Business Associates may be held directly liable for violations of HIPAA. Therefore, we could face liability under our Business Associate Agreements and HIPAA and HITECH if we do not comply with our Business Associate obligations and applicable provisions of the Privacy and Security Standards and HITECH and its implementing regulations. 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.

Subject to the discussion set forth above, we believe that 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, second, to require us to enter into and comply with Business Associate Agreements with our Covered Entity clients, and third, to comply with HIPAA when it directly applies to us. For most Covered Entities, the deadlines for compliance with the Privacy Standards and the Transaction Standards occurred in 2003, and for the Security Standards in 2005, and for the HIPAA Omnibus Rule in 2013.

Additionally, Covered Entities that are providers are required to adopt a unique standard National Provider Identifier ("NPI"), for use in filing and processing healthcare claims and other transactions. Most Covered Entities were required to use NPIs in standard transactions by 2007. We have policies and procedures that we believe comply with federal and state confidentiality requirements for the handling of PHI that we receive and with our obligations under Business Associate Agreements. In particular, we believe that our systems and products are operated by us and capable of being used by our clients in compliance with the Transaction, Security and Privacy Standards and are capable of being used by or for our clients in compliance with the NPI requirements. If, however, we or our subcontractors, do not follow those procedures and policies, or they 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. In the event that HIPAA, HITECH or their implementing regulations change or are interpreted in a way that requires any material change to the way in which we do business, our business, financial condition and operating results could be adversely affected. 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, including a regulation enacted by the Drug Enforcement Association in mid-2010. 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 the near future. In addition, the HHS published its final “E-Prescribing and the Prescription Drug Program” regulations in 2005 (effective January 1, 2006), and final regulations governing the standards for electronic prescribing under Medicare Part D in 2008 (effective June 6, 2008) (the “ePrescribing Regulations”). These regulations are required by the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (“MMA”) and consist of detailed standards and requirements, in addition to the HIPAA Standard discussed above, for prescription and other information transmitted electronically in connection with a drug benefit covered by the MMA’s Prescription Drug Benefit. Further, in 2016, Congress passed the Comprehensive Addiction and Recovery Act, which contained components related to Prescription Drug Monitoring Programs and other elements that relate to use of our technologies.

Incentive programs to drive certain usage patterns of our solutions by eligible professionals began to increase in number starting in 2008 with the Medicare Improvements for Patients and Providers Act (“MIPPA”), which authorized payments to individual prescribers who were successful electronic prescribers, and the quality reporting incentive program that is now known as the Physician Quality Reporting System (“PQRS”). Both programs remained in effect for 2015, with both applying payment adjustments to non-participating providers. Beginning in 2009, HITECH’s EHR Incentive Program (also known as Meaningful Use) became the most prominent incentive program, reducing the impact the MIPPA and PQRS programs had in spurring greater adoption of healthcare IT. In 2016, CMS issued preliminary regulations for the Quality Payment Program (QPP), which implements the Medicare Access and CHIP Reauthorization Act (MACRA); for ambulatory clinicians, this further replaces the impact of MIPPA. In general, regulations in this area impose certain requirements which can be burdensome and evolve regularly, meaning that any potential benefits may be reversed by a newly-promulgated regulation that adversely affects 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 achieve certification, as well as the need of our clients to comply, as discussed above, and we expect this will continue for the foreseeable future.

We also are subject, as discussed above, 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.

Electronic Health Records. A number of important federal and state laws govern the use and content of EHRs, including fraud and abuse laws that may affect the donation 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. 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.

Under HITECH, 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. Many of our products have been certified as compliant EHRs or modules, in accordance with the applicable certification criteria set forth by the Secretary of HHS, including the 2015 EHR Certification Edition criteria (the “2015 Edition”). Such certification does not represent an endorsement of our products or modules by HHS or a guaranty of the receipt of incentive payments by our clients. 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.

We have seen new, complex regulatory requirements related to Stage 3 “Meaningful Use” certification and voluntary regulations released within the 2015 Edition criteria. Even if our clients are not obligated to upgrade their products to remain compliant with Meaningful Use, they may desire to do so, and our failure to cause our products to maintain the applicable certifications could put us at a disadvantage to our competitors’ products. The rules associated with the third stage of Meaningful Use were adjusted for some but not all of our clients through the process of promulgating regulations associated with the MACRA, adding complexity as we now work to support the two different programs. Going forward, if the two separate programs with different requirements remain in place, it may lead to challenges with development and deployment to clients similar to what was experienced by the industry in 2014. We may incur additional costs in designing new upgrades and products and redesigning existing products to comply with these new requirements, which could also divert resources from our other research and development priorities.

The MACRA and resulting regulations are also anticipated to lead our clients to request advanced quality measurement and analytic functionality within our products in order to be able to participate in the new payment models that will be launched (Merit-based Incentive Payment System and Advanced Alternative Payment Models). Similar programs have also been created and are being expanded by commercial payers and non-governmental organizations, such as the National Committee for Quality Assurance, which oversee the Patient Centered Medical Home initiatives. The related product requirements are continually evolving and are not coordinated by these parties amongst themselves, which could cause us to expend additional resources to assist our clients.

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.

As discussed above, the HIPAA Transaction and Security Standards also affect our claims transmission services, since those services must be structured and provided in a way that supports our clients' HIPAA compliance obligations. Furthermore, to the extent that there is some type of information security breach, it could have a material adverse effect on our business.

Medical Devices. Certain computer software products are regulated as medical devices under the Federal Food, Drug and Cosmetic Act. The 21st Century Cures legislation passed in December, 2016, did clarify the definition of a medical device to exclude health information technology such as Electronic Health Records; 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 penalties—each of which could have an adverse effect on our business.

Health Reform. The activity related to the repeal, repair and/or replacement of the Affordable Care Act, including any changes resulting from continued judicial and congressional challenges to certain aspects of the law, and the 2015 repeal of the Sustainable Growth Rate and replacement with the MACRA may have an impact on our business. The Affordable Care Act, passed in 2010, contained various provisions which have impacted us and our clients, and any replacement or adjustment of that law may change requirements related to our products or how our clients use them, as well as reimbursement available to our clients. The QPP, which implements the MACRA, is oriented around the collection and analysis of quality measurement data from our clients and expansion of programs such as ACOs. These may have a positive impact by requiring the expanded use of EHRs and analytics tools to participate in certain federal programs, for example, while others, such as those mandating reductions in reimbursement for certain types of providers, may have a negative impact by reducing the resources available to purchase our products. Increases in fraud and abuse enforcement and penalties may also adversely affect participants in the healthcare sector, including us.

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.

The government had signaled, under the previous administration, increased enforcement activity targeting healthcare fraud and abuse, which could adversely impact our business, either directly or indirectly. This decision may remain in effect or be changed by the new administration. To the extent that our clients, most of who are providers, may be affected by this increased enforcement environment, our business could correspondingly be affected. 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. Additionally, certain safe harbors to the federal anti-kickback statute and corresponding exceptions to the federal Ethics in Patient Referrals Act, known as the Stark Law, may continue to alter the competitive landscape. These safe harbors and exceptions are intended to accelerate the adoption of electronic prescription systems and EHR systems, and therefore provide new and attractive opportunities for us to work with hospitals and other donors who wish to provide our solutions to physicians. At the same time, such safe harbors and exceptions may result in increased competition from providers of acute EHR solutions, whose hospital clients may seek to donate their existing acute EHR solutions to physicians for use in ambulatory settings.

If the healthcare information technology market fails to continue to develop as quickly as expected, our business, financial condition and operating results could be materially and adversely affected.

The electronic healthcare information market is rapidly evolving. A number of market entrants have introduced or developed products and services that are competitive with one or more components of the solutions we offer. We expect that additional companies will continue to enter this market, especially in response to recent legislative actions. In new and rapidly evolving industries, there is significant uncertainty and risk as to the demand for, and market acceptance of, recently introduced products and services. Because the markets for our products and services are new and evolving, we are not able to predict the size and growth rate of the markets with any certainty. If markets fail to develop, develop more slowly than expected or become saturated with competitors, our business, financial condition and operating results could be materially and adversely impacted.

We may not see the benefits of government programs initiated to accelerate the adoption and utilization of healthcare IT.

While government programs have been initiated to improve the efficiency and quality of the healthcare sector, including expenditures to stimulate business and accelerate the adoption and utilization of healthcare technology, we may not receive any more of those funds. For example, the passage of HITECH authorized approximately \$30 billion in expenditures, including discretionary funding, to further the adoption of EHRs. However, with most of those funds expended and taking into consideration the currently conservative fiscal environment within the United States Congress, there can be no certainty that any additional planned financial incentives, if made, will be made in regard to our services, nor can there be any assurance that HITECH and/or the MACRA will not be repealed or amended in a manner that would be unfavorable to our business. We also cannot predict the speed at which physicians will adopt EHR systems in response to such government incentives, whether physicians will select our products and services, or whether physicians will implement an EHR system at all, whether in response to government funding or at all. If the expected outcomes with respect to government programs do not materialize, or if physicians do not respond to such programs as expected, then this could materially and adversely impact our revenue growth, financial condition and operating results.

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. We will likely incur increased development costs in delivering solutions to upgrade our software and healthcare devices to be in compliance with these varying and evolving standards, and delays may result in connection therewith. If our applicable products or services are not consistent with these evolving standards, 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

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 a sufficient amount of personnel, systems, equipment, technology and other resources as are 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 towards 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 have acquired and expect to acquire new companies, investments or technologies, which are subject to significant risks.

From time to time, we have made investments in, or acquisitions of, businesses, joint ventures, new services and technologies, and other intellectual property rights (including the Netsmart Transaction). We expect that we will continue to make such investments and acquisitions in the future.

Our investments and acquisitions (including the Netsmart Transaction) 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, the success of any prior or future acquisitions will depend, in part, on our ability to integrate our existing businesses with those of the acquired company, including the integration of 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 company's. 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.

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 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 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.

Legal standards relating to the validity, enforceability and scope of protection of intellectual property rights are uncertain and still 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 those discussed under Note 16, "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 to seek 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 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 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 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 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.

If our security is breached, we could be subject to liability, 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 a deliberate or unintentional incident 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. Similarly, 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. We believe that, in recent years, companies in our industry have been targeted by such events with increasing frequency, primarily due to the increasing value of healthcare-related data.

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 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 or host sensitive information for our clients. While we have contractual or other mechanism 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.

Recently, other companies and government agencies have experienced many high profile incidents involving data security breaches by entities that transmit and store sensitive information. Lawsuits resulting from these security breaches have sought very significant monetary damages, although many of these suits have yet to be resolved. 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.

We may be forced 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.

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

Our business model depends on our success with maintaining our existing clients and selling new and incremental products and services to our 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 business is subject to the risks of global operations.

We operate in several countries outside of the United States, including significant operations in India and Israel, 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; 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.

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 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. Indicators that are considered include, but are not limited to, significant changes in performance relative to expected operating results, negative economic trends, or a significant decline in our stock price. 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.

We are consolidating the financial results of Netsmart in our consolidated financial statements based on certain factors that require consolidation accounting treatment. If those factors change in the future, it may require us to account for Netsmart differently.

Our financial statements are prepared on the basis that Netsmart meets the requirements for consolidation accounting treatment. As a result, we have reflected 100% of the financial results of Netsmart in our consolidated financial statements following the consummation of the transaction.

Future changes in the capital or voting structure of Netsmart or our contractual arrangements with Netsmart could change our conclusions regarding whether Netsmart meets the requirements for consolidation accounting treatment. If this is the case, the presentation of the information in our financial statements would change, which could be perceived negatively by investors, and could have an adverse effect on the market price of our common stock.

We rely on Netsmart to timely deliver important financial information to us. In the event that the financial information is inaccurate, incomplete, or not timely, we would not be able to meet our financial reporting obligations as required by the SEC.

We require Netsmart to provide financial information in order to prepare our consolidated financial statements. In the event that the financial information is inaccurate, incomplete, or not timely, we would not be able to meet our financial reporting obligations as required by the SEC.

Netsmart is highly leveraged and we have entered into contractual arrangements with Netsmart that subject us to certain legal and financial terms that could adversely affect us.

In connection with the formation of Netsmart, Netsmart incurred \$562 million of indebtedness. While Netsmart's debt is non-recourse to us and our wholly-owned subsidiaries, Netsmart's level of indebtedness could have important consequences to Netsmart's business, including making it difficult for Netsmart to satisfy its obligations, increase its vulnerability to general adverse economic and industry conditions, require it to dedicate a substantial portion of its cash flow from operations to payments on its indebtedness, and otherwise place it at a competitive disadvantage compared to its competitors who have less indebtedness, all of which could negatively affect our investment in Netsmart.

Netsmart may also be able to incur substantial additional indebtedness in the future. If new indebtedness is added to its current indebtedness levels, the related risks that we face could intensify.

Netsmart's credit facility contain, and any future indebtedness would likely contain, a number of restrictive covenants that impose significant operating and financial restrictions on it, including restrictions on its ability to take actions that may be in its, and our, best interests. Additionally, Netsmart's credit facility requires it to satisfy and maintain specified financial ratios. Netsmart's ability to meet those financial ratios can be affected by events beyond its, and our, control, and Netsmart 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 Netsmart's credit facility, which could negatively affect our investment in Netsmart.

Netsmart is governed by a Board of Managers (the "Netsmart Board"), of which members appointed by Allscripts hold three votes, members appointed by GI Netsmart Holdings LLC ("GI") hold three votes and one member, who is the Chief Executive Officer of Netsmart, holds one vote. Any action to be taken by the Netsmart Board must be taken by members holding a majority of votes. The Netsmart Board manages the business and affairs of Netsmart, subject to the Allscripts members' right to approve Netsmart's annual operating budget, and provided that certain significant actions to be taken by Netsmart require the consent of both Allscripts and GI, so long as they each maintain a minimum threshold ownership in Netsmart. As a result, with respect to some matters we could be outvoted by the other members of the Netsmart Board. If the Netsmart Board or GI make decisions that affect Netsmart which we disagree with and which we cannot block or override, the future success of Netsmart may be impaired and any amount that we have invested in it may be at risk.

GI's investment in Netsmart is in the form of Class A Preferred Units of Netsmart, which entitle GI, in certain liquidation events (including a sale of Netsmart), to the greater of (i) an 11% preferred return (compounded annually) and (ii) the as-converted value of Class A Common Units of Netsmart. Our investment in Netsmart is in the form of Class A Common Units of Netsmart. Additionally, GI has the right to cause Netsmart to redeem its equity upon the earlier of the fifth anniversary of the formation of Netsmart or a change in control of Allscripts.

Our investment in Netsmart is also subject to certain restrictions on our ability to transfer our interests in Netsmart and, under certain circumstances, we may be forced to sell our interests in Netsmart. During the first two years of Netsmart, neither we nor GI are permitted to transfer their equity to a third party without the other party's consent. In order for a party to cause a sale of Netsmart (i.e., a party's "drag-along right") under Netsmart's operating agreement, prior to the fifth anniversary of the formation of Netsmart, both Allscripts and GI must agree and act together and, after the fifth anniversary, only GI would be entitled to initiate the drag-along right.

Risks Related to Our Common Stock

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 has 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 is 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 1.25% Cash Convertible Senior Notes (the “1.25% 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 1.25% Notes;
- if a change of control of our company occurs, the Indenture may permit holders of the 1.25% Notes to require us to repurchase all or a portion of the 1.25% Notes, and may also require us to pay a cash make-whole premium 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 2015 Credit Agreement (as defined under Note 6, “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 2015 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 2015 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 2015 Credit Agreement or the Indenture.

Upon the occurrence of an event of default, 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 2015 Credit Agreement, and the lenders under the 2015 Credit Agreement could proceed against such collateral if we were unable to timely repay these amounts.

The accounting for the 1.25% Notes will result in our having to recognize interest expense significantly greater than the stated interest rate of the notes and may result in volatility to our Consolidated Statements of Operations.

We are obligated to settle any conversions of the 1.25% Notes entirely in cash. In accordance with GAAP, the conversion option that is part of the 1.25% Notes is accounted for as a derivative pursuant to accounting standards relating to derivative instruments and hedging activities. In general, this resulted in an initial valuation of the conversion option separate from the debt component of the 1.25% Notes, resulting in an original issue discount. The original issue discount will be accreted to interest expense over the term of the 1.25% Notes, which will result in an effective interest rate reported in our financial statements significantly in excess of the stated coupon rate of the 1.25% Notes. This accounting treatment will reduce our earnings and could adversely affect the price at which our common stock trades.

For each financial statement period after the issuance of the 1.25% Notes, a hedge gain (or loss) will be reported in our financial statements to the extent the valuation of the conversion option changes from the previous period. The 1.25% Call Option (as defined under Note 6, "Debt," to our consolidated financial statements included in Part II, Item 8, "Financial Statements and Supplementary Data" of this Form 10-K) is also accounted for as a derivative instrument, substantially offsetting the gain (or loss) associated with changes to the valuation of the conversion option. This may result in increased volatility to our operating results.

The convertible note hedge and warrant transactions we entered into in connection with the issuance of our 1.25% Notes may not provide the benefits we anticipate, and may have a dilutive effect on our common stock.

Concurrently with the issuance of the 1.25% Notes, we entered into the 1.25% Call Option with, and issued the 1.25% Warrants (as defined under Note 6, “Debt,” to our consolidated financial statements included in Part II, Item 8, “Financial Statements and Supplementary Data” of this Form 10-K) to certain of the initial purchasers of the 1.25% Notes. We entered into the 1.25% Call Option transaction with the expectation that it would offset potential cash payments in excess of the principal amount of the 1.25% Notes upon conversion of the 1.25% Notes. The hedge counterparties are financial institutions or affiliates of financial institutions, and we are subject to the risk that these hedge counterparties may default under the 1.25% Call Option transactions. Our exposure to the credit risk of the hedge counterparties is not secured by any collateral. If one or more of the hedge counterparties to the 1.25% Call Option transactions becomes subject to any insolvency proceedings, we will become an unsecured creditor in those proceedings with a claim equal to our exposure at the time under those transactions. Our exposure will depend on many factors but, generally, the increase in our exposure will be correlated to the increase in our stock price and in the volatility of our stock price. In addition, upon a default by one of the hedge counterparties, we may suffer adverse tax consequences and dilution with respect to our common stock. We can provide no assurances as to the financial stability or viability of any of the hedge counterparties.

Separately, we also issued the 1.25% Warrants to the hedge counterparties. The 1.25% Warrants could separately have a dilutive effect to the extent that our stock price, as measured under the terms of the transaction, exceeds the strike price of the 1.25% Warrants.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Our corporate headquarters are located in Chicago, Illinois. As of December 31, 2016, we leased 1.3 million square feet of building space worldwide. Our facilities are primarily located in the United States, although we also maintain facilities in 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

We hereby incorporate by reference Note 16, “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.

Item 4A. Executive Officers

The following sets forth certain information regarding our executive officers as of February 22, 2017, based on information furnished by each of them:

Name	Age	Position
Paul Black	58	Chief Executive Officer
Brian Farley	47	Senior Vice President, General Counsel and Corporate Secretary
James Hewitt	50	Executive Vice President, Solutions Development
Dennis Olis	54	Senior Vice President, Strategic Initiatives
Richard Poulton	51	President
Melinda Whittington	49	Chief Financial Officer

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, 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 of Truman Medical Centers since 2001.

Brian Farley has served as our Senior Vice President, General Counsel and Corporate Secretary since May 2013. From 2005 to 2013, Mr. Farley served in various positions at Motorola Mobility LLC, a provider of mobile communication devices and video and data delivery solutions. His most recent role at Motorola Mobility LLC was Corporate Vice President and General Counsel of Motorola’s Home business.

James Hewitt has served as our Executive Vice President, Solutions Development since October 2015. Mr. Hewitt served as our Senior Vice President, Solutions Development from March 2013 to September 2015. From 2006 to 2013, Mr. Hewitt served as Chief Information Officer of Springfield Clinic, a multi-specialty health clinic. From 2009 to 2013, Mr. Hewitt also served as Chief Executive Officer of Jardogs, the developer of FollowMyHealth, a highly-rated, cloud-based patient engagement solutions provider, which we acquired in 2013.

Dennis Olis has served as our Senior Vice President, Strategic Initiatives since November 2016. From November 2012 to November 2016, Mr. Olis served as Senior Vice President, Operations. Prior to joining, Mr. Olis was employed by Motorola, Inc. and Motorola Mobility LLC, a provider of mobile communication devices and video and data delivery solutions, for over 28 years. His most recent role at Motorola was Corporate Vice President, Mobile Device Operations. From 2007 until 2009, he was Corporate Vice President of Finance, Research & Development, Portfolio Management, and Planning at Motorola.

Richard Poulton has served as our President since October 2015. From October 2012 to March 2016, Mr. Poulton served as our Chief Financial Officer. From October 2012 to September 2015, Mr. Poulton also served as our Executive Vice President. 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.

Melinda Whittington has served as Chief Financial Officer since March 2016. Ms. Whittington served as Senior Vice President of The Kraft Heinz Company, a food and beverage company, from July 2015 to October 2015; Senior Vice President, Corporate Controller and principal accounting officer of Kraft Foods Group, Inc., a food and beverage company, from February 2015 to June 2015; and Vice President, Corporate Controller and principal accounting officer of Kraft Foods Group, Inc. from January 2014 to January 2015. Prior to joining Kraft, Ms. Whittington served as Finance Director, Global Home Products, of The Procter & Gamble Company, a consumer packaged goods company, from July 2013 to January 2014. Ms. Whittington joined Procter & Gamble in 1993 and served in a variety of finance leadership roles, including Finance Director, North America Home Care and Global Surface Care Brand Franchise, from 2010 to 2013.

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.” The following table sets forth, for the periods indicated, the high and low intra-day sales prices per share of our common stock as reported on NASDAQ.

	High	Low	Last
Fiscal Year 2016 Quarter Ended			
December 31, 2016	\$ 13.51	\$ 9.80	\$ 10.21
September 30, 2016	\$ 15.17	\$ 12.40	\$ 13.17
June 30, 2016	\$ 14.06	\$ 11.67	\$ 12.70
March 31, 2016	\$ 14.96	\$ 11.47	\$ 13.21
Fiscal Year 2015 Quarter Ended			
December 31, 2015	\$ 15.78	\$ 12.07	\$ 15.38
September 30, 2015	\$ 15.41	\$ 12.07	\$ 12.40
June 30, 2015	\$ 14.66	\$ 11.63	\$ 13.68
March 31, 2015	\$ 13.13	\$ 11.33	\$ 11.96

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

On November 17, 2016, we announced that our Board approved a new stock purchase program under which we may repurchase up to \$200 million of our common stock through December 31, 2019. The new stock program supersedes the previously existing stock repurchase program, which was announced on November 30, 2015 and authorized us to repurchase up to \$150 million of our common stock through December 31, 2018. During 2016, we purchased 2.2 million shares of our common stock under the new program for a total of \$24 million and 8.1 million shares of our common stock under the prior program for a total of \$97 million. Any share 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.

The following table summarizes the stock repurchase activity for the three months ended December 31, 2016 and the approximate dollar value of shares that may yet be purchased pursuant to our current stock repurchase program:

(In thousands, except per share amounts)

Period (Based on Trade Date)	Total Number Of Shares Purchased	Average Price Paid Per Share	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
10/01/16—10/31/16	0	\$ 0.00	0	\$ 79,029
11/01/16—11/30/16	3,906	\$ 10.61	3,906	\$ 184,606
12/01/16—12/31/16	803	\$ 10.73	803	\$ 175,995
	<u>4,709</u>	\$ 10.63	<u>4,709</u>	

Dividend Policy

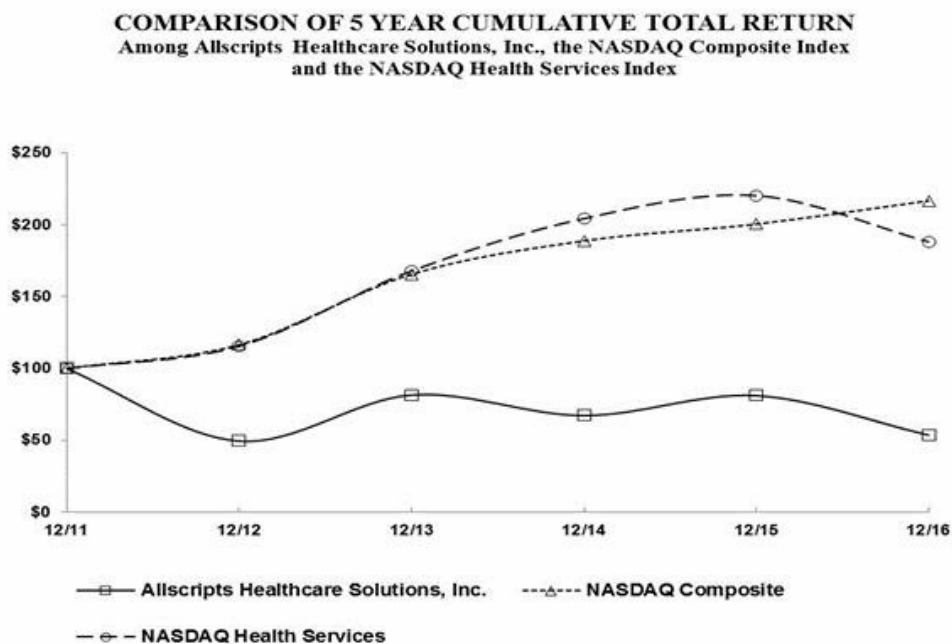
We have not declared or paid cash dividends on our shares of common stock for the last two years and currently do not intend to declare or pay cash dividends on our shares of common stock in the foreseeable future. Any future determination to pay cash dividends will be at the discretion of our Board 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 6, "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, 2017, there were 380 registered stockholders 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, 2011 through December 31, 2016, 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.



	2011	2012	2013	2014	2015	2016
Allscripts Healthcare Solutions, Inc.	100.00	49.74	81.63	67.42	81.20	53.91
NASDAQ Composite	100.00	116.41	165.47	188.69	200.32	216.54
NASDAQ Health Services	100.00	115.47	167.94	204.39	220.44	188.28

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, 2016, 2015 and 2014 and the balance sheet data as of December 31, 2016 and 2015 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, 2013 and 2012 and the balance sheet data as of December 31, 2014, 2013 and 2012 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.

(In thousands, except per share amounts)	Year Ended December 31,				
	2016(1)	2015(2)	2014	2013(3)	2012
Consolidated Statements of Operations Data:					
Revenue	\$ 1,549,899	\$ 1,386,393	\$ 1,377,873	\$ 1,373,061	\$ 1,446,325
Cost of revenue	878,860	805,828	831,889	838,605	839,790
Gross profit	671,039	580,565	545,984	534,456	606,535
Selling, general and administrative expenses	392,865	339,175	358,681	419,599	384,370
Research and development	187,906	184,791	192,821	199,751	162,158
Asset impairment charges	4,650	1,544	2,390	11,454	11,101
Amortization of intangible and acquisition-related assets	25,847	23,172	31,280	31,253	35,635
Income (loss) from operations	59,771	31,883	(39,188)	(127,601)	13,271
Interest expense	(68,141)	(31,396)	(29,297)	(28,055)	(16,187)
Other income (expense), net	1,087	2,183	766	7,310	(14,544)
Equity in net loss of unconsolidated investments	(7,501)	(2,100)	(398)	0	0
Income (loss) before income taxes	(14,784)	570	(68,117)	(148,346)	(17,460)
Income tax benefit (provision)	17,814	(2,626)	1,664	44,320	16,307
Net income (loss)	3,030	(2,056)	(66,453)	(104,026)	(1,153)
Less: Net income attributable to non-controlling interest	(146)	(170)	0	0	0
Less: Accretion of redemption preference on redeemable convertible non-controlling interest - Netsmart	(28,536)	0	0	0	0
Net loss attributable to Allscripts Healthcare Solutions, Inc. stockholders	\$ (25,652)	\$ (2,226)	\$ (66,453)	\$ (104,026)	\$ (1,153)
Loss per share - basic and diluted attributable to Allscripts Healthcare Solutions, Inc. stockholders	\$ (0.14)	\$ (0.01)	\$ (0.37)	\$ (0.59)	\$ (0.01)

(In thousands)	As of December 31,				
	2016	2015	2014(4)	2013(4)	2012(4)
Consolidated Balance Sheet Data:					
Cash, cash equivalents and marketable securities	\$ 96,610	\$ 116,873	\$ 54,478	\$ 64,283	\$ 105,662
Working capital (deficit)	(62,744)	25,389	(34,183)	(32,688)	(2,053)
Goodwill and intangible assets, net	2,665,455	1,570,247	1,604,108	1,645,556	1,466,350
Total assets	3,832,159	2,681,948	2,464,330	2,548,151	2,284,753
Long-term debt	1,294,771	612,405	539,193	533,603	356,769
Redeemable convertible non-controlling interest - Netsmart	387,685	0	0	0	0
Total stockholders’ equity	1,273,201	1,419,073	1,284,220	1,318,145	1,284,341

- Results of operations for the year ended December 31, 2016 include the results of operations of a third party for the period subsequent to the date of acquisition, which was December 2, 2016; of HealthMEDX for the period subsequent to the date of acquisition, which was October 27, 2016; of a third party for the period subsequent to the date of acquisition, which was October 14, 2016; of a third party for the period subsequent to the date of acquisition of a majority interest, which was September 8, 2016; and of Netsmart for the period subsequent to the date of the acquisition, which was April 19, 2016.
- Results of operations for the year ended December 31, 2015 include the results of operations of a third party for the period subsequent to the date of acquisition of a majority interest, which was April 17, 2015.
- Results of operations for the year ended December 31, 2013 include the results of operations of dbMotion and Jardogs for the period subsequent to the date of the acquisitions, which was, in each case, March 4, 2013.
- The balance sheet data as of December 31, 2014, 2013 and 2012 has been restated and reflects the retrospective adoption of ASU 2015-03, *Simplifying the Presentation of Debt Issuance Costs* and ASU 2015-17, *Income Taxes (Topic 740): Balance Sheet Classification of Deferred Taxes*.

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 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”), connectivity, private cloud hosting, outsourcing, analytics, patient engagement, clinical decision support and population health management. During the second quarter of 2016, we partnered with Netsmart, Inc. to expand our presence in the health and human services sector. In particular, in April 2016, we completed the merger of our Homecare™ business with Netsmart, Inc., a well-established behavioral health technology business. As a result, the new joint business entity (“Netsmart”) became one of the largest human services and post-acute technology providers in healthcare.

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 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 increasing pressure to demonstrate the delivery of high quality care at lower costs. Population health management, analytics, connectivity based on open APIs, and patient engagement are strategic imperatives that can help address these challenges. In the United States, for example, such initiatives will be critical tools for success under the framework of the new Quality Payment Program (“QPP”), launched by CMS in response to the passage of the Medicare Access and CHIP Reauthorization Act (“MACRA”). As healthcare providers and payers migrate from volume-based to value-based care delivery, interoperable solutions that are connected to the consumer marketplace are the key to market leadership in the new healthcare reality.

In recent years, we took several significant steps to solidify and advance our population health management solutions through both acquisition and internal development efforts. We acquired dbMotion, a company that we had jointly funded as a startup and had been an investor in since 2004, a leading supplier of community health solutions, and Jardogs, the developer of FollowMyHealth®, a cloud-based patient engagement solutions provider. We further advanced our population health management capabilities by introducing innovative additional features, functionality and enhancements to our solutions in the areas of connectivity, collaboration and data analytics. Taken together, we believe our solutions are delivering value to our clients by providing them with powerful connectivity, patient engagement and care coordination tools, enabling United States users to better comply with the evolving EHR Incentive Program (a.k.a. Meaningful Use) (as described below) and successfully participate in other advanced payment model programs. Population health management is commonly viewed as one of the critical next frontiers in healthcare delivery, and we expect this rapidly emerging 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 is in the midst of a period of rapid evolution, primarily due to new laws and regulations, as well as changes in industry standards. Various incentives that exist today (including the EHR Incentive Program and alternative payment models that reward high value care delivery) are rapidly moving health care toward a time where EHRs are as common as practice management systems in all provider offices. As a result, we believe that legislation, such as the aforementioned MACRA, as well as other government-driven initiatives, possibly 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.

Given that we expect CMS will release further future regulations related to EHRs, even as we comply with the previously published Final Rules associated with the QPP, as well as Stage 3 of the Meaningful Use program for those organizations not eligible for the QPP, our industry is preparing for additional areas in which we must execute compliance. Similarly, our ability to achieve applicable product certifications, any changing frequency of the Office of the National Coordinator for Health Information Technology (“ONC”) certification program, and the length, if any, of additional related development and other efforts required to meet regulatory standards could materially impact our capacity to maximize the market opportunity. All of our market-facing EHR solutions, as well as the Allscripts EDTM, dbMotion and FollowMyHealth® products, have been or will soon be certified as 2015 Edition-compliant by an ONC-Authorized Certification Body, in accordance with the applicable provider or hospital certification criteria adopted by the United States Secretary of Health and Human Services.

Conversations around the Medicare Sustainable Growth Rate reimbursement model concluded in the United States Congress in 2015 when the MACRA was passed, which further encouraged the adoption of health IT necessary to satisfy new requirements more closely associating the report of quality measurements to Medicare payments. With the finalization of the rule for the QPP in 2017, providers accepting payment from Medicare will have an opportunity to select one of two payment models: the Merit-based Incentive Payment System (“MIPS”) or an Advanced Alternative Payment Model (“APM”), as allowed by the regulation. These programs will require increased reporting on quality measures, which will likely be changed, but not abolished, by the new Secretary of Health and Human Services, Dr. Tom Price; additionally, the MIPS will consolidate several preexisting incentive programs, including Meaningful Use and Physician Quality Reporting System (“PQRS”), under one umbrella, as required by statute. The implementation of this new law could drive additional interest in our products among providers who were not eligible for or chose not to participate in the HITECH incentive program but now see sufficient reason to adopt EHRs and other health information technologies or by those needing to purchase more robust systems to help them be successful under the more complex MACRA requirements. Regulations released in the fourth quarter of 2016 in response to the MACRA also addressed, at least in part, current ambiguities among physician populations and healthcare organizations, enabling them to make strategic decisions about the purchase of analytic software or other solutions important to comply with the new law and associated regulations. Such regulations are expected to be released on an annual basis.

We believe that HITECH resulted in additional related new orders for our EHR products. Large physician groups will continue to purchase and enhance their use of EHR technology; however, the number of very large practices with over 100 physicians that have not yet acquired such technology is quickly decreasing. Such practices may choose to replace older EHR technology in the future as regulatory requirements (such as those related to QPP-related programs for Alternative APMs) and business realities dictate the need for updates and upgrades, as well as additional features and functionality. Additionally, we believe that a number of companies who certified their EHR products for Stage 1 or Stage 2 of Meaningful Use will demonstrate that they have not been able to comply with the requirements for the 2015 Edition, which continues to present additional opportunities in the replacement market, particularly in the smaller physician space. As the incentive payments have begun to wind down and a possible shift in policies related to payment adjustments from the new presidential administration in the United States is revealed, the role of commercial payers and their continued expansion of alternative payment models, as well as the anticipated growth in Medicaid payment models, is expected to provide a different motivation for purchase and expansion.

We also continue to see activity in local community-based buying whereby individual hospitals, health systems and integrated delivery networks are subsidizing the purchase of EHR licenses or related services for local, affiliated physicians and across their employed physician base as part of an offer to leverage buying power and help those practices take advantage of the HITECH incentives and other 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 the incentive program, while the subsidizing health system expands connectivity within the local provider community. We believe that the 2013 extension of the Stark and Anti-kickback exceptions, which allowed hospitals and other organizations to subsidize the purchase of EHRs, will contribute to the continuation of this market dynamic. We also believe that new orders driven by the MACRA legislation and related to EHR and community-based activity will continue to come in as physicians in those small- and medium-sized practices who have not yet participated seek to avoid payment adjustments stemming from the QPP. The associated challenge we face is to successfully position, sell, implement and support our products to the hospital, health system or integrated delivery network that is subsidizing its affiliated physicians. We believe the community programs we have in place will aid us in penetrating this market.

We believe we have taken and continue to take the proper steps to maximize the opportunity presented by HITECH and the QPP. 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 which may impact us and our clients. The current environment in which a new Administration and Congress remain unclear as to their next steps in repealing or adjusting the PPACA, as well as some of their other healthcare priorities, creates uncertainty for us and for our clients for the near term. Some of the legal provisions currently in place or which will be drafted in the coming months may have a positive impact by requiring the expanded use of EHRs, quality measurement and analytics tools to participate in certain federal, state or private sector programs, while others, such as the repeal of or any adjustments made to the PPACA by the new Congress, those

mandating reductions in reimbursement for certain types of providers, decreasing insurance coverage of patients, 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 may also adversely affect participants in the healthcare sector, including us. Generally, Congressional oversight of EHRs and health information technology has increased in recent years, including a specific focus on perceived interoperability failures in the industry, including any contributive factors to such failures, which could impact our clients and our business. This Congressional focus, however, may decrease in the midst of a larger focus on repealing and replacing the Affordable Care Act.

Starting October 1, 2015, all entities covered by HIPAA were required to have upgraded to the tenth revision of the International Statistical Classification of Diseases and Related Health Problems promulgated by the World Health Organization, also known as ICD-10, for use in reporting medical diagnoses and inpatient procedures. These changes in coding standards presented a significant opportunity for our clients in the United States to get to the most advanced versions of our products, but also posed a challenge due to the scale of the challenge for the industry, particularly among smaller independent physician practices. New payment and delivery system reform programs, as have been launched related to the Medicare program, are also increasingly being rolled out at the state level through Medicaid administrators, as well as through the private sector, presenting additional opportunity for us to provide software and services to our clients who participate.

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.

During 2016, in an effort to further streamline and align our operating structure around our key ambulatory, acute and population health management solutions, we made several changes to our organizational and reporting structure. These changes included (i) the separation of the former Touchworks strategic business unit and its dedicated leadership team into acute and ambulatory businesses, (ii) the transfer of several ancillary analytics-type products between our existing Clinical and Financial Solutions and Population Health reportable segments, and (iii) the establishment of the FollowMyHealth® and EPSi™ business units. Furthermore, the establishment of Netsmart in April 2016 resulted in the formation of a new operating and reportable segment. After the finalization of these changes to our organizational and reporting structure, as of December 31, 2016, we had seven operating segments, which are aggregated into three reportable segments: (i) Clinical and Financial Solutions, (ii) Population Health and (iii) Netsmart.

Summary of Results

During 2016, we remained focused on our key strategic, financial and operational imperatives aimed at driving higher client satisfaction, improving our competitive position by expanding the depth and breadth of our products and, ultimately, positioning Allscripts for sustainable long-term growth both domestically and globally. In that regard, we had success across several key areas that we expect will drive our future growth: EHR replacement market, population health management, international markets, provision of high value-added, strategic services to our clients and precision medicine. During 2016, as the healthcare industry continues to transition to a value-based care model, we continued to expand our client base for our Sunrise integrated platform and our population health management portfolio CareInMotion™ platform, which enable such transition for our clients. We also continued to look for opportunities to streamline our operations and made some organizational changes related to our acute, ambulatory and population health business units.

While there are still opportunities for improving our operating leverage, the results of our continued efforts to streamline operations are being manifested in terms of improved profitability and growth in cash flows from operations and bookings. In particular, the benefits of improving operating leverage are visible in our gross profit, which increased by 16% to \$671 million as compared with \$581 million for the prior year. Additionally, cash flows from operations increased by \$57 million to \$269 million during the year ended December 31, 2016 compared with \$212 million during the year ended December 31, 2015. On April 19, 2016, we formed a joint business entity with GI Netsmart Holdings LLC, a Delaware limited liability company, which subsequently acquired Netsmart, Inc., a Delaware corporation. In addition, Allscripts contributed its Homecare™ business to this joint business entity and merged it with Netsmart, Inc., a well-established behavioral health technology business. As a result, Netsmart became one of the largest healthcare IT companies serving the health and human services sector, which includes behavioral health, public health and child and family services. The financial results of Netsmart were consolidated with Allscripts financial results starting on April 19, 2016. During 2016, we also acquired a controlling interest in several third parties which offered solutions that broadened our portfolio.

We believe that the progress we made during 2016 in continuing to transform our company in response to ever changing client, regulatory and industry demands enabled us to enhance our competitive position and expand our opportunities for future growth.

Our bookings, which reflect the value of executed contracts for software, hardware, other client services, private cloud hosting, outsourcing and subscription-based services, totaled \$1,311 million for the year ended December 31, 2016, which represented an

increase of 18% over the comparable prior year amount of \$1,111 million. Excluding Netsmart bookings, bookings totaled \$1,189 million for the year ended December 31, 2016, or a 7% increase compared with the year ended December 31, 2015. The growth in bookings compared with the prior year was primarily driven by bookings related to a large new multi-year relationship with a commercial partner that was executed during 2016 as well as higher bookings from sales of our Sunrise suite and population health management portfolio CareInMotion™ platform. We also experienced growth in private cloud hosting and revenue cycle management services bookings, which were partly offset by lower outsourcing services bookings compared with 2015, which included several large outsourcing deals. The composition of our bookings for the year ended December 31, 2016 was 52% of software delivery-related bookings and 48% of client services-related bookings. The corresponding ratios for the year ended December 31, 2015 were 51% and 49%, respectively.

On November 17, 2016, we announced that our Board approved a new stock repurchase program under which we may repurchase up to \$200 million of our common stock over three years, expiring on December 31, 2019 or such earlier time that the total dollar authorized amount has been used. During 2016, we used a portion of our operating cash flows to repurchase a total of \$121 million of our common stock under the new and prior stock repurchase programs.

Revenues and Expenses

Revenues are derived 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.

Cost of revenue consists primarily of salaries, bonuses 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, bonuses 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, bonuses 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 our decision to discontinue several software development projects, the recognition of an other-than-temporary impairment of one of our cost method investments and the write-off of certain deferred costs that were determined to be unrealizable.

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

Interest expense consists primarily of interest on the 1.25% Notes, outstanding debt under our Senior Secured Credit Facility and the Netsmart Revolving Facility (as defined below), and the amortization of debt discounts and debt issuance costs.

Other income, net consists primarily of realized gains on from the sale of investments, miscellaneous receipts and interest earned on cash and marketable securities.

Equity in net loss of unconsolidated investments represents our share of the equity earnings (losses) of our investments in third parties accounted for under the equity method, including the amortization of cost basis adjustments.

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 the 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

Revenue represents the fair value of consideration received or receivable from clients for goods and services provided by us. Software delivery revenue consists of all of our proprietary software sales (either as a perpetual license sale or under a subscription delivery model), transaction-related revenue and the resale of hardware. Support and maintenance revenue consists of revenue from post contract client support and maintenance services. 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 or project-based revenue from implementation, training and consulting services. For some clients, we remotely host the software applications licensed from us using our own or third-party servers, which saves these clients the cost of procuring and maintaining hardware and related facilities. For other clients, we offer an outsourced solution in which we assume partial to total responsibility for a healthcare organization's IT operations using our employees.

Revenue from software licensing arrangements where the service element is not considered essential to the functionality of the other elements of the arrangement is recognized upon delivery of the software or as services are performed, provided persuasive evidence of an arrangement exists, fees are considered fixed or determinable, and collection of the receivable is probable. The revenue recognized for each separate element of a multiple-element software contract is based upon vendor-specific objective evidence of fair value ("VSOE"), which is based upon the price the client is required to pay when the element is sold separately or renewed. For arrangements in which VSOE only exists for the undelivered elements, the delivered elements (generally software licenses) are accounted for using the residual method.

Revenue from software licensing arrangements, where the service element is considered essential to the functionality of the other elements of the arrangement, is accounted for on an input basis under the percentage of completion accounting method using actual hours worked as a percentage of total expected hours required by the arrangement, provided that persuasive evidence of an arrangement exists, fees are considered fixed or determinable, and collection of the receivable is probable. Maintenance and support associated with these agreements is recognized over the term of the support agreement based on VSOE of the maintenance revenue, which is based on contractual renewal rates. For presentation in the statement of operations, consideration from agreements accounted for under the percentage of completion accounting method is allocated between software delivery and client services revenue based on VSOE of our hourly services rate multiplied by the amount of hours performed with the residual amount allocated to the software license fee.

Fees related to software-as-a-service ("SaaS") arrangements are recognized as revenue ratably over the contract terms beginning on the date our solutions are made available to clients. These arrangements include client services fees related to the implementation and set-up of our solutions and are typically billed upfront and recorded as deferred revenue until our solutions are made available to the client. The implementation and set-up fees are recognized as revenue ratably over the estimated client relationship period. The estimated length of a client relationship period is based on our experience with client contract renewals and consideration of the period over which such clients use our SaaS solutions.

Software private cloud hosting services are provided to clients that have purchased a perpetual license to our software solutions and contracted with us to host the software. These arrangements provide the client with a contractual right to take possession of the software at any time during the private cloud hosting period without significant penalty and it is feasible for the client to either use the software on its own equipment or to contract with an unrelated third party to host the software. Private cloud hosting services are not deemed to be essential to the functionality of the software or other elements of the arrangement; accordingly, for these arrangements, we recognize software license fees as software delivery revenue upon delivery, assuming all other revenue recognition criteria have been met, and separately recognize fees for the private cloud hosting services as client services revenue over the term of the private cloud hosting arrangement.

We also enter into multiple-element arrangements that may include a combination of various software-related and non-software-related products and services. Management applies judgment to ensure appropriate accounting for multiple deliverables, including the allocation of arrangement consideration among multiple units of accounting, the determination of whether undelivered elements are essential to the functionality of delivered elements, and the timing of revenue recognition, among others. In such arrangements, we first allocate the total arrangement consideration based on a selling price hierarchy at the inception of the arrangement. The selling price for each element is based upon the following selling price hierarchy: VSOE if available, third-party evidence of fair value if VSOE is not available, or estimated selling price if neither VSOE nor third-party evidence of fair value is available (discussion as to how we determine VSOE, third-party evidence of fair value and estimated selling price is provided below). Upon allocation of the arrangement consideration to the software elements as a whole and individual non-software elements, we then further allocate consideration within the software group to the respective elements following higher-level, industry-specific guidance and our policies described above. After the arrangement consideration has been allocated to the various elements, we account for each respective element in the arrangement as described above.

To determine the selling price in multiple-element arrangements, we establish VSOE using the price charged for a deliverable when sold separately and contractual renewal rates for maintenance fees. For non-software multiple element arrangements, third-party evidence of fair value is established by evaluating similar and interchangeable competitor products or services in standalone arrangements with similarly situated clients. If we are unable to determine the selling price because VSOE or third-party evidence of fair value does not exist, we determine an estimated selling price by considering several external and internal factors including, but not limited to, pricing practices, margin objectives, competition, client demand, internal costs and overall economic trends. The determination of an estimated selling price is made through consultation with and approval by our management, taking into consideration our go-to-market strategy. As our, or our competitors', pricing and go-to-market strategies evolve, we may modify our pricing practices in the future. These events could result in changes to our determination of VSOE, third-party evidence of fair value and estimated selling price. Selling prices are analyzed on an annual basis or more frequently if we experience significant changes in our selling prices.

For those arrangements where the deliverables do not qualify as separate units of accounting, revenue recognition is evaluated for the combined deliverables as a single unit of accounting and the recognition pattern of the final deliverable will dictate the revenue recognition pattern for the single, combined unit of accounting. Changes in circumstances and client data may result in a requirement to either separate or combine deliverables, such that a delivered item could now meet the separation criteria and qualify as a separate unit of accounting which may lead to an upward or downward adjustment to the amount of revenue recognized under the arrangement on a prospective basis.

We assess whether fees are considered fixed or determinable at the time of sale and recognize revenues if all other revenue recognition requirements are met. Our payment arrangements with clients typically include milestone-based software license fee payments and payments based on delivery for services and hardware.

While most of our arrangements include short-term payment terms, we periodically provide extended payment terms to clients from the date of contract signing. We do not recognize revenue under extended payment term arrangements until such payments become due. In certain circumstances, where all other revenue recognition criteria have been met, we occasionally offer discounts to clients with extended payment terms to accelerate the timing of when payments are made. Changes to extended payment term arrangements have not had a material impact on our consolidated results of operations.

Maintenance fees are recognized ratably over the period of the contract based on VSOE, which is based on contractual renewal rates. Revenue from electronic data interchange services is recognized as services are provided and is determined based on the volume of transactions processed or estimated selling price.

We provide outsourcing services to our clients under arrangements that typically range from three to ten years in duration. Under these arrangements we assume full, partial or transitional responsibilities for a healthcare organization's IT operations using our employees. Our outsourcing services include facilities management, network outsourcing and transition management. Revenue from these arrangements is recognized subsequent to the transition period as services are performed.

Revenue is recognized net of any taxes collected from clients and subsequently remitted to governmental authorities. We record as revenue any amounts billed to clients for shipping and handling costs and record as cost of revenue the actual shipping costs incurred.

We record reimbursements for out-of-pocket expenses incurred as client services revenue in our consolidated statement of operations.

Allowance for Doubtful Accounts Receivable

We rely on estimates to determine our bad debt expense and the adequacy of our allowance for doubtful accounts. These estimates are based on our historical experience and management's assessment of a variety of factors related to the general financial condition of our clients, the industry in which we operate and general economic conditions. If the financial condition of our clients were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances and related bad debt expense may be required.

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, we must determine the amount of implied goodwill that would be established if the reporting unit was hypothetically acquired on the impairment test date. If the carrying amount of a reporting unit's goodwill exceeds the amount of implied goodwill, an impairment loss equal to the excess would be recorded. The recoverability of indefinite-lived intangible assets is assessed by comparison of the carrying value of the asset to its estimated fair value. If we determine that the carrying value of the asset exceeds its estimated fair value, an impairment loss equal to the excess would be recorded.

The determination of the fair value of our reporting units is based on a combination of a market approach, that considers benchmark company market multiples, and an income approach, that 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 historical experience, our expectations of future performance and the expected economic environment. 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.

All of our goodwill is assigned to reporting units where it is tested for impairment. The reporting units evaluated for goodwill impairment were determined to be the same as our operating segments. We performed the annual impairment tests of our reporting units as of October 1, 2016, with the exception of the Netsmart reporting unit for the which the test was performed as of December 31, 2016. All of the annual impairment tests consisted of quantitative analyses. 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.

As discussed above and in Note 13, "Business Segments" to our consolidated financial statements included in Part II, Item 8, "Financial Statements and Supplementary Data" of this Form 10-K, during 2016, we revised our reportable segments in order to better align our reporting structure with our chief operating decision maker's (our "CODM") management of resource allocation and performance assessment. The changes in our reportable segments caused us to reallocate goodwill to our revised reporting units and perform interim goodwill impairment tests, which consisted of a quantitative analysis, to ensure that these changes did not delay, accelerate or avoid a potential impairment charge. The fair value of each of our revised reporting units substantially exceeded its carrying value and no indicators of impairment were identified as a result of the interim goodwill impairment tests. Refer to Note 4, "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.

Accounting guidance also requires that definite-lived intangible assets 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. 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 in the future 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 may be 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.

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 the following three categories:

- Level 1: Inputs are unadjusted quoted prices in active markets for identical assets or liabilities at the measurement date.
- Level 2: Inputs, other than quoted prices included in Level 1, are observable for the asset or liability, either directly or indirectly. Level 2 inputs include quoted prices for similar instruments in active markets, and inputs other than quoted prices that are observable for the asset or liability.

- Level 3: Inputs are unobservable for the asset or liability, and include situations where there is little, if any, market activity for the asset or liability.

Our Level 3 financial instruments include derivative financial instruments comprised of the 1.25% Call Option asset and the 1.25% Notes embedded cash conversion option liability associated with the 1.25% Notes. Refer to Note 6, "Debt," and Note 11, "Derivative Financial Instruments," to our consolidated financial statements included in Part II, Item 8, "Financial Statements and Supplementary Data" of this Form 10-K for further information, including defined terms, regarding our derivative financial instruments. These derivatives are not actively traded and are valued based on an option pricing model that uses as inputs both observable and unobservable market data. Significant market data inputs used to determine the fair values as of December 31, 2016 and 2015 included our common stock price, time to maturity of the derivative instruments, the risk-free interest rate, and the implied volatility of our common stock. The 1.25% Call Option asset and the 1.25% Notes embedded cash conversion option liability were designed with the intent that changes in their fair values would substantially offset, with limited net impact to our earnings. Therefore, we believe the sensitivity associated with changes in the unobservable inputs to the option pricing model for these instruments is substantially mitigated.

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,			2016 % Change from 2015	2015 % Change from 2014
	2016	2015	2014		
Revenue:					
Software delivery	\$ 521,290	\$ 449,510	\$ 441,241	16.0%	1.9%
Support and maintenance	491,062	468,920	466,102	4.7%	0.6%
Client services	537,547	467,963	470,530	14.9%	(0.5%)
Total revenue	<u>1,549,899</u>	<u>1,386,393</u>	<u>1,377,873</u>	11.8%	0.6%
Cost of revenue:					
Software delivery	171,704	155,367	166,186	10.5%	(6.5%)
Support and maintenance	159,351	136,437	146,712	16.8%	(7.0%)
Client services	459,174	432,038	437,776	6.3%	(1.3%)
Amortization of software development and acquisition-related assets	88,631	81,986	81,215	8.1%	0.9%
Total cost of revenue	<u>878,860</u>	<u>805,828</u>	<u>831,889</u>	9.1%	(3.1%)
Gross profit	671,039	580,565	545,984	15.6%	6.3%
Gross margin %	43.3%	41.9%	39.6%		
Selling, general and administrative expenses	392,865	339,175	358,681	15.8%	(5.4%)
Research and development	187,906	184,791	192,821	1.7%	(4.2%)
Asset impairment charges	4,650	1,544	2,390	NM	(35.4%)
Amortization of intangible and acquisition-related assets	25,847	23,172	31,280	11.5%	(25.9%)
Income (loss) from operations	59,771	31,883	(39,188)	87.5%	(181.4%)
Interest expense	(68,141)	(31,396)	(29,297)	117.0%	7.2%
Other income, net	1,087	2,183	766	(50.2%)	185.0%
Equity in net loss of unconsolidated investments	(7,501)	(2,100)	(398)	NM	NM
Income (loss) before income taxes	(14,784)	570	(68,117)	NM	(100.8%)
Income tax benefit (provision)	17,814	(2,626)	1,664	NM	NM
Effective tax rate	120.5%	460.7%	2.4%		
Net income (loss)	3,030	(2,056)	(66,453)	NM	(96.9%)
Less: Net income attributable to non-controlling interest	(146)	(170)	0	(14.1%)	NM
Less: Accretion of redemption preference on redeemable convertible non-controlling interest - Netsmart	(28,536)	0	0	NM	NM
Net loss attributable to Allscripts Healthcare Solutions, Inc. stockholders	<u>\$ (25,652)</u>	<u>\$ (2,226)</u>	<u>\$ (66,453)</u>	NM	(96.7%)

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

Revenue

(In thousands)	Year Ended December 31,			2016 % Change from 2015	2015 % Change from 2014
	2016	2015	2014		
Revenue:					
Software delivery, support and maintenance					
Recurring revenue	\$ 846,195	\$ 781,000	\$ 759,297	8.3%	2.9%
Non-recurring revenue	166,157	137,430	148,046	20.9%	(7.2%)
Total software delivery, support and maintenance	1,012,352	918,430	907,343	10.2%	1.2%
Client services					
Recurring revenue	350,559	271,800	230,038	29.0%	18.2%
Non-recurring revenue	186,988	196,163	240,492	(4.7%)	(18.4%)
Total client services	537,547	467,963	470,530	14.9%	(0.5%)
Total revenue	\$ 1,549,899	\$ 1,386,393	\$ 1,377,873	11.8%	0.6%

Year Ended December 31, 2016 Compared with the Year Ended December 31, 2015

The increase in total revenue reflects additional revenue from the consolidation of Netsmart effective as of April 19, 2016, partly offset by \$26 million of amortization of acquisition-related deferred revenue adjustments during the year ended December 31, 2016. Adjusting for the impact of incremental revenue from Netsmart, Inc. and the amortization of acquisition-related deferred revenue adjustments, total revenue during the year ended December 31, 2016 increased by 3%, compared with the prior year as higher recurring services revenue and non-recurring software delivery, support and maintenance revenue were partly offset by lower non-recurring services revenue. The changes in recurring and non-recurring revenue during 2016 compared with the prior year were caused by similar drivers, as explained below.

Software delivery, support and maintenance revenue consists of recurring subscription-based software sales, support and maintenance revenue, recurring transactions revenue, and non-recurring perpetual software licenses sales, hardware resale and non-recurring transactions revenue. The growth in recurring and non-recurring software delivery, support and maintenance revenue was largely driven by incremental revenue from Netsmart, Inc. Adjusting for the impact of such incremental revenue, our recurring revenue increased 1% during the year ended December 31, 2016, compared with the prior year as the expansion of our client base for our population health management portfolio CareInMotion™ and ambulatory EHR solutions was offset by anticipated changes in our client base and a challenging comparison with last year. Support and maintenance revenue can also experience some variability related to contract restructurings and the achievement of client activation milestones. Adjusting for the impact of incremental revenue from Netsmart, Inc., non-recurring software delivery, support and maintenance revenue increased by 10% during the year ended December 31, 2016 compared with the prior year, primarily driven by higher software license sales of our acute and ambulatory solutions.

Client services revenue consists of recurring revenue from managed services solutions, such as outsourcing, private cloud hosting and revenue cycle management, as well as non-recurring project-based client services revenue. The growth in client services revenue was also largely driven by incremental revenue from Netsmart, Inc. Adjusting for the impact of such incremental revenue, recurring client services revenue increased by 17% during the year ended December 31, 2016 compared with the prior year, primarily due to expanding our outsourcing services at several large clients and adding new outsourcing clients, as well as revenue related to our acquisition of a majority interest in a third party in April 2015, the results of which are consolidated with our financial results from the date of this transaction. Adjusting for the impact of incremental revenue from Netsmart, Inc., non-recurring revenue declined 15% during the year ended December 31, 2016 compared with the prior year, primarily as a result of a decrease in implementation services attributable to fewer large implementations of our ambulatory and acute solutions, changes to our business model requiring less upfront services and some clients choosing to delay upgrade implementations as they awaited the release of the final CMS rules related to the Quality Payment Program and changes to Stage 3 of the Meaningful Use program. Additionally, 2015 also included the recognition of services revenue upon the achievement of a key implementation milestone with a large client, which did not recur during 2016. Non-recurring client services revenue can also vary between periods from the timing of implementation services revenue recognition associated with large-scale implementation contracts and the achievement of key delivery milestones and the timing of special projects.

The percentage of recurring and non-recurring revenue of our total revenue was 77% and 23%, respectively, during the year ended December 31 2016, representing a slight shift compared with 76% and 24%, respectively, during the prior year.

Year Ended December 31, 2015 Compared with the Year Ended December 31, 2014

The growth in recurring software delivery, support and maintenance revenue was primarily driven by higher subscription-based software revenue as we expanded our client base for population health management solutions and higher support and maintenance revenue related to our patient portal interfaces and population health management and post-acute care coordination solutions, as the number of clients, both domestically and globally, that implemented those solutions increased compared with the prior year. Support and maintenance revenue can also experience some quarterly variability related to contract restructurings and the achievement of client activation milestones. Non-recurring software delivery, support and maintenance decreased by 7% compared with the prior year primarily due to lower revenue from perpetual software license and hardware sales and certain transaction-related revenue. The decrease in perpetual software license and hardware sales and the increase in subscription-based software revenue reflect the continued shift in customer preferences from up-front software license agreements to subscription-based agreements.

The growth in recurring client services revenue was primarily driven by an increase in managed services revenue from expanding our outsourcing services at several large clients and adding new outsourcing clients, as well as revenue related to our acquisition of a majority interest in a third party in April 2015, the results of which are consolidated with our financial results from the date of this transaction. Recurring client service revenue related to our private cloud hosting services also increased as we experienced increased demand for these services.

Non-recurring client services revenue decreased by 18% compared with the prior year primarily as a result of a decrease in implementation services attributable to fewer large implementations of our ambulatory and acute solutions and the timing of implementation services revenue recognition associated with a large contract in the second quarter of 2014. In early 2015, we also experienced softer demand for regulatory-driven upgrades as the effective dates of certain regulatory requirements, particularly in the state of New York, were extended. Non-recurring client services revenue can also vary between periods from the timing of implementation services revenue recognition associated with large-scale implementation contracts and the achievement of key delivery milestones, and the timing of special projects.

Gross Profit

(In thousands)	Year Ended December 31,			2016 % Change from 2015	2015 % Change from 2014
	2016	2015	2014		
Total cost of revenue	\$ 878,860	\$ 805,828	\$ 831,889	9.1%	(3.1%)
Gross profit	\$ 671,039	\$ 580,565	\$ 545,984	15.6%	6.3%
Gross margin %	43.3%	41.9%	39.6%		

Year Ended December 31, 2016 Compared with the Year Ended December 31, 2015

Gross profit and gross margin increased during the year ended December 31, 2016 compared with the year ended December 31, 2015. These increases were primarily driven by improved profitability from the delivery of recurring client services, particularly private cloud hosting and outsourcing, as we continue to expand our customer base for these services. Gross margin associated with non-recurring client services revenue also improved compared with last year as the 2016 periods reflect the full effect of cost reduction initiatives completed during the first half of 2015. Additionally, gross profit and gross margin increased for the year ended December 31, 2016 due to improved profitability associated with recurring subscription-based software as we were able to generate higher revenue while maintaining a fairly stable cost base to deliver these solutions.

Year Ended December 31, 2015 Compared with the Year Ended December 31, 2014

Gross profit and gross margin increased during the year ended December 31, 2015 compared with the prior year. These increases were primarily driven by improved profitability associated with recurring software, support and maintenance revenue from lower third-party and internal costs to deliver these solutions and services. Also contributing to the increases in gross profit and gross margin was higher profitability from the delivery of managed services, particularly outsourcing, as we continue to expand our customer base for these services. In addition, gross profit and gross margin for the year ended December 31, 2014 reflect the impact of a \$5 million non-recurring charge related to previously deferred third-party costs within our outsourcing business, which did not recur in 2015. These positive factors were partially offset by lower overall utilization of internal client services resources as the volume of new implementation projects during 2015 only partly offset work performed on several large implementation projects that were completed or nearly complete prior to the start of 2015. The extension of the effective dates of certain regulatory requirements, particularly in the state of New York in early 2015, also contributed to lower utilization of our internal resources dedicated to implementing these new regulatory requirements. While the overall profitability associated with non-recurring client services revenue was lower during 2015 compared with 2014, overall profitability during the second half of 2015 improved as a result of cost reduction initiatives completed during the first half of 2015.

Selling, General and Administrative Expenses

(In thousands)	Year Ended December 31,			2016 % Change from 2015	2015 % Change from 2014
	2016	2015	2014		
Selling, general and administrative expenses	\$ 392,865	\$ 339,175	\$ 358,681	15.8%	(5.4%)

Year Ended December 31, 2016 Compared with the Year Ended December 31, 2015

Selling, general and administrative expenses increased during the year ended December 31, 2016 compared with the year ended December 31, 2015 primarily due to additional expenses from acquisitions completed during 2016, including the Netsmart Transaction in the second quarter of 2016 as well as investments to support business growth.

Year Ended December 31, 2015 Compared with the Year Ended December 31, 2014

Selling, general and administrative expenses decreased during the year ended December 31, 2015 compared with the year ended December 31, 2014. The primary drivers of these decrease were lower overall personnel-related costs and discretionary spending as a result of continued efforts to streamline our operations and improve operational efficiency, including headcount actions taken during the first half of 2015. The reduction in selling, general and administrative expenses was also attributable to decreases in stock-based compensation of \$5 million and acquisition-related transaction costs of \$4 million. These decreases were partially offset by increases in severance and other costs of \$10 million, primarily related to headcount actions taken during the first half of 2015 and additional selling, general and administrative expenses of \$6 million related to our acquisitions of Oasis Medical Solutions Limited in July 2014 and of a majority interest in a third party in April 2015, compared with the year ended December 31, 2014.

Research and Development

(In thousands)	Year Ended December 31,			2016 % Change from 2015	2015 % Change from 2014
	2016	2015	2014		
Research and development	\$ 187,906	\$ 184,791	\$ 192,821	1.7%	(4.2%)

Year Ended December 31, 2016 Compared with the Year Ended December 31, 2015

Research and development expense increased by 2% during the year ended December 31, 2016 compared with the prior year, primarily due to the consolidation of Netsmart in the second quarter of 2016, which resulted in \$9 million of additional costs in 2016. After adjusting for Netsmart, research and development expense decreased compared with the prior year comparable period due to an increase in the amount of capitalized software costs in 2016 compared with 2015. The increase in capitalized software development costs was primarily driven by incremental investments in the emerging areas of precision medicine and population health analytics as well as our continued investment in expanding the capabilities and functionality of our traditional ambulatory and acute platforms, including in response to new regulatory requirements. The capitalization of software development costs is highly dependent on the nature of the work being performed and the development status of projects and, therefore, it is common for the amount of capitalized software development costs to fluctuate.

Year Ended December 31, 2015 Compared with the Year Ended December 31, 2014

Research and development expenses decreased by 4% during the year ended December 31, 2015 compared with the prior year, primarily driven by the nature of development efforts in 2015 compared with 2014, which resulted in a higher amount of capitalized software development costs, and lower discretionary spending driven by actions taken during the first two quarters of 2015.

Asset Impairment Charges

(In thousands)	Year Ended December 31,			2016 % Change from 2015	2015 % Change from 2014
	2016	2015	2014		
Asset impairment charges	\$ 4,650	\$ 1,544	\$ 2,390	NM	(35.4%)

Year Ended December 31, 2016 Compared with the Year Ended December 31, 2015

During the year ended December 31, 2016, we recorded non-cash asset impairment charges of \$2.2 million for the impairment of capitalized software as a result of our decision to discontinue several software development projects, \$2.1 million for the impairment of one of our cost method equity investments and \$0.4 million to write down a long-term asset to its estimated net realizable value.

Year Ended December 31, 2015 Compared with the Year Ended December 31, 2014

During the year ended December 31, 2015, we recorded non-cash asset impairment charges of \$1.2 million associated with a decline in the value of a commercial agreement and wrote-off \$0.3 million of certain deferred costs that were determined to be unrealizable. The non-cash asset impairment charges recorded during the year ended December 31, 2014 were primarily the result of our decision to discontinue certain software development projects.

Amortization of Intangible and Acquisition-Related Assets

(In thousands)	Year Ended December 31,			2016 % Change from 2015	2015 % Change from 2014
	2016	2015	2014		
Amortization of intangible and acquisition-related assets	\$ 25,847	\$ 23,172	\$ 31,280	11.5%	(25.9%)

Year Ended December 31, 2016 Compared with the Year Ended December 31, 2015

The increase in amortization expense for the year ended December 31, 2016 compared with the year ended December 31, 2015 was primarily due to the consolidation of Netsmart in the second quarter of 2016, which resulted in \$10 million of additional costs in 2016, and additional amortization related to intangible assets associated with our acquisitions of a controlling interest in third parties during the second half of 2016. After adjusting for Netsmart, amortization expense decreased compared with the prior year comparable period as several intangible assets were fully amortized in 2015.

Year Ended December 31, 2015 Compared with the Year Ended December 31, 2014

The decrease in amortization expense for the year ended December 31, 2015 compared with the year ended December 31, 2014 was primarily driven by amortization associated with intangible assets that were fully amortized in 2014. As a result, the year ended December 31, 2014 includes amortization that did not recur during 2015. This impact was partially offset by additional amortization associated with intangible assets acquired as part of our acquisitions of Oasis Medical Solutions Limited in July 2014 and of a majority interest in a third party in April 2015.

Interest Expense

(In thousands)	Year Ended December 31,			2016 % Change from 2015	2015 % Change from 2014
	2016	2015	2014		
Interest expense	\$ 68,141	\$ 31,396	\$ 29,297	117.0%	7.2%

Year Ended December 31, 2016 Compared with the Year Ended December 31, 2015

Interest expense during the year ended December 31, 2016 was higher compared with the prior year primarily due to \$39 million of interest expense associated with Netsmart's non-recourse debt incurred since April 19, 2016. The incremental Netsmart interest expense includes \$8 million of amortization of debt issuance costs, which include \$5 million of debt issuance costs written-off in connection with the amendment of Netsmart's First Lien Credit Agreement (as defined in Note 6, "Debt," to our consolidated financial statements included in Part II, Item 8, "Financial Statements and Supplementary Data" of this Form 10-K). After adjusting for Netsmart, interest expense decreased slightly primarily due to lower borrowing costs resulting from the amendment of our Senior Secured Credit Facility during the third quarter of 2015.

Year Ended December 31, 2015 Compared with the Year Ended December 31, 2014

Interest expense during the year ended December 31, 2015 was higher compared with the prior year primarily due to the write-off of \$1.4 million of unamortized deferred debt issuance cost during the three months ended September 30, 2015 in connection with amending our existing senior secured credit facility. During the second half of 2015, we also incurred additional interest expense associated with borrowing \$100 million under the Revolving Facility (as defined below) to finance a portion of our investment in NantHealth in June 2015.

Other income, net

(In thousands)	Year Ended December 31,			2016 % Change from 2015	2015 % Change from 2014
	2016	2015	2014		
Other income, net	\$ 1,087	\$ 2,183	\$ 766	(50.2%)	185.0%

Year Ended December 31, 2016 Compared with the Years Ended December 31, 2015 and 2014

Other income, net for the years ended December 31, 2016, 2015 and 2014 consists of miscellaneous receipts. The year ended December 31, 2015 also included the recognition of unrealized gains from accumulated other comprehensive loss related to our available for sale marketable securities that were sold during 2015.

Equity in Net Loss of Unconsolidated Investments

(In thousands)	Year Ended December 31,			2016 % Change from 2015	2015 % Change from 2014
	2016	2015	2014		
Equity in net loss of unconsolidated investments	\$ (7,501)	\$ (2,100)	\$ (398)	NM	NM

Year Ended December 31, 2016 Compared with the Years Ended December 31, 2015 and 2014

Equity in net loss of unconsolidated investments represent our share of the equity earnings (losses) of our investments in third parties accounted for under the equity method, including the amortization of cost basis adjustments. The majority of the amount recognized during the years ended December 31, 2016 and 2015 relates to our share of the net loss incurred by NantHealth along with the amortization of cost basis adjustments prior to its initial public offering in June 2016.

Income Tax (Provision) Benefit

(In thousands)	Year Ended December 31,			2016 % Change from 2015	2015 % Change from 2014
	2016	2015	2014		
Income tax benefit (provision)	\$ 17,814	\$ (2,626)	\$ 1,664	NM	NM
Effective tax rate	120.5%	460.7%	2.4%		

Year Ended December 31, 2016 Compared with the Year Ended December 31, 2015

During the year ended December 31, 2016, we released valuation allowance of \$17.5 million related to federal credit carryforwards, and foreign and state NOL carryforwards to offset current year taxable income. During the year ended December 31, 2015, we recorded valuation allowances of \$1.7 million for federal credit carryforwards, and foreign and state NOL carryforwards. 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.

Our effective rate was lower for the year ended December 31, 2016 as compared with the prior year, primarily due to the release of valuation allowance of \$17.5 million, and the fact that the permanent items and the impact of foreign earnings had a greater impact on the near break-even pre-tax income of \$0.6 million in the year ended December 31, 2015, compared to the impacts of these items on a pre-tax loss of \$14.8 million for the year ended December 31, 2016. Lastly, the effective tax rate for the year ended December 31, 2016, was impacted by the consolidation of Netsmart's financial results starting on April 19, 2016. On December 18, 2015, the Consolidated Appropriations Act of 2016 was enacted into law, which both reinstated retroactively to January 1, 2015 the research and development credit and made it permanent. Our effective tax rate for the years ended December 31, 2016 and December 31, 2015 includes the estimated impacts of this credit of \$3.0 million. A detailed reconciliation of taxes computed at the statutory federal income tax rate of 35% and the provision for income taxes is set forth in Note 7, "Income Taxes," to our consolidated financial statements included in Part II, Item 8, "Financial Statements and Supplementary Data" of this Form 10-K.

Year Ended December 31, 2015 Compared with the Year Ended December 31, 2014

During the year ended December 31, 2015, we recorded a valuation allowance of \$1.7 million for federal net operating loss and credit carryforwards, and foreign and state net operating loss carryforwards. 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.

Our effective rate is higher for the year ended December 31, 2015 as compared with the prior year, primarily due to the impact of permanent items, such as non-deductible meals and entertainment and officer compensation, and the impacts of foreign operations on the near break-even pre-tax income for 2015 as compared with the prior year pre-tax loss.

Non-Controlling Interests

(In thousands)	Year Ended December 31,			2016 % Change from 2015	2015 % Change from 2014
	2016	2015	2014		
Net income attributable to non-controlling interest	\$ (146)	\$ (170)	\$ 0	(14.1%)	NM
Accretion of redemption preference on redeemable convertible non-controlling interest - Netsmart	\$ (28,536)	\$ 0	\$ 0	NM	NM

Year Ended December 31, 2016 Compared with the Years Ended December 31, 2015 and 2014

The net income attributable to non-controlling interest represents the share of earnings of a consolidated affiliate that is attributable to the affiliate's common stock that is not owned by us for each of the periods presented. 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 for each of the periods presented. Refer to Note 2, "Business Combinations 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 additional information regarding such liquidation preference.

Segment Operations

Overview of Segment Results

(In thousands)	Year Ended December 31,			2016 % Change from 2015	2015 % Change from 2014
	2016	2015	2014		
Revenue:					
Clinical and Financial Solutions	\$ 1,125,073	\$ 1,105,504	\$ 1,112,432	1.8%	(0.6%)
Population Health	235,206	219,861	208,535	7.0%	5.4%
Netsmart	173,361	0	0	NM	NM
Unallocated Amounts	16,259	61,028	56,906	(73.4%)	7.2%
Total revenue	<u>\$ 1,549,899</u>	<u>\$ 1,386,393</u>	<u>\$ 1,377,873</u>	<u>11.8%</u>	<u>0.6%</u>
Gross Profit:					
Clinical and Financial Solutions	\$ 471,345	\$ 452,058	\$ 427,069	4.3%	5.9%
Population Health	171,969	147,095	146,970	16.9%	0.1%
Netsmart	70,286	0	0	NM	NM
Unallocated Amounts	(42,561)	(18,588)	(28,055)	129.0%	(33.7%)
Total gross profit	<u>\$ 671,039</u>	<u>\$ 580,565</u>	<u>\$ 545,984</u>	<u>15.6%</u>	<u>6.3%</u>
Income from operations:					
Clinical and Financial Solutions	\$ 251,417	\$ 234,146	\$ 196,263	7.4%	19.3%
Population Health	112,974	91,887	84,824	22.9%	8.3%
Netsmart	(7,416)	0	0	NM	NM
Unallocated Amounts	(297,204)	(294,150)	(320,275)	1.0%	(8.2%)
Total income (loss) from operations	<u>\$ 59,771</u>	<u>\$ 31,883</u>	<u>\$ (39,188)</u>	<u>(87.5%)</u>	<u>(181.4%)</u>

Clinical and Financial Solutions

Our Clinical and Financial Solutions segment derives its revenue from the sale of integrated clinical software applications and financial and information solutions, which primarily include EHR-related software, financial and practice management software, related installation, support and maintenance, outsourcing, private cloud hosting, revenue cycle management, training and electronic claims administration services.

(In thousands)	Year Ended December 31,			2016 % Change from 2015	2015 % Change from 2014
	2016	2015	2014		
Revenue	\$ 1,125,073	\$ 1,105,504	\$ 1,112,432	1.8%	(0.6%)
Gross profit	\$ 471,345	\$ 452,058	\$ 427,069	4.3%	5.9%
Gross margin %	41.9%	40.9%	38.4%		
Income from operations	\$ 251,417	\$ 234,146	\$ 196,263	7.4%	19.3%
Operating margin %	22.3%	21.2%	17.6%		

Year Ended December 31, 2016 Compared with the Year Ended December 31, 2015

Clinical and Financial Solutions revenue increased during the year ended December 31, 2016 compared with the prior year, as higher revenue from recurring outsourcing, revenue cycle management and private cloud hosting client services, and higher non-recurring software delivery, support and maintenance revenue, which were partly offset by lower non-recurring client services revenue. The higher revenue from recurring outsourcing and revenue cycle management client services was due to an increase in our client base for such services. This increase in revenue included additional revenue associated with expanding our outsourcing services at several large clients and adding new outsourcing clients as well as revenue related to our acquisition of a majority interest in a third party in April 2015. Revenue related to private cloud hosting also increased as we experienced increased demand for these services. The increase in non-recurring software delivery, support and maintenance revenue was primarily driven by higher software license sales of our acute solutions. The decrease in non-recurring revenue was the result of a decrease in implementation services attributable to fewer large implementations of our ambulatory and acute solutions and several large software license sales of our acute solutions in the prior year period.

The improvement in profitability during the year ended December 31, 2016 compared with the prior year was primarily driven by our various client services revenue streams. The year ended December 31, 2016 reflects the full effect of cost reduction initiatives completed during the first half of 2015, which resulted in both lower overall third-party resources utilization and internal costs associated with the delivery of client services compared with the year ended December 31, 2015. Additionally, we capitalized a higher amount of software development costs during the year ended December 31, 2016 compared with the year ended December 31, 2015.

Year Ended December 31, 2015 Compared with the Year Ended December 31, 2014

Clinical and Financial Solutions revenue decreased during the year ended December 31, 2015 compared with the prior year, as a decrease in non-recurring client services revenue was only partially offset by an increase in revenue from recurring outsourcing, revenue cycle management and private cloud hosting client services. The decrease in non-recurring client services revenue was primarily attributable to a bigger volume and larger implementation projects that were completed or nearly complete during 2014 when compared to the volume and size of implementation projects completed during 2015. Softer demand for regulatory-driven upgrades as the effective dates of certain regulatory requirements, particularly in the state of New York, were extended in early 2015 and the timing of implementation services revenue recognition associated with a large contract in the second quarter of 2014 also contributed to the decrease in other client services revenue in 2015 compared with 2014. Higher non-recurring client services revenue associated with certain international projects partially offset the overall decline in other client services revenue. The increase in managed services revenue was primarily driven by an increase in our client base for such services, including additional revenue associated with expanding our outsourcing services at several large clients, adding new outsourcing clients as well as revenue related to our acquisition of a majority interest in a third party in April 2015, the results of which are consolidated with our financial results from the date of this transaction.

The improvement in gross profit and gross margin during the year ended December 31, 2015 compared with the year ended December 31, 2014 was broad-based across our primary revenue streams and highest in client services. The improved profitability of other client services reflects the effect of cost reduction initiatives completed during the first half of 2015, which resulted in both lower overall third-party resources utilization and internal costs compared with 2014. The effect of the cost reduction initiatives more than offset the unfavorable impact of lower revenue as the volume of new implementation projects during year ended December 31, 2015 only partly offset work performed on several large implementation projects that were completed or nearly complete prior to the start of 2015. We also experienced higher profitability associated with the delivery of managed services from improved operating leverage driven by the increase in our client base for such services. Income from operations and the operating margin also increased during the year ended December 31, 2015 compared with the year ended December 31, 2014 primarily due to the same factors that affected gross profit and gross margin, and lower personnel-related costs, discretionary spending and research and development expenses.

Population Health

Our Population Health segment derives its revenue from the sale of health management and coordinated care solutions, which are mainly targeted at hospitals, health systems, other care facilities and Accountable Care Organizations (“ACOs”). These solutions enable clients to connect, transition, analyze and coordinate care across the entire care community.

(In thousands)	Year Ended December 31,			2016 % Change from 2015	2015 % Change from 2014
	2016	2015	2014		
Revenue	\$ 235,206	\$ 219,861	\$ 208,535	7.0%	5.4%
Gross profit	\$ 171,969	\$ 147,095	\$ 146,970	16.9%	0.1%
Gross margin %	73.1%	66.9%	70.5%		
Income from operations	\$ 112,974	\$ 91,887	\$ 84,824	22.9%	8.3%
Operating margin %	48.0%	41.8%	40.7%		

Year Ended December 31, 2016 Compared with the Year Ended December 31, 2015

Population Health revenue increased during the year ended December 31, 2016 compared with the prior year in part due to higher recurring subscription-based revenue associated with our CareInMotion™ population health management portfolio. This increase was slightly offset by lower revenue from non-recurring client services.

Gross profit and gross margin increased during the year ended December 31, 2016 compared with the prior year, primarily due to a combination of higher recurring subscription-based revenue and lower overall internal costs associated with this revenue stream, as a result of headcount reductions made during the first half of 2015. Income from operations and operating margin also increased during the year ended December 31, 2016 compared with the prior year, primarily due to the same factors, as selling, general and administrative expenses were only slightly higher.

Year Ended December 31, 2015 Compared with the Year Ended December 31, 2014

The increase in revenue during the year ended December 31, 2015 was primarily driven by higher recurring subscription-based and support and maintenance revenue related to our patient portal solution and population health management and post-acute care coordination solutions, as the number of clients that implemented those solutions increased compared with the prior year. Lower revenue from non-recurring client services and perpetual software license sales partially offset the overall increase in revenue. During 2014, compared with 2015, we experienced larger volume and greater number of implementations, primarily driven by demand for solutions to meet certain Meaningful Use requirements.

Gross margin decreased in 2015 primarily due to unfavorable operating leverage as non-recurring client services costs remained elevated relative to the decrease in non-recurring client services revenue. Income from operations and operating margin increased during the year ended December 31, 2015 compared with the prior year, primarily due to lower selling, general and administrative expenses and research and development expenses.

Netsmart

Our Netsmart segment is a new segment that was established as part of the Netsmart Transaction and is comprised of the combination of our Homecare™ business with Netsmart, Inc. The Netsmart segment operates in the home care and behavioral healthcare information technology field throughout the United States. It provides software and technology solutions to the health and human services industry, which is comprised of behavioral health, addiction treatment, intellectual and developmental disability services, child and family services and public health segments, as well as to post-acute home care organizations.

(In thousands)	Year Ended December 31,			2016 % Change from 2015	2015 % Change from 2014
	2016	2015	2014		
Revenue	\$ 173,361	\$ 0	\$ 0	NM	NM
Gross profit	\$ 70,286	\$ 0	\$ 0	NM	NM
Gross margin %	40.5%	NM	NM		
Income (loss) from operations	\$ (7,416)	\$ 0	\$ 0	NM	NM
Operating margin %	(4.3%)	NM	NM		

Year Ended December 31, 2016 Compared with the Year Ended December 31, 2015

Revenue for the year ended December 31, 2016 includes two revenue categories, business services and system sales. Business services includes both subscription revenue and services and support revenue. System sales includes revenue from software licenses, sold either as perpetual licenses or fixed-term licenses, and revenue from third party software licenses and hardware products. Overall, revenues are negatively impacted by the deferred revenue adjustment related to the Netsmart Transaction totaling \$25 million for the year ended December 31, 2016. Gross profit is also negatively impacted by this same deferred revenue adjustment in addition to the amortization of technology-related intangibles acquired in the Netsmart Transaction and capitalized software totaling \$17 million for the year ended December 31, 2016.

Unallocated Amounts

In determining revenue, gross profit and income from operations for our segments, with the exception of the Netsmart segment, we do not include in revenue the amortization of acquisition-related deferred revenue adjustments, which reflect the fair value adjustments to deferred revenues acquired in a business acquisition. With the exception of the Netsmart segment, we also exclude the amortization of intangible assets, stock-based compensation, non-recurring expenses and transaction-related costs, and non-cash asset impairment charges from the operating segment data provided to our CODM. Non-recurring expenses relate to certain severance, product consolidation, legal, consulting and other charges incurred in connection with activities that are considered one-time. Accordingly, these amounts are not included in our reportable segment results and are included in the “Unallocated Amounts” category. The “Unallocated Amounts” category also includes corporate general and administrative expenses (including marketing expenses) which are centrally managed, as well as revenue and the associated cost from the resale of certain ancillary products, primarily hardware, other than the respective amounts associated with the Netsmart segment. The historical results of our Homecare™ business prior to the Netsmart Transaction are also included in the “Unallocated Amounts” category. The Netsmart segment, as presented, includes all revenue and expenses incurred by Netsmart since it operates as a stand-alone business entity and its resources allocation and performance are reviewed and measured at such all-inclusive level. The eliminations of intercompany transactions between Allscripts and Netsmart are also included in the “Unallocated Amounts” category.

(In thousands)	Year Ended December 31,			2016 % Change from 2015	2015 % Change from 2014
	2016	2015	2014		
Revenue	\$ 16,259	\$ 61,028	\$ 56,906	(73.4%)	7.2%
Gross profit	\$ (42,561)	\$ (18,588)	\$ (28,055)	129.0%	(33.7%)
Gross margin %	NM	(30.5%)	(49.3%)		
Income (loss) from operations	\$ (297,204)	\$ (294,150)	\$ (320,275)	1.0%	(8.2%)
Operating margin %	NM	NM	NM		

Year Ended December 31, 2016 Compared with the Year Ended December 31, 2015

Revenue from the resale of ancillary products, primarily consisting of hardware, is customer and project driven and, as a result, can fluctuate from period to period. Revenue for the year ended December 31, 2016 includes the elimination of \$10 million of revenue associated with transactions between Allscripts and Netsmart since the Netsmart Transaction on April 19, 2016. Revenue for the year ended December 31, 2016 decreased primarily due to the results of our Homecare™ business being included in the prior year period in their entirety but only partially in the current year period, as Homecare™ results are included as part of the Netsmart reportable segment.

Gross unallocated expenses, which represent the unallocated loss from operations excluding the impact of revenue, totaled \$313 million for the year ended December 31, 2016 compared to \$355 million for the year ended December 31, 2015. This decline was primarily the result of decreases in both cost of revenue and operating expenses. Cost of revenue decreased \$21 million largely due to the results of our Homecare™ business being included in the prior year period in their entirety and only partially in the current year period. Selling, general and administrative expenses decreased \$11 million primarily due to higher legal fees and severance costs associated with headcount reductions taken in 2015. The remaining decrease was primarily driven by lower amortization of software development and acquisition-related assets due to several intangible assets becoming fully amortized during the first half of 2015.

Year Ended December 31, 2015 Compared with the Year Ended December 31, 2014

Revenue from the resale of ancillary products, primarily consisting of hardware, is customer and project driven and, as a result, can fluctuate from period to period. Revenue for both of the years ended December 31, 2015 and 2014 includes all of the revenue associated with our Homecare™ business during those periods. The Homecare™ business revenue remained consistent year over year.

Gross unallocated expenses, totaled \$355 million for the year ended December 31, 2015 compared to \$377 million for the year ended December 31, 2014. This decrease reflects the impact of continued cost reduction initiatives aimed at improving our operational efficiency and reducing discretionary spending. Unallocated expenses also decreased driven by declines in transaction-related and product consolidation costs, including those associated with the convergence of our MyWay and Professional Suite ambulatory solutions, of approximately \$8 million; deferred revenue-related and other adjustments of approximately \$12 million; stock-based compensation of approximately \$3 million; amortization of intangible assets of approximately \$8 million; and non-cash impairment charges of approximately \$1 million. Partially offsetting these decreases were higher severance and other costs of approximately \$7 million during the year ended December 31, 2015 compared with the year ended December 31, 2014.

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,		% Change
	2016	2015	
Software delivery, support and maintenance	\$ 2,379	\$ 2,151	10.6%
Client services	1,671	1,500	11.4%
Total contract backlog	\$ 4,050	\$ 3,651	10.9%

Total contract backlog as of December 31, 2016 was higher compared with December 31, 2015, primarily due to an increase in bookings related to subscription-based agreements and managed services, such as outsourcing, private cloud hosting and revenue cycle management. The revenue associated with these types of agreements and contracts is recognized over an extended period of time based on the subscription term or contract period. Total contract backlog as of December 31, 2016 also includes the addition of backlog from Netsmart starting in the second quarter of 2016. Total contract backlog can fluctuate between periods based on the level of revenue and bookings as well as the timing of renewal activity and periodic revalidations. We estimate that approximately 34% of our aggregate contract backlog as of December 31, 2016 will be recognized as revenue during 2017.

We estimate that the aggregate contract backlog as of December 31, 2016 will be recognized as revenue in future years as follows:

Year Ended December 31,	(Percentage of Total Backlog)
2017	34%
2018	21%
2019	17%
2020	11%
2021	6%
Thereafter	11%
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. As of December 31, 2016, our principal sources of liquidity consisted of cash and cash equivalents of \$97 million and available borrowing capacity of \$342 million under our Revolving Facility and \$49 million under the Netsmart 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,			2016 \$ Change from 2015	2015 \$ Change from 2014
	2016	2015	2014		
Net income (loss)	\$ 3,030	\$ (2,056)	\$ (66,453)	\$ 5,086	\$ 64,397
Non-cash adjustments to net income (loss)	211,586	197,287	219,802	14,299	(22,515)
Cash impact of changes in operating assets and liabilities	54,388	16,348	(49,853)	38,040	66,201
Net cash provided by operating activities	\$ 269,004	\$ 211,579	\$ 103,496	\$ 57,425	\$ 108,083

Year Ended December 31, 2016 Compared with the Year Ended December 31, 2015

Net cash provided by operating activities increased during the year ended December 31, 2016 compared with the prior year. This increase reflects the beneficial impact of our continued efforts to streamline our organizational structure, cut long-term costs, reduce discretionary spending and improve efficiency. In addition, improved working capital management generated a \$38 million increase in cash flows from operating activities during the year ended December 31, 2016 as compared with the prior year comparable period.

Year Ended December 31, 2015 Compared with the Year Ended December 31, 2014

Net cash provided by operating activities increased by \$108 million during the year ended December 31, 2015 compared with the prior year. This increase reflects the beneficial impact of the steps we have taken in recent years to streamline our organizational structure, cut long-term costs, reduce discretionary spending and improve efficiency as evidenced by the decrease in our net loss for the year ended December 31, 2015 compared with the prior year. In addition, during 2014 we paid client upgrade costs associated with the convergence of our MyWay and Professional Suite ambulatory solutions, which did not recur during 2015. During 2014, we also paid higher employee severance, relocation and lease costs associated with the closure of several offices as well as higher commission and incentive-based payments.

Investing Cash Flow Activities

(In thousands)	Year Ended December 31,			2016 \$ Change from 2015	2015 \$ Change from 2014
	2016	2015	2014		
Capital expenditures	\$ (35,510)	\$ (18,322)	\$ (26,438)	\$ (17,188)	\$ 8,116
Capitalized software	(102,472)	(49,264)	(40,661)	(53,208)	(8,603)
Cash paid for business acquisitions, net of cash acquired	(994,876)	(9,372)	(20,180)	(985,504)	10,808
Purchases of equity securities, other investments and related intangible assets	(21,185)	(215,786)	(21,544)	194,601	(194,242)
Sales and maturities of marketable securities and other investments	0	3,763	50	(3,763)	3,713
Proceeds received from sale of fixed assets	37	15	85	22	(70)
Net cash used in investing activities	<u>\$ (1,154,006)</u>	<u>\$ (288,966)</u>	<u>\$ (108,688)</u>	<u>\$ (865,040)</u>	<u>\$ (180,278)</u>

Year Ended December 31, 2016 Compared with the Year Ended December 31, 2015

Net cash used in investing activities increased during the year ended December 31, 2016 compared with the prior year, primarily due to acquisition and investment transactions completed during 2016. In particular, such transactions included: (i) the acquisition of Netsmart, Inc. for \$906 million, net of cash acquired, (ii) Netsmart Inc.'s acquisition of HealthMEDX for \$36 million, net of cash acquired, (iii) the acquisition of controlling stakes in three third parties for \$53 million, net of cash acquired, and (iv) \$21 million of new third-party investments. Spending for capital expenditures and capitalized software costs in 2016 increased by \$70 million compared with 2015.

Year Ended December 31, 2015 Compared with the Year Ended December 31, 2014

Net cash used in investing activities increased during the year ended December 31, 2015 compared with the prior year, primarily due to our investment in NantHealth of \$200 million. During 2015 we also acquired a majority interest in a third party, net of cash acquired, for \$9 million and repaid an external loan of the third party for \$9 million. In addition, during 2015, we sold our remaining outstanding marketable securities and received proceeds of \$1 million, and received \$2 million from the final distribution of escrow funds related to the sale of our investment in Humedica, Inc. in 2013. Our capital spending during 2014 was higher compared with 2015 primarily due to software purchases in connection with the renewal of software licenses with some of our key software providers and enhancements to our IT infrastructure. The increase in capitalized software was primarily driven by the nature of development efforts in 2015 compared with 2014, which resulted in a higher amount of capitalized software development costs.

Financing Cash Flow Activities

(In thousands)	Year Ended December 31,			2016 \$ Change from 2015	2015 \$ Change from 2014
	2016	2015	2014		
Proceeds from sale or issuance of common stock	\$ 84	\$ 103,631	\$ 1,487	\$ (103,547)	\$ 102,144
Proceeds from issuance of redeemable convertible preferred stock - Netsmart	333,606	0	0	333,606	0
Excess tax benefits from stock-based compensation	1,014	644	0	370	644
Taxes paid related to net share settlement of equity awards	(8,204)	(7,062)	(10,400)	(1,142)	3,338
Payments on debt instruments	(163,522)	(239,109)	(97,331)	75,587	(141,778)
Credit facility borrowings, net of issuance costs	823,535	284,161	101,964	539,374	182,197
Repurchase of common stock	(121,241)	0	0	(121,241)	0
Net cash provided by (used in) financing activities	<u>\$ 865,272</u>	<u>\$ 142,265</u>	<u>\$ (4,280)</u>	<u>\$ 723,007</u>	<u>\$ 146,545</u>

Year Ended December 31, 2016 Compared with the Year Ended December 31, 2015

Net cash provided by financing activities increased during the year ended December 31, 2016 compared with the prior year, primarily due to \$574 million, net of issuance costs, borrowed under the Netsmart Credit Agreements and \$250 million borrowed under our Revolving Facility to partially finance acquisitions and third-party investments. In addition, Netsmart received \$334 million in proceeds from the issuance of redeemable convertible preferred stock during the second quarter of 2016. During 2016, we also repurchased \$121 million of our common stock. During the year ended December 31, 2015, we borrowed \$100 million under our Revolving Facility to partially finance our \$200 million investment in NantHealth and received \$100 million in proceeds from the sale of our common stock and warrants to Nant Capital LLC.

Year Ended December 31, 2015 Compared with the Year Ended December 31, 2014

Net cash provided by financing activities increased during the year ended December 31, 2015 compared with the prior year, primarily due to \$100 million borrowed under our revolving credit facility to partially finance our \$200 million investment in NantHealth and \$100 million in proceeds from the sale of our common stock and warrants to Nant Capital, LLC during the year ended December 31, 2015. During the three months ended September 30, 2015, we entered into the 2015 Credit Agreement (as defined in Note 6, "Debt," to our consolidated financial statements included in Part II, Item 8, "Financial Statements and Supplementary Data" of this Form 10-K) to refinance the outstanding borrowings under our prior senior secured credit facility. Our overall borrowings under our prior senior secured credit facility did not change as a result of the refinance transaction.

Future Capital Requirements

The following table summarizes future payments under our 1.25% Notes and Senior Secured Credit Facility and under Netsmart's Non-Recourse Debt as of December 31, 2016:

(In thousands)	Total	2017	2018	2019	2020	2021	Thereafter
Principal payments:							
1.25% Cash Convertible Senior Notes (1)	\$ 345,000	\$ 0	\$ 0	\$ 0	\$ 345,000	\$ 0	\$ 0
Senior Secured Credit Facility (2)	441,875	15,625	28,125	40,625	357,500	0	0
Netsmart Non-Recourse Debt (2)							
First Lien Term Loan	432,925	4,351	4,351	4,351	4,351	4,351	411,170
Second Lien Term Loan	167,000	0	0	0	0	0	167,000
Other debt	13	13	0	0	0	0	0
Total principal payments	<u>1,386,813</u>	<u>19,989</u>	<u>32,476</u>	<u>44,976</u>	<u>706,851</u>	<u>4,351</u>	<u>578,170</u>
Interest payments:							
1.25% Cash Convertible Senior Notes (1)	17,252	4,313	4,313	4,313	4,313	0	0
Senior Secured Credit Facility (2) (3)	42,748	13,135	12,573	11,664	5,376	0	0
Netsmart Non-Recourse Debt							
First Lien Term Loan (4)	149,901	23,720	23,480	23,241	23,002	22,763	33,695
First Lien Revolver (5)	1,093	243	243	243	243	121	0
Second Lien Term Loan (6)	122,745	17,535	17,535	17,535	17,535	17,535	35,070
Total interest payments	<u>333,739</u>	<u>58,946</u>	<u>58,144</u>	<u>56,996</u>	<u>50,469</u>	<u>40,419</u>	<u>68,765</u>
Total future debt payments	<u>\$ 1,720,552</u>	<u>\$ 78,935</u>	<u>\$ 90,620</u>	<u>\$ 101,972</u>	<u>\$ 757,320</u>	<u>\$ 44,770</u>	<u>\$ 646,935</u>

- (1) Assumes no cash conversions of the 1.25% Notes prior to their maturity on July 1, 2020.
- (2) Assumes no additional borrowings after December 31, 2016 and that all drawn amounts are repaid upon maturity.
- (3) Assumes LIBOR plus the applicable margin remain constant at the rate in effect on December 31, 2016, which was 2.77%.
- (4) Assumes Adjusted LIBO Rate plus the applicable margin remain constant at the rate in effect on December 31, 2016, which was 5.50%.
- (5) Assumes commitment fee remain constant at the rate in effect on December 31, 2016, which was 0.5%.
- (6) Assumes Adjusted LIBO Rate plus the applicable margin remain constant at the rate in effect on December 31, 2016, which was 10.5%.

Revolving Credit Facilities

We have a \$550 million senior secured revolving facility (the "Revolving Facility") that expires in September 2020. 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 \$207.5 million of borrowings and \$0.8 million of letters of credit outstanding under the Revolving Facility as of December 31, 2016. We had \$341.7 million available, net of outstanding letters of credit, under the Revolving Facility as of December 31, 2016. 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.

Netsmart has a \$50 million senior secured 5-year revolving loan credit facility (the "Netsmart Revolving Facility") that expires in April 2021. Netsmart had no borrowings and \$1.5 million of letters of credit outstanding under the Netsmart Revolving Facility as of December 31, 2016. Netsmart had \$48.5 million available, net of outstanding letters of credit, under the Netsmart Revolving Facility as of December 31, 2016. There can be no assurance that Netsmart will be able to draw on the full available balance of the Netsmart Revolving Facility if the financial institutions that have extended such credit commitments become unwilling or unable to fund such borrowings.

Refer to Note 6, "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

On November 17, 2016, we announced that our Board approved a new stock purchase program under which we may repurchase up to \$200 million of our common stock through December 31, 2019. The new stock program supersedes the previously existing stock repurchase program, which authorized us to repurchase \$150 million of our common stock through December 31, 2018. During 2016, we purchased 2.2 million shares of our common stock under the new program for a total of \$24 million and 8.1 million shares of our common stock under the prior program for a total of \$97 million. Any share repurchase transactions may be made through open market transactions, block trades, privately negotiated transactions (including accelerated share repurchase transactions) or other means, subject to market conditions. Any repurchase activity will depend on many factors such as 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.

We are currently in our sixth year of a ten-year agreement with Atos (formerly known as Xerox Consultant Services) to provide services to support our private cloud hosting services for our Sunrise acute care clients. We maintain all client relationships and domain expertise with respect to the hosted applications. The agreement includes the payment of an initial base amount of \$50 million per year plus charges for services incremental to the base agreement. During the year ended December 31, 2016, we incurred \$62 million of expenses under this agreement, which are included in cost of revenue in our consolidated statements of operations.

During 2015, we completed renegotiations with Atos and our other largest hosting partner to improve the operating cost structure of our private cloud hosting operations. As a result of these renegotiations, during 2016 we began to realize the benefits from the reductions in our base service payments.

Our total investment in research and development efforts during 2017 is expected to remain similar to 2016 as we continue to build and expand our capabilities in emerging areas of health care, such as precision medicine and population health analytics, and our traditional offerings in the ambulatory and acute markets. Our total spending consists of research and development costs directly recorded to expense, which are offset by the capitalization of eligible development costs, and the purchase of third-party software, as needed, to supplement our internal development efforts. To supplement our statement of operations, the table below presents a non-GAAP measure of research and development-related expenses that we believe is a useful metric for evaluating how we are investing in research and development.

(In thousands)	Year Ended December 31,		
	2016	2015	2014
Research and development costs directly recorded to expense	\$ 187,906	\$ 184,791	\$ 192,821
Capitalized software development costs per consolidated statement of cash flows (1)	102,472	49,264	40,661
Total non-GAAP R&D-related spending	\$ 290,378	\$ 234,055	\$ 233,482
Total revenue	\$ 1,549,899	\$ 1,386,393	\$ 1,377,873
Total non-GAAP R&D-related spending as a % of total revenue	19%	17%	17%

- (1) Amount for the year ended December 31, 2016 includes \$20 million of third-party software purchases to supplement our internal software development efforts.

We believe that our cash and cash equivalents of \$97 million as of December 31, 2016, our future cash flows, and our borrowing capacity under our Revolving Facility and Netsmart's Revolving Facility, taken together, provide adequate resources to fund ongoing cash requirements for the next twelve months. 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 purchase of our common stock under our stock repurchase program, each of which might impact our liquidity requirements or cause us to borrow under our credit facilities 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, Commitments and Off Balance Sheet Arrangements

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, 2016 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.

(In thousands)	Total	Payments due by period					
		2017	2018	2019	2020	2021	Thereafter
Balance sheet obligations: (1)							
Debt:							
Principal payments	\$ 786,875	\$ 15,625	\$ 28,125	\$ 40,625	\$ 702,500	\$ 0	\$ 0
Interest payments	60,000	17,448	16,886	15,977	9,689	0	0
Netsmart Non-Recourse Debt:							
Principal payments	599,925	4,351	4,351	4,351	4,351	4,351	578,170
Interest payments	273,739	41,498	41,258	41,019	40,780	40,419	68,765
Other debt	13	13	0	0	0	0	0
Capital leases	23,977	11,608	8,506	3,820	40	3	0
Other obligations: (2)							
Non-cancelable operating leases	132,739	23,085	20,851	18,218	15,244	13,079	42,262
Purchase obligations (3)	86,495	53,762	13,748	7,881	7,041	3,154	909
Agreement with Atos	335,034	60,119	63,200	63,302	63,500	63,672	21,241
Other contractual obligations (4)	7,904	7,687	217	0	0	0	0
Total contractual obligations	\$ 2,306,701	\$ 235,196	\$ 197,142	\$ 195,193	\$ 843,145	\$ 124,678	\$ 711,347

- (1) Our liability for uncertain tax positions was \$11 million as of December 31, 2016. 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 \$139 million from the amounts presented in the table as the amounts that will be settled in cash are not known and the timing of any payments is uncertain.
- (2) We have no off balance sheet arrangements as defined in Item 303 of Regulation S-K as of December 31, 2016. Additionally, we have obligations to pay contingent consideration associated with acquisitions completed in 2016 up to a maximum of \$4.9 million in 2018 and \$1.1 million in 2019 based on exchange rates in effect as of December 31, 2016. 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.
- (4) Other contractual obligations consist of \$2.3 million of letters of credit outstanding under our 2015 Credit Agreement and Netsmart's Credit Agreements and \$5.6 million relating to deferred consideration payable by Netsmart for acquisitions completed prior to the Netsmart Transaction that is solely contingent on the passage of time. As of December 31, 2016, no amounts had been drawn on the letters of credit.

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, and primarily due to our borrowing under the Senior Secured Credit Facility. Based on our balance of \$442 million of debt under the Senior Secured Credit Facility as of December 31, 2016, an increase in interest rates of 1.0% would cause a corresponding increase in our annual interest expense of approximately \$4 million. Borrowings under Netsmart's Credit Agreements are also exposed to interest rate risk as the interest rates on such borrowings are variable, which exposes us to fluctuations in our results of operations or liquidity, an increase in interest rates of 1.0% would cause a corresponding additional increase in our annual interest expense of approximately \$6 million. Netsmart's borrowings are non-recourse in nature to Allscripts.

We have global operations; therefore, we are exposed to risks related to foreign currency fluctuations. Foreign currency fluctuations through December 31, 2016 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. An exception to this is our development center in India, where we are required to make payments in local currency but which we fund in United States dollars. Starting in 2015, we 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 decreasing percentage of forecasted monthly INR expenses over time. As of December 31, 2016, there were 30 forward contracts outstanding that were staggered to mature monthly starting in January 2017 and ending in June 2018. 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 2018. As of December 31, 2016, the notional amounts of outstanding forward contracts ranged from 20 million to 120 million INR, or the equivalent of \$0.3 million to \$1.8 million United States dollars, based on the exchange rate between the United States dollar and the INR in effect as of December 31, 2016. These amounts also approximate the ranges of forecasted future INR expenses we target to hedge in any one month in the future. The forward contracts did not have a material impact on our financial position or results of operations during the years ended December 31, 2016 and 2015.

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

The Board of Directors and Stockholders of
Allscripts Healthcare Solutions, Inc.:

We have audited the accompanying consolidated balance sheets of **Allscripts Healthcare Solutions, Inc.** (a Delaware corporation) and subsidiaries (the “Company”) as of December 31, 2016 and 2015, and the related consolidated statements of operations and comprehensive loss, stockholders’ equity, and cash flows for each of the three years in the period ended December 31, 2016. These financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Allscripts Healthcare Solutions, Inc. and subsidiaries as of December 31, 2016 and 2015, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2016 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), the Company’s internal control over financial reporting as of December 31, 2016, 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 24, 2017 expressed an unqualified opinion.

/s/ GRANT THORNTON LLP

Raleigh, North Carolina
February 24, 2017

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Stockholders of
Allscripts Healthcare Solutions, Inc.:

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, 2016, based on criteria established in the 2013 *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). 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. Our audit of, and opinion on, the Company’s internal control over financial reporting does not include the internal control over financial reporting of Netsmart, a consolidated affiliate, whose financial statements reflect total assets and revenues constituting 32 and 11 percent, respectively, of the related consolidated financial statement amounts as of and for the year ended December 31, 2016. As indicated in Management’s Report, Netsmart was acquired on April 19, 2016. Management’s assertion on the effectiveness of the Company’s internal control over financial reporting excluded internal control over financial reporting of Netsmart.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). 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.

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.

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2016, 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), the consolidated financial statements of the Company as of and for the year ended December 31, 2016, and our report dated February 24, 2017 expressed an unqualified opinion on those financial statements.

/s/ GRANT THORNTON LLP

Raleigh, North Carolina
February 24, 2017

ALLSCRIPTS HEALTHCARE SOLUTIONS, INC.
CONSOLIDATED BALANCE SHEETS

(In thousands, except per share amounts)	December 31, 2016	December 31, 2015
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 96,610	\$ 116,873
Accounts receivable, net of allowance of \$32,670 and \$31,266 as of December 31, 2016 and 2015, respectively	405,172	327,851
Prepaid expenses and other current assets	102,551	93,622
Total current assets	604,333	538,346
Available for sale marketable securities	149,100	0
Fixed assets, net	148,810	125,617
Software development costs, net	163,879	85,775
Intangible assets, net	741,403	347,646
Goodwill	1,924,052	1,222,601
Deferred taxes, net	2,791	2,298
Other assets	97,791	359,665
Total assets	<u>\$ 3,832,159</u>	<u>\$ 2,681,948</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 126,144	\$ 60,004
Accrued expenses	86,135	62,021
Accrued compensation and benefits	64,291	62,398
Deferred revenue	363,772	315,925
Current maturities of long-term debt	15,158	12,178
Non-recourse current maturities of long-term debt - Netsmart	2,451	0
Current maturities of capital lease obligations	9,126	431
Total current liabilities	667,077	512,957
Long-term debt	717,853	612,405
Non-recourse long-term debt - Netsmart	576,918	0
Long-term capital lease obligations	9,877	617
Deferred revenue	18,009	20,273
Deferred taxes, net	141,752	22,164
Other liabilities	39,787	94,459
Total liabilities	2,171,273	1,262,875
Redeemable convertible non-controlling interest - Netsmart	387,685	0
Commitments and contingencies		
Stockholders' equity:		
Preferred stock: \$0.01 par value, 1,000 shares authorized, no shares issued and outstanding as of December 31, 2016 and 2015	0	0
Common stock: \$0.01 par value, 349,000 shares authorized as of December 31, 2016 and 2015; 267,997 and 180,510 shares issued and outstanding as of December 31, 2016, respectively; 266,545 and 189,308 shares issued and outstanding as of December 31, 2015, respectively	2,680	2,665
Treasury stock: at cost, 87,487 and 77,237 shares as of December 31, 2016 and 2015, respectively	(310,993)	(189,753)
Additional paid-in capital	1,789,959	1,789,449
Accumulated deficit	(187,351)	(190,235)
Accumulated other comprehensive loss	(61,829)	(4,242)
Total Allscripts Healthcare Solutions, Inc.'s stockholders' equity	1,232,466	1,407,884
Non-controlling interest	40,735	11,189
Total stockholders' equity	1,273,201	1,419,073
Total liabilities and stockholders' equity	<u>\$ 3,832,159</u>	<u>\$ 2,681,948</u>

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,		
	2016	2015	2014
Revenue:			
Software delivery, support and maintenance	\$ 1,012,352	\$ 918,430	\$ 907,343
Client services	537,547	467,963	470,530
Total revenue	<u>1,549,899</u>	<u>1,386,393</u>	<u>1,377,873</u>
Cost of revenue:			
Software delivery, support and maintenance	331,055	291,804	312,898
Client services	459,174	432,038	437,776
Amortization of software development and acquisition-related assets	88,631	81,986	81,215
Total cost of revenue	<u>878,860</u>	<u>805,828</u>	<u>831,889</u>
Gross profit	671,039	580,565	545,984
Selling, general and administrative expenses	392,865	339,175	358,681
Research and development	187,906	184,791	192,821
Asset impairment charges	4,650	1,544	2,390
Amortization of intangible and acquisition-related assets	25,847	23,172	31,280
Income (loss) from operations	59,771	31,883	(39,188)
Interest expense	(68,141)	(31,396)	(29,297)
Other income, net	1,087	2,183	766
Equity in net loss of unconsolidated investments	(7,501)	(2,100)	(398)
Income (loss) before income taxes	(14,784)	570	(68,117)
Income tax benefit (provision)	17,814	(2,626)	1,664
Net income (loss)	\$ 3,030	\$ (2,056)	\$ (66,453)
Less: Net income attributable to non-controlling interests	(146)	(170)	0
Less: Accretion of redemption preference on redeemable convertible non-controlling interest - Netsmart	(28,536)	0	0
Net loss attributable to Allscripts Healthcare Solutions, Inc. stockholders	<u>\$ (25,652)</u>	<u>\$ (2,226)</u>	<u>\$ (66,453)</u>
Loss per share - basic attributable to Allscripts Healthcare Solutions, Inc. stockholders	<u>\$ (0.14)</u>	<u>\$ (0.01)</u>	<u>\$ (0.37)</u>
Loss per share - diluted attributable to Allscripts Healthcare Solutions, Inc. stockholders	<u>\$ (0.14)</u>	<u>\$ (0.01)</u>	<u>\$ (0.37)</u>

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

ALLSCRIPTS HEALTHCARE SOLUTIONS, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS

(In thousands)	Year Ended December 31,		
	2016	2015	2014
Net income (loss)	\$ 3,030	\$ (2,056)	\$ (66,453)
Other comprehensive income (loss):			
Foreign currency translation adjustments	(1,528)	(2,381)	\$ (529)
Change in unrealized (loss) gain on available for sale securities	(56,359)	(228)	25
Change in fair value of derivatives qualifying as cash flow hedges	597	424	458
Other comprehensive loss before income tax expense	(57,290)	(2,185)	(46)
Income tax expense related to items in other comprehensive loss	(297)	(78)	(188)
Total other comprehensive loss	(57,587)	(2,263)	(234)
Comprehensive loss	(54,557)	(4,319)	(66,687)
Less: Comprehensive income attributable to non-controlling interests	(146)	(170)	0
Comprehensive loss, net	\$ (54,703)	\$ (4,489)	\$ (66,687)

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,		
	2016	2015	2014
Number of Common Shares Issued			
Balance at beginning of year	266,545	265,138	263,474
Common stock issued under stock compensation plans, net of shares withheld for employee taxes	1,452	1,407	1,664
Balance at end of year	267,997	266,545	265,138
Common Stock			
Balance at beginning of year	\$ 2,665	\$ 2,651	\$ 2,635
Common stock issued under stock compensation plans, net of shares withheld for employee taxes	15	14	16
Balance at end of year	\$ 2,680	\$ 2,665	\$ 2,651
Number of Treasury Stock Shares Purchased			
Balance at beginning of year	(77,237)	(84,672)	(84,672)
Issuance of treasury stock to Nant Capital, LLC	0	7,435	0
Purchase of treasury stock	(10,250)	0	0
Balance at end of year	(87,487)	(77,237)	(84,672)
Treasury Stock			
Balance at beginning of year	\$ (189,753)	\$ (278,036)	\$ (278,036)
Issuance of treasury stock to Nant Capital, LLC	0	88,283	0
Purchase of treasury stock	(121,240)	0	0
Balance at end of year	\$ (310,993)	\$ (189,753)	\$ (278,036)
Additional Paid-In Capital			
Balance at beginning of year	\$ 1,789,449	\$ 1,749,593	\$ 1,716,847
Stock-based compensation	34,544	31,961	37,295
Common stock issued under stock compensation plans, net of shares withheld for employee taxes	(8,133)	(3,445)	(6,969)
Tax deficiency realized upon exercise of stock-based awards	(1,280)	(2,920)	(123)
Accretion of redemption preference on redeemable convertible non-controlling interest in Netsmart	(28,536)	0	0
Issuance of treasury stock to Nant Capital, LLC	0	10,017	0
Warrants issued	3,915	4,243	2,543
Balance at end of year	\$ 1,789,959	\$ 1,789,449	\$ 1,749,593
Accumulated Deficit			
Balance at beginning of year	\$ (190,235)	\$ (188,009)	\$ (121,556)
Net income (loss) less net income attributable to non-controlling interests	2,884	(2,226)	(66,453)
Balance at end of year	\$ (187,351)	\$ (190,235)	\$ (188,009)
Accumulated Other Comprehensive Loss			
Balance at beginning of year	\$ (4,242)	\$ (1,979)	\$ (1,745)
Foreign currency translation adjustments, net	(1,528)	(2,381)	(529)
Unrecognized gain on derivatives qualifying as cash flow hedges, net of tax	361	258	279
Unrecognized (loss) gain on available for sale securities, net of tax	(56,420)	(140)	16
Balance at end of year	\$ (61,829)	\$ (4,242)	\$ (1,979)
Non-controlling interest			
Balance at beginning of year	\$ 11,189	\$ 0	\$ 0
Acquisition of non-controlling interest	29,400	11,019	0
Net income attributable to non-controlling interests	146	170	0
Balance at end of year	\$ 40,735	\$ 11,189	\$ 0
Total Stockholders' Equity at beginning of year	\$ 1,419,073	\$ 1,284,220	\$ 1,318,145
Total Stockholders' Equity at end of year	\$ 1,273,201	\$ 1,419,073	\$ 1,284,220

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,		
	2016	2015	2014
Cash flows from operating activities:			
Net income (loss)	\$ 3,030	\$ (2,056)	\$ (66,453)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:			
Depreciation and amortization	172,390	161,011	174,263
Stock-based compensation expense	42,877	34,663	39,254
Excess tax benefits from stock-based compensation	(1,014)	(644)	0
Deferred taxes	(22,621)	(2,206)	(56)
Asset impairment charges	4,650	1,544	2,390
Write-off of unamortized deferred debt issuance costs	5,224	1,433	0
Equity in net loss of unconsolidated investments	7,501	2,100	398
Other losses (gains), net	2,579	(614)	3,553
Changes in operating assets and liabilities (net of businesses acquired):			
Accounts receivable, net	(17,826)	3,215	(14,644)
Prepaid expenses and other assets	13,765	17,614	(7,038)
Accounts payable	40,456	(11,953)	(1,944)
Accrued expenses	1,490	(22,974)	(22,767)
Accrued compensation and benefits	(4,106)	10,257	(29,544)
Deferred revenue	21,722	20,372	33,109
Other liabilities	(1,113)	(183)	(7,025)
Net cash provided by operating activities	269,004	211,579	103,496
Cash flows from investing activities:			
Capital expenditures	(35,510)	(18,322)	(26,438)
Capitalized software	(102,472)	(49,264)	(40,661)
Cash paid for business acquisitions, net of cash acquired	(994,876)	(9,372)	(20,180)
Purchases of equity securities, other investments and related intangible assets	(21,185)	(215,786)	(21,544)
Sales and maturities of marketable securities and other investments	0	3,763	50
Proceeds received from sale of fixed assets	37	15	85
Net cash used in investing activities	(1,154,006)	(288,966)	(108,688)
Cash flows from financing activities:			
Proceeds from sale or issuance of common stock	84	103,631	1,487
Proceeds from issuance of redeemable convertible preferred stock - Netsmart	333,605	0	0
Excess tax benefits from stock-based compensation	1,014	644	0
Taxes paid related to net share settlement of equity awards	(8,204)	(7,062)	(10,400)
Payments of capital lease obligations	(6,277)	(598)	(455)
Credit facility payments	(157,245)	(238,511)	(96,876)
Credit facility borrowings, net of issuance costs	823,535	284,161	101,964
Repurchase of common stock	(121,241)	0	0
Net cash provided by (used in) financing activities	865,271	142,265	(4,280)
Effect of exchange rate changes on cash and cash equivalents	(532)	(1,178)	(309)
Net (decrease) increase in cash and cash equivalents	(20,263)	63,700	(9,781)
Cash and cash equivalents, beginning of period	116,873	53,173	62,954
Cash and cash equivalents, end of period	\$ 96,610	\$ 116,873	\$ 53,173

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

ALLSCRIPTS HEALTHCARE SOLUTIONS, INC.
NOTES TO 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 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 (“GAAP”) requires us to make estimates and assumptions that affect the amounts reported and disclosed in the consolidated financial statements and the accompanying notes. Actual results could differ materially from these estimates.

Revenue Recognition

Revenue represents the fair value of consideration received or receivable from clients for goods and services provided by us. Software delivery revenue consists of all of our proprietary software sales (either as a perpetual license sale or under a subscription delivery model), transaction-related revenue and the resale of hardware. Support and maintenance revenue consists of revenue from post contract client support and maintenance services. 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 or project-based revenue from implementation, training and consulting services. For some clients, we remotely host the software applications licensed from us using our own or third-party servers, which saves these clients the cost of procuring and maintaining hardware and related facilities. For other clients, we offer an outsourced solution in which we assume partial to total responsibility for a healthcare organization’s IT operations using our employees.

Revenue from software licensing arrangements where the service element is not considered essential to the functionality of the other elements of the arrangement is recognized upon delivery of the software or as services are performed, provided persuasive evidence of an arrangement exists, fees are considered fixed or determinable, and collection of the receivable is probable. The revenue recognized for each separate element of a multiple-element software contract is based upon vendor-specific objective evidence of fair value (“VSOE”), which is based upon the price the client is required to pay when the element is sold separately or renewed. For arrangements in which VSOE only exists for the undelivered elements, the delivered elements (generally software licenses) are accounted for using the residual method.

Revenue from software licensing arrangements, where the service element is considered essential to the functionality of the other elements of the arrangement, is accounted for on an input basis under the percentage of completion accounting method using actual hours worked as a percentage of total expected hours required by the arrangement, provided that persuasive evidence of an arrangement exists, fees are considered fixed or determinable, and collection of the receivable is probable. Maintenance and support associated with these agreements is recognized over the term of the support agreement based on VSOE of the maintenance revenue, which is based upon contractual renewal rates. For presentation in the statement of operations, consideration from agreements accounted for under the percentage of completion accounting method is allocated between software delivery and client services revenue based on VSOE of our hourly services rate multiplied by the amount of hours performed with the residual amount allocated to the software license fee.

Fees related to software-as-a-service (“SaaS”) arrangements are recognized as revenue ratably over the contract terms beginning on the date our solutions are made available to clients. These arrangements include client services fees related to the implementation and set-up of our solutions and are typically billed upfront and recorded as deferred revenue until our solutions are made available to the client. The implementation and set-up fees are recognized as revenue ratably over the estimated client relationship period. The estimated length of a client relationship period is based on our experience with client contract renewals and consideration of the period over which such clients use our SaaS solutions.

Software private cloud hosting services are provided to clients that have purchased a perpetual license to our software solutions and contracted with us to host the software. These arrangements provide the client with a contractual right to take possession of the software at any time during the private cloud hosting period without significant penalty and it is feasible for the client to either use the software on its own equipment or to contract with an unrelated third party to host the software. Private cloud hosting services are not deemed to be essential to the functionality of the software or other elements of the arrangement; accordingly, for these arrangements, we recognize software license fees as software delivery revenue upon delivery, assuming all other revenue recognition criteria have been met, and separately recognize fees for the private cloud hosting services as client services revenue over the term of the private cloud hosting arrangement.

We also enter into multiple-element arrangements that may include a combination of various software-related and non-software-related products and services. Management applies judgment to ensure appropriate accounting for multiple deliverables, including the allocation of arrangement consideration among multiple units of accounting, the determination of whether undelivered elements are essential to the functionality of delivered elements, and the timing of revenue recognition, among others. In such arrangements, we first allocate the total arrangement consideration based on a selling price hierarchy at the inception of the arrangement. The selling price for each element is based upon the following selling price hierarchy: VSOE, if available, third-party evidence of fair value if VSOE is not available, or estimated selling price if neither VSOE nor third-party evidence of fair value is available (discussion as to how we determine VSOE, third-party evidence of fair value and estimated selling price is provided below). Upon allocation of the arrangement consideration to the software elements as a whole and to individual non-software elements, we then further allocate consideration within the software group to the respective elements following higher-level, industry-specific guidance and our policies described above. After the arrangement consideration has been allocated to the various elements, we account for each respective element in the arrangement as described above.

To determine the selling price in multiple-element arrangements, we establish VSOE using the price charged for a deliverable when sold separately and contractual renewal rates for maintenance fees. For non-software multiple element arrangements, third-party evidence of fair value is established by evaluating similar and interchangeable competitor products or services in standalone arrangements with similarly situated clients. If we are unable to determine the selling price because VSOE or third-party evidence of fair value does not exist, we determine an estimated selling price by considering several external and internal factors including, but not limited to, pricing practices, margin objectives, competition, client demand, internal costs and overall economic trends. The determination of an estimated selling price is made through consultation with and approval by our management, taking into consideration our go-to-market strategy. As our, or our competitors', pricing and go-to-market strategies evolve, we may modify our pricing practices in the future. These events could result in changes to our determination of VSOE, third-party evidence of fair value and estimated selling price. Selling prices are analyzed on an annual basis or more frequently if we experience significant changes in our selling prices.

For those arrangements where the deliverables do not qualify as separate units of accounting, revenue recognition is evaluated for the combined deliverables as a single unit of accounting and the recognition pattern of the final deliverable will dictate the revenue recognition pattern for the single, combined unit of accounting. Changes in circumstances and client data may result in a requirement to either separate or combine deliverables, such that a delivered item could now meet the separation criteria and qualify as a separate unit of accounting, which may lead to an upward or downward adjustment to the amount of revenue recognized under the arrangement on a prospective basis.

We assess whether fees are considered fixed or determinable at the time of sale and recognize revenues if all other revenue recognition requirements are met. Our payment arrangements with clients typically include milestone-based software license fee payments and payments based upon delivery for services and hardware.

While most of our arrangements include short-term payment terms, we periodically provide extended payment terms to clients from the date of contract signing. We do not recognize revenue under extended payment term arrangements until such payments become due. In certain circumstances, where all other revenue recognition criteria have been met, we occasionally offer discounts to clients with extended payment terms to accelerate the timing of when payments are made. Changes to extended payment term arrangements have not had a material impact on our consolidated results of operations.

Maintenance fees are recognized ratably over the period of the contract based on VSOE, which is based upon contractual renewal rates. Revenue from electronic data interchange services is recognized as services are provided and is determined based on the volume of transactions processed or estimated selling price.

We provide managed services to our clients under arrangements that typically range from three to ten years in duration. Under these arrangements we assume full, partial or transitional responsibilities for a healthcare organization's IT operations using our employees. Our managed services include facilities management, network outsourcing and transition management. Revenue from these arrangements is recognized subsequent to the transition period as services are performed.

Revenue is recognized net of any taxes collected from clients and subsequently remitted to governmental authorities. We record as revenue any amounts billed to clients for shipping and handling costs and record as cost of revenue the actual shipping costs incurred.

We record reimbursements for out-of-pocket expenses incurred as client services revenue in our consolidated statements of operations. These amounts totaled:

(In thousands)	Year Ended December 31,		
	2016	2015	2014
Reimbursements for out-of-pocket expenses incurred	\$ 9,528	\$ 12,873	\$ 16,251

The following table summarizes revenue earned on contracts in excess of billings, both the current and non-current portions, which are included in the balances of accounts receivable and other assets, respectively, in our consolidated balance sheets. Billings are expected to occur according to the contract terms.

(In thousands)	December 31,	
	2016	2015
Revenue earned on contracts in excess of billings		
Unbilled revenue (current)	\$ 98,917	\$ 68,444
Unbilled revenue (long-term)	0	0
Total revenue earned on contracts in excess of billings	<u>\$ 98,917</u>	<u>\$ 68,444</u>

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 the following three categories:

Level 1: Inputs are unadjusted quoted prices in active markets for identical assets or liabilities at the measurement date. Our Level 1 financial instruments include our investment in NantHealth common stock.

Level 2: Inputs, other than quoted prices included in Level 1, are observable for the asset or liability, 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 11, "Derivative Financial Instruments," for further information regarding these derivative financial instruments.

Level 3: Unobservable inputs that 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. Our Level 3 financial instruments include derivative financial instruments comprising the 1.25% Call Option asset and the 1.25% embedded cash conversion option liability 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. Therefore, we believe the sensitivity of changes in the unobservable inputs to the option pricing model for these instruments is substantially mitigated. Refer to Note 11, "Derivative Financial Instruments," for further information regarding these derivative financial instruments. Our Level 3 financial instruments also include a third party non-marketable convertible note. The sensitivity of changes in the unobservable inputs to the valuation pricing model used to value this instrument is not material to our consolidated results of operations.

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, 2016				December 31, 2015			
		Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
NantHealth Common Stock	Available for sale marketable securities	\$ 149,100	\$ 0	\$ 0	\$ 149,100	\$ 0	\$ 0	\$ 0	\$ 0
Non-marketable convertible note	Other assets	0	0	1,156	1,156	0	0	0	0
1.25% Call Option	Other assets	0	0	17,080	17,080	0	0	80,208	80,208
1.25% Embedded cash conversion option	Other liabilities	0	0	(17,659)	(17,659)	0	0	(81,210)	(81,210)
Foreign exchange derivative assets	Prepaid expenses and other current assets	0	1,021	0	1,021	0	424	0	424
Total		<u>\$ 149,100</u>	<u>\$ 1,021</u>	<u>\$ 577</u>	<u>\$ 150,698</u>	<u>\$ 0</u>	<u>\$ 424</u>	<u>\$ (1,002)</u>	<u>\$ (578)</u>

As of December 31, 2016, it is not practicable to estimate the fair value of our non-marketable cost and equity method investments primarily because of their illiquidity and restricted marketability. 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 and the issuer's subsequent or planned raises of capital. Refer to Note 2, "Business Combinations and Other Investments" for additional information about these investments.

Our long-term financial liabilities include borrowings outstanding under our Senior Secured Credit Facility and non-recourse borrowings outstanding under Netsmart's Credit Agreements (both as defined in Note 6, "Debt"), with carrying values that approximate fair value since the variable interest rates approximate current market rates. In addition, as of December 31, 2016, the fair value of the 1.25% Notes (as defined in Note 6, "Debt") was less than the 1.25% Notes' principal balance (or par) by approximately 6%. We utilized the 1.25% Notes' market trading prices near December 31, 2016 in our fair value assessment. See Note 6, "Debt," for further information regarding our long-term financial liabilities.

Financial Instruments

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 investments classified as long-term available for sale securities include certain debt and equity instruments. Debt securities are classified as available-for-sale and realized gains and losses are recorded using the specific identification method. Changes in market value, excluding other-than-temporary impairments, are reflected in other comprehensive income. There were no other-than-temporary impairments related to our long-term available for sale securities for the years ended December 31, 2016, 2015 and 2014.

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.

For derivative instruments designated as cash-flow hedges, the effective portion of the derivative's gain (loss) is initially reported as a component of other comprehensive income and is subsequently recognized in earnings when the hedged exposure is recognized in earnings. Gains (losses) on derivatives representing either hedge components excluded from the assessment of effectiveness or hedge ineffectiveness are recognized in earnings. See Note 11, "Derivative Financial Instruments," for information regarding gains and losses from derivative instruments during the years ended December 31, 2016, 2015 and 2014.

Allowance for Doubtful Accounts Receivable

Accounts receivable are recorded at the invoiced amounts and do not bear interest. An allowance for doubtful accounts is recorded to provide for estimated losses resulting from uncollectible accounts, and is based principally on specifically identified amounts where collection is deemed doubtful. Additional non-specific allowances are recorded based on historical experience and management's assessment of a variety of factors related to the general financial condition of our clients, the industry in which we operate and general economic conditions. We regularly review the collectability of individual accounts and assess the adequacy of the allowance for doubtful accounts. Account balances are charged off against the allowance after all means of collection have been exhausted and the potential for recovery is considered remote. If the financial condition of our clients were to deteriorate, resulting in an impairment of their ability to make payments, additional allowance and related bad debt expense may be required.

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 on 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 its carrying value, we must determine the amount of implied goodwill that would be established if the reporting unit was hypothetically acquired on the impairment test date. If the carrying amount of a reporting unit's goodwill exceeds the amount of implied goodwill, an impairment loss equal to the excess would be recorded. The recoverability of indefinite-lived intangible assets is assessed by comparison of the carrying value of the asset to its estimated fair value. If we determine that the carrying value of the asset exceeds its estimated fair value, an impairment loss equal to the excess would be recorded.

The determination of the fair value of our reporting units is based on a combination of a market approach, that considers benchmark company market multiples, and an income approach, that 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 historical experience, our expectations of future performance, and the expected economic environment. 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.

Accounting guidance also requires that definite-lived intangible assets 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.

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 or if it meets the future alternative use criteria. 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. 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 in the future 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 may be recorded as a charge to earnings.

The unamortized balances of capitalized software were as follows:

(In thousands)	December 31,	
	2016	2015
Software development costs	\$ 321,265	\$ 200,531
Less: accumulated amortization	(157,386)	(114,756)
Software development costs, net	<u>\$ 163,879</u>	<u>\$ 85,775</u>

Capitalized software development costs, write-offs included in asset impairment changes and amortization of capitalized software development costs included in cost of revenue are shown in the table below. Capitalized software development costs for the year ended December 31, 2016 include \$44 million of third-party software purchases to supplement our internal software development efforts, of which \$24 million was accrued as of December 31, 2016.

(In thousands)	Year Ended December 31,		
	2016	2015	2014
Capitalized software development costs	\$ 126,003	\$ 46,464	\$ 45,461
Write-offs of capitalized software development costs	\$ 4,625	\$ 0	\$ 1,444
Amortization of capitalized software development costs	\$ 43,274	\$ 46,842	\$ 46,108

Redeemable Convertible Non-Controlling Interest – Netsmart

The redeemable convertible non-controlling interest reported in the mezzanine equity section of the accompanying consolidated balance sheet as of December 31, 2016 represents the redemption value of the Class A Preferred Units issued as part of the formation of Nathan Holding LLC in April 2016. Refer to Note 2, “Business Combinations and Other Investments” for additional information about the formation of this joint business entity and the redemption terms of the Class A Preferred Units.

The Class A Preferred Units do not have a mandatory redemption date and, with certain exceptions, can be redeemed no earlier than five years from their issuance date. They also contain a minimum liquidation preference feature and the value of such feature is accreted using the effective interest method. The Class A Preferred Units were not redeemable as of December 31, 2016.

A rollforward of the balance of redeemable convertible non-controlling interest for the year ended December 31, 2016 follows:

(In thousands)	
Balance as of December 31, 2015	\$ 0
Issuance of redeemable convertible non-controlling interest	359,149
Accretion of redemption preference on redeemable convertible non-controlling interest	28,536
Balance as of December 31, 2016	\$ 387,685

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.

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,		
	2016	2015	2014
Basic Loss per Common Share:			
Net income (loss)	\$ 3,030	\$ (2,056)	\$ (66,453)
Less: Net income attributable to non-controlling interests	\$ (146)	\$ (170)	\$ 0
Less: Accretion of redemption preference on redeemable convertible non-controlling interest - Netsmart	\$ (28,536)	\$ 0	\$ 0
Net loss attributable to Allscripts Healthcare Solutions, Inc. stockholders	<u>\$ (25,652)</u>	<u>\$ (2,226)</u>	<u>\$ (66,453)</u>
Weighted-average common shares outstanding	<u>186,188</u>	<u>185,082</u>	<u>179,849</u>
Basic Loss per Common Share	<u>\$ (0.14)</u>	<u>\$ (0.01)</u>	<u>\$ (0.37)</u>
Diluted Loss per Common Share:			
Net income (loss)	\$ 3,030	\$ (2,056)	\$ (66,453)
Less: Net income attributable to non-controlling interests	\$ (146)	\$ (170)	\$ 0
Less: Accretion of redemption preference on redeemable convertible non-controlling interest - Netsmart	\$ (28,536)	\$ 0	\$ 0
Net loss attributable to Allscripts Healthcare Solutions, Inc. stockholders	<u>\$ (25,652)</u>	<u>\$ (2,226)</u>	<u>\$ (66,453)</u>
Weighted-average common shares outstanding	186,188	185,082	179,849
Dilutive effect of stock options, restricted stock unit awards and warrants	<u>0</u>	<u>0</u>	<u>0</u>
Weighted-average common shares outstanding assuming dilution	<u>186,188</u>	<u>185,082</u>	<u>179,849</u>
Diluted Loss per Common Share	<u>\$ (0.14)</u>	<u>\$ (0.01)</u>	<u>\$ (0.37)</u>

As a result of the net loss attributable to Allscripts Healthcare Solutions, Inc. stockholders for the years ended December 31, 2016, 2015 and 2014, we used basic weighted-average common shares outstanding in the calculation of diluted loss per share for each of these years, 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:

(In thousands)	Year Ended December 31,		
	2016	2015	2014
Shares subject to anti-dilutive stock options, restricted stock unit awards and warrants excluded from calculation	<u>25,277</u>	<u>25,063</u>	<u>24,254</u>

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. With the exception of Netsmart, 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. Netsmart's stock-based option awards are liability-classified due to the option to call and cash settle such awards. 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. With the exception of Netsmart, 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.

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:

(In thousands)	Year Ended December 31,		
	2016	2015	2014
Company contributions to employee benefit plans	\$ 18,329	\$ 16,397	\$ 16,427

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 11, "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. No single client accounted for more than 10% of our revenue in the years ended December 31, 2016, 2015 and 2014. No client represented more than 10% of accounts receivable as of December 31, 2016 or 2015.

Recently Adopted Accounting Pronouncements

In August 2014, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update No. 2014-15, *Presentation of Financial Statements — Going Concern (Subtopic 205-40): Disclosure of Uncertainties about an Entity’s Ability to Continue as a Going Concern* (“ASU 2014-15”), which requires management of an entity to evaluate, in connection with preparing financial statements for each annual and interim reporting period, whether there are conditions or events, considered in the aggregate, that raise substantial doubt about such entity’s ability to continue as a going concern within one year after the date that the financial statements are issued (or within one year after the date that the financial statements are available to be issued when applicable), and provide related disclosures. ASU 2014-15 is effective for the annual period ending after December 15, 2016, and for annual and interim periods thereafter. We adopted this new guidance effective on December 31, 2016 and the adoption did not have any impact on our consolidated financial statements.

In November 2016, the FASB issued Accounting Standards Update No. 2016-18, *Statement of Cash Flows (Topic 230): Restricted Cash* (“ASU 2016-18”), which provides amendments to current guidance to address the classification and presentation of changes in restricted cash in the statement of cash flows. ASU 2016-18 is effective for annual periods beginning after December 15, 2017, and interim periods within those annual periods. Early adoption is permitted. We adopted this new guidance during the fourth quarter of 2016 and the adoption did not have any impact on our consolidated financial statements.

Accounting Pronouncements Not Yet Adopted

In May 2014, the FASB issued Accounting Standards Update No. 2014-09, *Revenue from Contracts with Customers: Topic 606* (“ASU 2014-09”), to supersede nearly all existing revenue recognition guidance under GAAP. The core principle of ASU 2014-09 is to recognize revenue when promised goods or services are transferred to customers in an amount that reflects the consideration that is expected to be received for those goods or services. ASU 2014-09 defines a five-step process to achieve this principle and, in doing so, it is possible more judgment and estimates may be required within the revenue recognition process than required under existing GAAP, including identifying performance obligations in the contract, estimating the amount of variable consideration to include in the transaction price and allocating the transaction price to each separate performance obligation. As issued, ASU 2014-09 is effective for us for annual reporting periods beginning after December 15, 2016, including interim periods within that reporting period. On August 12, 2015, the FASB issued ASU 2015-14, which deferred the effective date of ASU 2014-09 by one year to annual reporting periods beginning after December 15, 2017, while also permitting companies to voluntarily adopt the new revenue standard as of the original effective date. In addition, during 2016, the FASB issued ASU 2016-08, ASU 2016-10, 2016-11, 2016-12 and 2016-20, all of which clarify certain implementation guidance within ASU 2014-09.

The new revenue recognition guidance permits two methods of adoption: retrospectively to each prior reporting period presented (full retrospective method), or retrospectively with the cumulative effect of initially applying the guidance recognized at the date of initial application (the cumulative catch-up transition method). We currently plan to adopt the standard effective January 1, 2018 using the full retrospective method.

We have completed our initial assessment of our systems, data and processes that will be affected by the implementation of this new guidance. We are currently working towards establishing policies, updating our processes and implementing necessary changes to be able to comply with the new requirements. Based on the results of our assessment to date, we anticipate this standard will have an impact, which could be significant, on our consolidated financial statements. While we are continuing to assess all potential impacts of the standard, we currently believe the most significant impact relates to our accounting for software license revenue. We expect revenue related to hardware, SaaS-based offerings, professional services, electronic data interchange services, and managed service to remain substantially unchanged. We expect to recognize a significant portion of license revenue upfront rather than be restricted to payment amounts due under extended payment term contracts under current guidance. We also expect to recognize license revenue upfront rather than over the subscription period from certain multi-year software subscriptions that include both software licenses and software maintenance. Due to the complexity of certain of our license subscription contracts, the actual revenue recognition treatment required under the standard will be dependent on contract-specific terms, and may vary in some instances from upfront recognition.

In January 2016, the FASB issued Accounting Standards Update No. 2016-01, *Recognition and Measurement of Financial Assets and Financial Liabilities* (“ASU 2016-01”). The amendments in ASU 2016-01 modify the requirements related to the measurement of certain financial instruments in the statement of financial condition and results of operation. Equity investments (except those accounted for under the equity method of accounting or those that result in consolidation of the investee), are required to be measured at fair value with changes in fair value recognized in net income. An entity may continue to elect to measure equity investments which do not have a readily determinable fair value at cost with adjustments for impairment, if any, and observable changes in price. In addition, for a liability (other than a derivative liability) that an entity measures at fair value, any change in fair value related to the instrument-specific credit risk, that is the entity’s own-credit, should be presented separately in other comprehensive income and not as a component of net income. ASU 2016-01 also clarifies that an entity should evaluate the need for a valuation allowance on a deferred tax asset related to available-for sale securities in combination with the entity’s other deferred tax assets. ASU 2016-01 is effective for interim and annual periods beginning after December 15, 2017 with early adoption permitted.

solely for the instrument-instrument specific credit risk for liabilities measured at fair value. The amendments should be applied by means of a cumulative-effect adjustment to the balance sheet as of the beginning of the fiscal year of adoption. The amendments related to equity securities without readily determinable fair values (including disclosure requirements) should be applied prospectively to equity investments that exist as of the date of adoption. We are currently evaluating the impact of this accounting guidance.

In February 2016, the FASB issued Accounting Standards Update No. 2016-02, “*Leases (Topic 842)*” (“ASU 2016-02”) intended to improve financial reporting about leasing transactions. The new guidance will require entities that lease assets to recognize on their balance sheets the assets and liabilities for the rights and obligations created by those leases and to disclose key information about the leasing arrangements. ASU 2016-02 is effective for interim and annual periods beginning after December 15, 2018 with early adoption permitted. We are currently evaluating the impact of this accounting guidance, including the timing of adoption.

In March 2016, the FASB issued Accounting Standards Update No. 2016-07, *Investments – Equity Method and Joint Ventures (Topic 323): Simplifying the Transition to the Equity Method of Accounting* (“ASU 2016-07”). The guidance in ASU 2016-07 eliminates the requirement that, when an investment qualifies for use of the equity method as a result of an increase in the level of ownership interest or degree of influence, an investor must adjust the investment, results of operations, and retained earnings retroactively on a step-by-step basis as if the equity method had been in effect during all previous periods that the investment had been held. The amendments require that the equity method investor add the cost of acquiring the additional interest in the investee to the current basis of the investor’s previously held interest and adopt the equity method of accounting as of the date the investment becomes qualified for equity method accounting. The amendments also require that an entity that has an available-for-sale equity security that becomes qualified for the equity method of accounting recognize through earnings the unrealized holding gain or loss in accumulated other comprehensive income at the date the investment becomes qualified for use of the equity method. ASU 2016-07 is effective for interim and annual periods beginning after December 15, 2016, and should be applied prospectively. Early application is permitted. We plan to adopt this new guidance effective January 1, 2017 and the adoption is not expected to have a material impact on our consolidated financial statements.

In March 2016, the FASB issued Accounting Standards Update No. 2016-09, *Compensation – Stock Compensation (Topic 718): Improvements to Share-Based Payment Accounting* (“ASU 2016-09”). The guidance in ASU 2016-09, among other things, (i) will require all income tax effects of share-based awards to be recognized in the statement of operations when the awards vest or are settled, (ii) will allow an employer to repurchase more of an employee’s shares for tax withholding purposes than it can today without triggering liability accounting and (iii) will allow a policy election to account for forfeitures as they occur. ASU 2016-09 is effective for annual periods beginning after December 15, 2016, and interim periods within those annual periods. We plan to adopt this new guidance effective January 1, 2017. The requirement to recognize all income tax effects of share-based awards in the statement of operations when the awards vest or are settled will impact our future results of operations and earnings per share. We are not able to determine the magnitude of such impact as it will depend on the future prices of our common stock and awards activity.

In June 2016, the FASB issued Accounting Standards Update No. 2016-13, *Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments* (“ASU 2016-13”). The guidance in ASU 2016-13 replaces the incurred loss impairment methodology under current GAAP. 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 will be 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. Early adoption is permitted for fiscal years beginning after December 15, 2018. We are currently in the process of evaluating this new guidance, which we expect to have an impact on our consolidated financial statements and results of operations.

In August 2016, the FASB issued Accounting Standards Update No. 2016-15, *Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments* (“ASU 2016-15”). The guidance in ASU 2016-15 eliminates the diversity in practice related to the classification of certain cash receipts and payments in the statement of cash flows, by adding or clarifying guidance on eight specific cash flow issues. ASU 2016-15 is effective for annual periods beginning after December 15, 2017, and interim periods within those annual periods. Early adoption is permitted. We are currently evaluating the impact of this accounting guidance, including the timing of adoption.

In January 2017, the FASB issued Accounting Standards Update No. 2017-01, *Business Combinations (Topic 805): Clarifying the Definition of a Business* (“ASU 2017-01”). ASU 2017-01 provides new accounting guidance to assist an entity in evaluating when a set of transferred assets and activities is a business. The guidance is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2017, and should be applied prospectively to any transactions occurring within the period of adoption. Early adoption is permitted, including for interim or annual periods in which the financial statements have not been issued or made available for issuance. We are currently evaluating the impact of adopting this new guidance, including the timing of adoption.

In January 2017, the FASB issued Accounting Standards Update No. 2017-04, *Intangibles—Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment* (“ASU 2017-04”) that provides new accounting guidance to simplify the accounting for goodwill impairment. ASU 2017-04 removes Step two of the goodwill impairment test, which requires a hypothetical purchase price allocation. Under the new guidance, a goodwill impairment will now be the amount by which a reporting unit’s carrying value exceeds its fair value, not to exceed the carrying amount of goodwill. All other goodwill impairment guidance will remain largely unchanged. Entities will continue to have the option to perform a qualitative assessment to determine if a quantitative impairment test is necessary. ASU 2017-04 is effective for annual and interim periods in fiscal years beginning after December 15, 2019 with early adoption permitted for any goodwill impairment tests performed after January 1, 2017. The new guidance is to be applied prospectively. We are currently evaluating the impact of this accounting guidance, including the timing of adoption.

We do not believe that any other recently issued, but not yet effective accounting standards, if adopted, would have a material impact on our consolidated financial statements.

2. Business Combinations and Other Investments

Formation of Joint Business Entity and Acquisition of Netsmart, Inc.

On March 20, 2016, we entered into a Contribution and Investment Agreement (the “Contribution Agreement”) with GI Netsmart Holdings LLC, a Delaware limited liability company (“GI Partners”) to form a joint business entity, Nathan Holding LLC, a Delaware limited liability company (“Nathan”). The formation of Nathan was completed on April 19, 2016. As a result, pursuant to, and subject to the terms and conditions of, the Contribution Agreement, Nathan issued to Allscripts Class A Common Units in exchange for Allscripts contributing its Homecare™ business and cash to Nathan and issued to GI Partners Class A Preferred Units in exchange for cash.

The Nathan operating agreement provides that the Class A Preferred Units entitle the owners at any time and from time to time following the later of (A) the earlier of (I) the fifth anniversary of the effective date and (II) a change in control of Allscripts, and (B) the earlier of (I) the payment in full of the obligations under the Netsmart Credit Agreements and the termination of any commitments thereunder or (II) with respect to any proposed redemption, such earlier date for such redemption consented to in writing by the required lenders under each of the credit facilities under which obligations remain unpaid or under which commitments continue, to redeem all or any portion of their Class A Preferred Units for cash at a price per Unit equal to the Class A Preferred liquidation preference for each such Class A Preferred Unit as of the date of such redemption. The liquidation preference is equal to the greater of (i) a return of the original issue price plus a preferred return (accruing on a daily basis at the rate of 11% per annum and compounding annually on the last day of each calendar year) or (ii) the as-converted value of Class A Common Units in Nathan. The consolidated statement of operations for the year ended December 31, 2016 gives effect to the accretion of the 11% redemption preference as part of the calculation of net income (loss) attributable to Allscripts stockholders.

Also on April 19, 2016, Nathan acquired Netsmart, Inc., a Delaware corporation, pursuant to the Agreement and Plan of Merger, dated as of March 20, 2016 (the “Merger Agreement”), by and among Nathan Intermediate LLC, a Delaware limited liability company and a wholly-owned subsidiary of Nathan (“Intermediate”), Nathan Merger Co., a Delaware corporation and a wholly-owned subsidiary of Intermediate (“Merger Sub”), Netsmart, Inc. and Genstar Capital Partners V, L.P., as the equityholders’ representative. Pursuant to the Merger Agreement, on April 19, 2016, Merger Sub was merged with and into Netsmart, Inc., with Netsmart, Inc. surviving as a wholly-owned subsidiary of Intermediate (the “Merger”). As a result of these transactions (the “Netsmart Transaction” or “Netsmart Acquisition”), the establishment of Nathan combined the Allscripts Homecare™ business with Netsmart, Inc. Throughout the rest of this Form 10-K, Nathan is referred to as “Netsmart”.

At the effective time of the Merger, shares of Netsmart, Inc.’s common stock issued and outstanding immediately prior to the effective time were converted into the right to receive a pro rata share of \$950 million, reduced by net debt and subject to working capital and other adjustments (the “Purchase Price”). Each vested outstanding option to acquire shares of Netsmart, Inc.’s common stock became entitled to receive a pro rata share of the Purchase Price, less applicable exercise prices of the options. Certain holders of shares of Netsmart, Inc.’s common stock, who were members of Netsmart, Inc.’s management, exchanged a portion of such shares for equity interests in Nathan, in lieu of receiving their pro rata share of the Purchase Price, and certain holders of options to purchase shares of Netsmart, Inc.’s common stock, who were also members of Netsmart, Inc.’s management, invested a portion of such holder’s proceeds from the Merger in equity interests in Nathan (collectively, the “Rollover”). After the completion of the Merger and the Rollover, Allscripts owned 49.1%, GI Partners owned 47.2% and Netsmart’s management owned 3.7% of the outstanding equity interests in Netsmart, in each case on an as-converted basis. As part of the Netsmart Transaction, we deposited \$15 million in an escrow account to be used by Netsmart to facilitate the integration of our Homecare™ business within Netsmart over the next 5 years, at which time the restriction on any unused funds will lapse.

Pursuant to the consolidation guidance in FASB Accounting Standards Codification (“ASC”) Topic 810, *Consolidation*, we performed a qualitative and quantitative assessment to determine whether Netsmart was a variable interest entity (“VIE”). Our assessment involved consideration of all facts and circumstances relevant to Netsmart’s structure, including its capital structure, contractual rights to earnings (losses), subordination of our interests relative to those of other investors, contingent payments, as well as other contractual arrangements that have the potential to be economically significant. Based on this analysis, we determined that Netsmart was not a VIE and that we, through our 49.1% interest in Netsmart and other contractual rights, including budgetary approval, have the power to direct the activities of Netsmart that most significantly impact its economic performance. As a result, we concluded that we will account for our investment in Netsmart on a consolidated basis and the financial results of Netsmart were consolidated with Allscripts starting on April 19, 2016.

The acquisition of Netsmart, Inc. by Nathan was completed for an aggregate consideration of \$937 million. The consideration was funded by the sources of funds as described in the table below. The new Netsmart term loans are non-recourse to Allscripts and its wholly-owned subsidiaries. A portion of the debt proceeds were used to extinguish Netsmart, Inc.'s existing debt of \$325 million, including accrued interest and fees of \$2 million.

	<u>(In thousands)</u>
Cash contribution for redeemable convertible non-controlling interest in Netsmart - GI Partners	\$ 333,606
Exchange of Netsmart, Inc.'s common stock for redeemable convertible non-controlling interest in Netsmart - Netsmart, Inc. management	25,543
Cash contribution from borrowings under revolver in exchange for common stock in Netsmart - Allscripts	43,782
Net borrowings under new term loans - Netsmart	534,135
Total consideration for Netsmart, Inc.	\$ 937,066

Under the acquisition method of accounting, the fair value of consideration transferred for Netsmart, Inc. was allocated to the tangible and intangible assets acquired and the liabilities assumed based on their estimated fair values as of the acquisition date with the remaining unallocated amount recorded as goodwill. During the three months ended December 31, 2016, we recorded several measurement period adjustments, which included \$3.6 million decrease in accounts receivable, net, \$0.3 million increase in prepaid expenses and other assets, \$0.3 million decrease in other assets, \$0.7 million increase in deferred taxes, net, \$0.6 million decrease in other liabilities and \$3.7 million increase in the residual allocation to goodwill.

The final allocation of the fair value of the consideration transferred, including measurement period adjustments through December 31, 2016, is shown in the table below.

	<u>(In thousands)</u>
Cash and cash equivalents	\$ 5,982
Accounts receivable, net	50,472
Prepaid expenses and other current assets	9,667
Fixed assets	26,829
Intangible assets	409,500
Goodwill	619,283
Other assets	6,540
Accounts payable	(14,151)
Accrued expenses	(9,595)
Deferred revenue	(18,843)
Capital lease obligations	(17,833)
Deferred taxes, net	(127,729)
Other liabilities	(3,056)
Net assets acquired	\$ 937,066

Allscripts' contribution of its Homecare™ business to Nathan was deemed to be a transaction between entities under common control and the net assets of the Homecare™ business were contributed at carryover basis.

As noted above, the formation of Netsmart resulted in the merger of our Homecare™ business with Netsmart, Inc.'s behavioral health technology business. As a result, Netsmart became one of the largest healthcare IT companies serving the health and human services sector, which includes behavioral health, public health and child and family services. Among the factors that contributed to a purchase price resulting in the recognition of goodwill were the expected growth and synergies that we believe will result from the integration of our Homecare™ business with Netsmart, Inc.'s product offerings. The goodwill is not deductible for tax purposes.

The acquired intangible assets are being amortized over their useful lives, using a method that approximates the pattern of economic benefits to be gained by the intangible asset and consist of the following amounts for each class of acquired intangible asset:

Description	Useful Life (In years)	Fair Value (In thousands)
Technology	10	\$ 144,000
Corporate Trademark	indefinite	27,000
Product Trademarks	10	8,500
Customer Relationships	12-20	230,000
		<u>\$ 409,500</u>

Acquisition costs related to the Netsmart Acquisition totaled \$4.1 million and are included in selling, general and administrative expenses in the accompanying consolidated statement of operations for the year ended December 31, 2016.

Acquisition of HealthMEDX

On October 27, 2016, Netsmart completed the acquisition of HealthMEDX, LLC, a Delaware limited liability company (“HealthMEDX”), for an aggregate consideration of \$39.2 million. HealthMEDX is a provider of electronic medical record solutions for long-term and post-acute care including continuing care retirement communities, assisted living, independent living, skilled nursing and home care providers.

The aggregate consideration was funded by the sources of funds as shown in the table below and includes a contingent consideration payable to the HealthMEDX unitholders in 2018 of up to \$3.5 million based on HealthMEDX achieving certain recurring revenue milestones in 2017. The fair value of such contingent consideration shown in the table below represents the maximum pay-out amount discounted at the weighted-average cost of capital rate used as part of the HealthMEDX valuation. The portion of the aggregate consideration that was paid in cash at closing was funded with borrowings under the Netsmart Credit Agreements.

	(In thousands)
Incremental term loan - Netsmart	\$ 36,195
Contingent consideration payable to former HealthMEDX owners	2,888
Deferred cash consideration	100
Total consideration for HealthMEDX, LLC	<u>\$ 39,183</u>

The allocation of the fair value of the consideration transferred as of the acquisition date of October 27, 2016 is shown in the table below. This allocation is preliminary and is subject to changes, which could be significant, as appraisals of tangible and intangible assets are finalized, and additional information becomes available:

	(In thousands)
Cash and cash equivalents	\$ 489
Accounts receivable, net	3,109
Prepaid expenses and other current assets	773
Fixed assets	603
Intangible assets	20,940
Goodwill	18,457
Other assets	45
Accounts payable	(703)
Accrued expenses	(1,427)
Deferred revenue	(1,792)
Current maturities of capital lease obligations	(808)
Long-term maturities of debt and capital lease obligations	(503)
Net assets acquired	<u>\$ 39,183</u>

We believe that the HealthMEDX acquisition will complement the existing Homecare™ business and result in higher future revenue and operating synergies. These factors contributed to a purchase price resulting in the recognition of goodwill. The goodwill is expected to be deductible for tax purposes.

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

Description	Useful Life (In years)	Fair Value (In thousands)
Technology	10	\$ 11,410
Product Trademarks	10	680
Customer Relationships	15	8,850
		<u>\$ 20,940</u>

Supplemental Information

The supplemental pro forma results below were calculated after applying our accounting policies and adjusting the results of Netsmart and HealthMEDX to reflect (i) the additional depreciation and amortization that would have been charged resulting from the fair value adjustments to property, plant and equipment and intangible assets, (ii) the additional interest expense associated with Netsmart's borrowings under the new term loans, and (iii) the additional amortization of the estimated adjustment to decrease the assumed deferred revenue obligations to fair value that would have been charged assuming both acquisitions occurred on January 1, 2015, together with the consequential tax effects. Supplemental pro forma results for the year ended December 31, 2016 were also adjusted to exclude acquisition-related and transaction costs incurred during this period. Supplemental pro forma results for the year ended December 31, 2015 were adjusted to include these items. The supplemental pro forma results for the year ended December 31, 2016 exclude expenses incurred by Netsmart immediately prior to the Netsmart Transaction related to the accelerated pay-out of outstanding equity awards and the payment of seller costs. The supplemental pro forma results for the year ended December 31, 2015 include a goodwill impairment expense of \$23 million recognized by HealthMEDX. The effects of transactions between Allscripts and Netsmart during the periods presented have been eliminated in the supplemental pro forma data.

The revenue and earnings of Netsmart, since April 19, 2016, and HealthMEDX, since October 27, 2016, are included in our consolidated statement of operations for the year ended December 31, 2016 and the supplemental pro forma revenue and net loss of the combined entity, presented as if the acquisitions of both entities had occurred on January 1, 2015, are as follows:

(In thousands, except per share amounts)	Year Ended December 31,	
	2016	2015
Actual from Netsmart since acquisition date of April 19, 2016:		
Revenue (1)	\$ 173,361	\$ 0
Net loss (1)	\$ (27,709)	\$ 0
Actual from HealthMEDX since acquisition date of October 27, 2016:		
Revenue	\$ 4,725	\$ 0
Net loss	\$ 602	\$ 0
Supplemental pro forma data for combined entity:		
Revenue	\$ 1,644,004	\$ 1,579,848
Net loss attributable to Allscripts Healthcare Solutions, Inc. stockholders	\$ (44,728)	\$ (133,467)
Loss per share, basic and diluted	\$ (0.24)	\$ (0.72)

(1) Amounts are not adjusted for the effects of transactions between Allscripts and Netsmart and include HealthMEDX actual results since October 27, 2016.

Acquisition of Oasis Medical Solutions Limited

On July 8, 2014, we acquired the entire capital stock of Oasis Medical Solutions Limited (“Oasis”), a privately-held, Patient Administration System and health informatics solutions provider headquartered in London, United Kingdom, for \$20.6 million, in cash. The allocation of the fair value of the consideration transferred is as follows: \$0.4 million of acquired cash; \$5.4 million of accounts receivable and other current assets; \$5.6 million of intangible assets related to technology; \$0.3 million related to Oasis’ tradename; \$6.5 million of intangible assets related to customer relationships; goodwill of \$11.2 million; \$0.2 million of fixed assets; \$6.7 million of accounts payable, deferred revenue and accruals; and \$2.3 million of net deferred tax liabilities. Goodwill was determined based on the residual difference between the fair value of the consideration transferred and the value assigned to tangible and intangible assets and liabilities, and is not deductible for tax purposes. Among the factors that contributed to a purchase price resulting in the recognition of goodwill were the expected synergies that we believe will result from the integration of our product offerings with those of Oasis. The acquired intangible assets relating to technology, customer relationships and the Oasis’ tradename will be amortized on a straight-line basis over estimated lives of 10 years, 12 years and 2 years, respectively.

The pro forma impact of the Oasis acquisition is not material. The results of operations of Oasis have been included in our consolidated results from the date of acquisition. We did not incur any significant acquisition and integration-related costs related to the Oasis acquisition.

Other Acquisitions and Investments

On December 2, 2016, we acquired a 100% interest in a third party based in Australia for an aggregate consideration of \$5.1 million, net of cash acquired. The acquisition will broaden our clinical solutions portfolio. The financial results of this third party were consolidated with our financial results starting on the date of the transaction. The allocation of the estimated fair value of the aggregate consideration is as follows: \$2.9 million of goodwill; \$3.4 million of intangible assets related to customer relationships, \$0.6 million of intangible assets related to technology; \$1.2 million of deferred tax liabilities; and \$0.6 million of net working capital and deferred revenue. The goodwill is not deductible for tax purposes. The acquired intangible assets relating to technology and customer relationships will be amortized on a straight-line basis over estimated lives of 8 years. The aggregate consideration included a contingent consideration payable to the third party owners of up to \$2.5 million based on the achievement of certain profitability targets by 2018 and 2019. The fair value of \$2.0 million accrued at December 31, 2016 was calculated based on probability-weighted simulations of potential target achievements. All amounts are based on the exchange rate between the United States dollar and the Australian dollar as of December 31, 2016. The results of operations of this third party were not material to our consolidated results of operations for the year ended December 31, 2016.

On October 14, 2016, we acquired a 100% interest in a third party for an aggregate consideration \$24.0 million, net of cash acquired. The acquisition will broaden our population health solutions portfolio. The financial results of this third party were consolidated with our financial results starting on the date of the transaction. The allocation of the aggregate consideration is as follows: \$16.2 million of goodwill; \$11.5 million of intangibles assets related to technology, \$0.2 million of intangible assets related to customer relationships; \$3.7 million of deferred tax liabilities and \$0.2 million of net working capital and deferred revenue. The goodwill is not deductible for tax purposes. The acquired intangible assets relating to technology and customer relationships will be amortized on a straight-line basis over estimated lives of 8 years. The results of operations of this third party were not material to our consolidated results of operations for the year ended December 31, 2016.

On September 8, 2016, we acquired a 51% interest in a third party for \$29.7 million, net of cash acquired. This acquisition broadens our financial analytics solutions portfolio. The financial results of this third party were consolidated with our financial results starting on the date of the transaction and were not material to our consolidated results of operations for the year ended December 31, 2016. The allocation of the fair value of the consideration transferred is as follows: \$46.2 million in goodwill; \$8.3 million intangible assets related to customer relationships, \$10.3 million of intangible assets related to technology; \$1.6 million related to tradename; \$5.9 million of accounts receivable and other current assets; \$0.6 million of deferred tax assets; \$1.5 million of fixed assets; \$6.0 million of accounts payable, deferred revenue and accruals; \$8.5 million of deferred tax liabilities; \$0.8 million of other long-term liabilities, and \$29.4 million of non-controlling interest. The value of the non-controlling interest was based on its proportionate share of the implied total enterprise value of the third party at the time of the transaction. The goodwill is not deductible for tax purposes. The acquired intangible assets relating to technology, customer relationships and tradename will be amortized on a straight-line basis over estimated lives of 10 years, 13 years and 10 years, respectively. During the three months ended December 31, 2016, we recorded several measurement period adjustments, which included \$1.2 million decrease in the value of customer relationship intangibles, \$0.2 million decrease in deferred tax liability and \$1.0 million increase in the residual allocation to goodwill. As part of this acquisition, Allscripts also obtained a call option to purchase all, but not less than all, of the remaining 49% equity share of the third party after the second and third anniversaries of the transaction date at pre-defined future enterprise values of the third party. Additionally, as part of this acquisition, the minority owners of the third party were granted a call option to repurchase the 51% equity share owned by Allscripts at the same pre-defined future enterprise value applicable to Allscripts call option for a period of 9 months after the third

anniversary of the transaction date. Such call option can only be exercised in the event that Allscripts chooses not to exercise its call option after the third anniversary of the transaction date.

On April 17, 2015 we acquired a majority interest in a third party for \$11.1 million, and provided a loan to the third party of \$9.3 million to refinance its outstanding indebtedness. The financial results of this third party were consolidated with our financial results starting on the date of the transaction, with a proportionate share allocated to non-controlling interest. The allocations of the estimated fair value of the net assets of the third party to goodwill, intangibles and non-controlling interest were \$22.3 million, \$4.3 million and \$11.0 million, respectively. The value of the non-controlling interest was based on its proportionate share of the implied total enterprise value of the third party at the time of the transaction. The goodwill is not deductible for tax purposes. The results of operations of this third party were not material to our consolidated results of operations for the year ended December 31, 2015.

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

(In thousands)	Number of Investees at December 31, 2016	Original Investment	Carrying Value at	
			December 31, 2016	December 31, 2015
Equity method investments (1):				
Nant Health, LLC (2)	0	\$ 0	\$ 0	\$ 203,117
Other	3	1,658	2,436	2,436
Total equity method investments	3	1,658	2,436	205,553
Cost method investments	5	29,991	26,041	17,876
Total equity investments	8	\$ 31,649	\$ 28,477	\$ 223,429

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

(2) As noted below, effective June 2, 2016, Nant Health, LLC is no longer accounted for under the equity method.

On June 26, 2015 we purchased 59,099,908 Series G Units of Nant Health, LLC, a cloud-based information technology company that offers comprehensive genomic and protein-based molecular diagnostic testing, for \$200.0 million and incurred \$5.4 million of transaction-related expenses, resulting in a total investment of \$205.4 million. This investment represented a 10% ownership stake, excluding authorized but unissued common units of Nant Health, LLC, and was accounted for under the equity method. Additionally, the carrying amount of our investment at December 31, 2015 exceeded the amount of our share of underlying equity in net assets of Nant Health, LLC at September 30, 2015 by \$180 million. The excess carrying value over the underlying equity in net assets of Nant Health, LLC is primarily comprised of amortizable intangible assets and nonamortizable goodwill. During the six months ended December 31, 2015, we recorded a loss of \$2.3 million representing our share of equity loss of Nant Health, LLC based on a one quarter reporting lag and the amortization of cost basis differences associated with the amortizable intangible assets. The carrying value of our investment in Nant Health, LLC is included in other assets in the accompanying consolidated balance sheet as of December 31, 2015.

Effective June 1, 2016, in preparation for an IPO of its equity securities, Nant Health, LLC converted from an LLC into a Delaware corporation under the name of NantHealth, Inc. ("NantHealth"). We received 14,285,714 shares of common stock in the new corporation in replacement of our Series G Units of the former Nant Health, LLC, representing a 12.6% ownership interest in NantHealth immediately prior to the IPO. On June 2, 2016, NantHealth completed its IPO of 6,500,000 shares and its stock began trading on the NASDAQ under the ticker symbol "NH". The issuance of the IPO shares initially diluted our ownership interest to 11.8%. Also on June 2, 2016, we purchased an additional 714,286 shares at the IPO price of \$14 per share for an additional investment in NantHealth of \$10 million. This additional share purchase brought our total voting interest in NantHealth to 15,000,000 shares or 12.4% of the voting common stock.

Based on the guidance under FASB ASC Topic 323, *Investments – Equity Method and Joint Ventures*, and given our ownership percentage of 12.4% and lack of significant influence over NantHealth's operations, we concluded that we should no longer account for our investment in NantHealth as an equity method investment subsequent to June 2, 2016. The carrying amount of our Nant Health, LLC investment immediately after the IPO was \$205.6 million, which became the initial cost of our investment in NantHealth common stock. This amount includes the recognition of our equity in the net earnings of NantHealth and the amortization of cost basis adjustments through June 2, 2016, which totaled \$7.5 million during year ended December 31, 2016.

In accordance with FASB ASC Topic 320, *Investments – Debt and Equity Securities* and Topic 820, *Fair Value Measurement*, we began accounting prospectively for our investment in NantHealth's common stock as an available for sale marketable security with unrealized gains and losses due to the changes in the fair value of the investment recorded as part of accumulated other comprehensive loss ("AOCI") in stockholders' equity. If we determine that a decline in fair value below cost is other than temporary, we will recognize an impairment charge in current period earnings for the difference between cost and fair value. As of December 31, 2016, the fair value of our investment, based on the closing price as quoted on the NASDAQ, was \$149.1 million, resulting in a cumulative unrealized loss of \$56.5 million recognized in AOCI.

During 2016, we acquired a \$1.0 million non-marketable convertible note of a third party with which we have an existing license and distribution agreement. This investment is accounted as a non-marketable available-for-sale security with changes in fair value recorded in accumulated other comprehensive loss. The fair value of the convertible note was \$1.2 million as of December 31, 2016 and was included in other assets in the accompanying consolidated balance sheet as of December 31, 2016.

During 2016, we also acquired certain non-marketable equity securities of two third parties and entered into new commercial agreements with each of those third parties to license and distribute their products and services, for a total consideration of \$10.2 million. Both of these equity investments are accounted for under the cost method. The carrying value of these investments was \$10.2 million as of December 31, 2016 and is included in other assets in the accompanying consolidated balance sheet as of December 31, 2016. During 2016, we recognized an impairment charge of \$2.1 million relating to one of our other cost method investments.

As of December 31, 2016, it is not practicable to estimate the fair value of our equity investments primarily because of their illiquidity and restricted marketability. 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 and the issuer's subsequent or planned raises of capital.

3. Fixed Assets

Fixed assets consist of the following:

(Dollar amounts in thousands)	Estimated Useful Life	December 31, 2016	December 31, 2015
Computer equipment and software	3 to 10 years	\$ 336,784	\$ 304,032
Facility furniture, fixtures and equipment	5 to 7 years	23,398	20,302
Leasehold improvements	7 to 8 years, or life of lease if shorter	36,600	30,619
Assets under capital lease	3 to 5 years	23,204	3,266
Fixed assets, gross		419,986	358,219
Less: Accumulated depreciation and amortization		(271,176)	(232,602)
Fixed assets, net		<u>\$ 148,810</u>	<u>\$ 125,617</u>

Accumulated amortization for assets under capital lease amounted to \$5.6 million and \$3.0 million as of December 31, 2016 and 2015, respectively.

Fixed assets depreciation and amortization expense were as follows:

(In thousands)	Year Ended December 31,		
	2016	2015	2014
Fixed assets depreciation and amortization expense, including capital leases	\$ 40,315	\$ 42,153	\$ 48,465

4. Goodwill and Intangible Assets

Goodwill and intangible assets consist of the following:

(In thousands)	December 31, 2016			December 31, 2015		
	Gross Carrying Amount	Accumulated Amortization	Intangible Assets, Net	Gross Carrying Amount	Accumulated Amortization	Intangible Assets, Net
Intangibles subject to amortization:						
Proprietary technology	\$ 627,819	\$ (347,477)	\$ 280,342	\$ 450,852	\$ (302,284)	\$ 148,568
Customer contracts and relationships	813,021	(430,960)	382,061	552,395	(405,317)	147,078
Total	<u>\$ 1,440,840</u>	<u>\$ (778,437)</u>	<u>\$ 662,403</u>	<u>\$ 1,003,247</u>	<u>\$ (707,601)</u>	<u>\$ 295,646</u>
Intangibles not subject to amortization:						
Registered trademarks			\$ 79,000			\$ 52,000
Goodwill			1,924,052			1,222,601
Total			<u>\$ 2,003,052</u>			<u>\$ 1,274,601</u>

During 2016, in an effort to further streamline and align our operating structure around our key ambulatory, acute and population health management solutions, we made several changes to our organizational and reporting structure. These changes included (i) the separation of the former Touchworks strategic business unit and its dedicated leadership team into acute and ambulatory businesses, (ii) the transfer of several ancillary analytics-type products between our existing Clinical and Financial Solutions and Population Health reportable segments, both effective as of January 1, 2016, and (iii) the establishment of the FollowMyHealth® and EPSi™ business units effective September 30, 2016.

As a result of these changes, we assessed our revised reporting units and allocated the goodwill previously assigned to our former Touchworks reporting unit to our new Acute and Ambulatory reporting units based on the relative fair value allocation method as applied to the separate Touchworks acute and ambulatory businesses.

During the second quarter of 2016, we completed the Netsmart Transaction and recorded additional goodwill and intangible assets relating to the acquisition of Netsmart, Inc. As noted above, the formation of Netsmart resulted in the merger of our Homecare™ business with Netsmart, Inc.'s behavioral health technology business. Netsmart is deemed to be a separate reportable segment. Prior to the Netsmart Transaction, our Homecare™ business was included as part of the Population Health segment. As a result, we allocated part of the goodwill assigned to our Population Health segment to the Homecare™ business based on the relative fair value allocation method. Refer to Note 2, "Business Combinations and Other Investments," for additional information regarding the Netsmart Transaction.

We performed interim goodwill impairment tests (i) as of January 1, 2016 in conjunction with the organizational change within our Clinical and Financial Solutions reportable segment, (ii) as of March 31, 2016 in conjunction with the Netsmart Transaction and related carve-out of our Homecare™ business, and (iii) as of September 30, 2016 in conjunction with reporting structure changes of our FollowMyHealth® and EPSi™ businesses. The January 1, 2016 goodwill impairment test was performed on a before and after basis, which included impairment tests for each of the separate Touchworks acute and ambulatory businesses and for each of the new Acute and Ambulatory reporting units. The fair values of the separate Touchworks acute and ambulatory businesses and of the Acute and Ambulatory reporting units substantially exceeded their carrying values and no indicators of impairment were identified as a result of each of these goodwill impairment tests. The March 31, 2016 goodwill impairment test was performed on a before and after basis, which included impairment tests for the separate Homecare™ business and the Population Health segment excluding Homecare™. The fair values of the separate Homecare™ business and the Population Health segment excluding Homecare™ substantially exceeded their carrying values and no indicators of impairment were identified as a result of each of these goodwill impairment tests. The September 30, 2016 goodwill impairment test was performed on a before and after basis, which included impairment tests for each of the separate FollowMyHealth® and EPSi™ businesses and the Population Health segment excluding FollowMyHealth® and EPSi™. The fair values of the separate businesses and the Population Health segment excluding FollowMyHealth® and EPSi™ substantially exceeded their carrying values and no indicators of impairment were identified as a result of each of these goodwill impairment tests. We also performed the annual impairment tests of our reporting units as of October 1, 2016, with the exception of the Netsmart reporting unit for the which the test was performed as of December 31, 2016. The fair value of each reporting unit substantially exceeded its carrying value and no indicators of impairment were identified. All of the impairment tests performed during 2016 consisted of quantitative analyses.

We determined the fair value of each of our reporting units using both a discounted cash flow analysis and a market approach considering benchmark company market multiples. A discount rate of 10% to 11% was applied to the cash flows used in the discounted cash flow analysis. We also considered our market capitalization as of the date of each test.

There were no accumulated impairment losses associated with our goodwill as of December 31, 2016 or 2015, and no impairments were recorded during the years ended December 31, 2016, 2015 and 2014. Changes in the carrying amounts of goodwill by reportable segment for the years ended December 31, 2016 and 2015 were as follows:

(In thousands)	Clinical and Financial Solutions	Population Health	Netsmart	Total
Balance as of December 31, 2014	\$ 774,512	\$ 426,234	\$ 0	\$ 1,200,746
Other additions	22,319	0	0	22,319
Foreign exchange translation	(464)	0	0	(464)
Balance as of December 31, 2015	\$ 796,367	\$ 426,234	\$ 0	\$ 1,222,601
Additions arising from business acquisitions:				
Netsmart	0	0	619,283	619,283
HealthMEDX	0	0	18,457	18,457
Other additions	49,093	16,241	0	65,334
Total additions to goodwill	49,093	16,241	637,740	703,074
Reallocation	0	(37,600)	37,600	0
Foreign exchange translation	(1,623)	0	0	(1,623)
Balance as of December 31, 2016	<u>\$ 843,837</u>	<u>\$ 404,875</u>	<u>\$ 675,340</u>	<u>\$ 1,924,052</u>

Other additions during the years ended December 31, 2016 and 2015 relate to goodwill arising from our acquisition of several third parties. The goodwill reallocation during the year ended December 31, 2016 relates to the allocation of goodwill associated with our Homecare™ business during the second quarter of 2016 as a result of the Netsmart Transaction. Refer to Note 2, "Business Combinations and Other Investments," for additional information regarding these acquisitions.

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

(In thousands)	Year Ended December 31,		
	2016	2015	2014
Proprietary technology amortization included in cost of revenue	\$ 45,357	\$ 35,144	\$ 35,924
Intangible amortization included in operating expenses	25,847	23,172	31,280
Total intangible amortization expense	<u>\$ 71,204</u>	<u>\$ 58,316</u>	<u>\$ 67,204</u>

The increase in amortization expense for the year ended December 31, 2016 compared with the year ended December 31, 2015 was primarily driven by acquisitions in 2016, partly offset by amortization associated with intangible assets that were fully amortized in the second half of 2015. The decrease in amortization expense for the year ended December 31, 2015 compared with the year ended December 31, 2014 was primarily driven by amortization associated with intangible assets that were fully amortized in 2014. Estimated future amortization expense for the intangible assets that exist as of December 31, 2016, based on foreign currency exchange rates in effect as of such date, is as follows:

Year Ended December 31,	(In thousands)
2017	\$ 83,501
2018	80,953
2019	80,531
2020	78,766
2021	72,227
Thereafter	266,425
Total	<u>\$ 662,403</u>

5. Asset Impairment Charges

During the year ended December 31, 2016, we incurred non-cash asset impairment charges totaling \$4.7 million. These charges included \$2.2 million for the impairment of capitalized software as a result of our decision to discontinue several software development projects, \$2.1 million for the impairment of one of our cost method equity investments, and other charges of \$0.4 million to write down a long-term asset to its estimated net realizable value.

During the year ended December 31, 2015, we recorded asset impairment charges of \$1.2 million associated with a decline in the value of a commercial agreement and wrote-off certain deferred costs that were determined to be unrealizable of \$0.3 million. During 2014, we wrote-off certain deferred costs that were determined to be unrealizable of \$0.8 million and recorded \$1.6 million of non-cash capitalized software impairment charges as a result of our decision to discontinue several software development projects.

(In thousands)	Year Ended December 31,		
	2016	2015	2014
Asset impairment charges	\$ 4,650	\$ 1,544	\$ 2,390

6. Debt

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

(In thousands)	December 31, 2016			December 31, 2015		
	Principal Balance	Unamortized Discount and Debt Issuance Costs	Net Carrying Amount	Principal Balance	Unamortized Discount and Debt Issuance Costs	Net Carrying Amount
1.25% Cash Convertible Senior Notes	\$ 345,000	\$ 49,186	\$ 295,814	\$ 345,000	\$ 61,771	\$ 283,229
Senior Secured Credit Facility	441,875	4,691	437,184	346,875	5,704	341,171
Netsmart Non-Recourse Debt:						
First Lien Term Loan	432,925	11,655	421,270	0	0	0
Second Lien Term Loan	167,000	8,901	158,099	0	0	0
Other debt	13	0	13	183	0	183
Total debt	<u>\$ 1,386,813</u>	<u>\$ 74,433</u>	<u>\$ 1,312,380</u>	<u>\$ 692,058</u>	<u>\$ 67,475</u>	<u>\$ 624,583</u>
Less debt payable within one year - excluding Netsmart	15,638	480	15,158	12,657	479	12,178
Less debt payable within one year - Netsmart	4,351	1,900	2,451	0	0	0
Total long-term debt, less current maturities	<u>\$ 1,366,824</u>	<u>\$ 72,053</u>	<u>\$ 1,294,771</u>	<u>\$ 679,401</u>	<u>\$ 66,996</u>	<u>\$ 612,405</u>

Interest expense consisted of the following:

(In thousands)	Year Ended December 31,		
	2016	2015	2014
Interest expense	\$ 15,556	\$ 16,284	\$ 16,020
Amortization of discounts and debt issuance costs	13,922	13,679	13,277
Write off of unamortized deferred debt issuance costs	0	1,433	0
Netsmart:			
Interest expense (1)	30,820	0	0
Amortization of discounts and debt issuance costs	2,619	0	0
Write off of unamortized deferred debt issuance costs	5,224	0	0
Total interest expense	<u>\$ 68,141</u>	<u>\$ 31,396</u>	<u>\$ 29,297</u>

(1) Includes interest expense related to capital leases.

Interest expense related to the 1.25% Cash Convertible Senior Notes was comprised of the following:

(In thousands)	Year Ended December 31,		
	2016	2015	2014
Coupon interest at 1.25%	\$ 4,312	\$ 4,312	\$ 4,312
Amortization of discounts and debt issuance costs	12,585	11,994	11,433
Total interest expense related to the 1.25% Notes	\$ 16,897	\$ 16,306	\$ 15,745

1.25% Cash Convertible Senior Notes due 2020

On June 18, 2013, we issued \$345.0 million aggregate principal amount of the 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 is payable semiannually in arrears on January 1 and July 1 of each year, at a fixed annual rate of 1.25% commencing on January 1, 2014. The 1.25% Notes will mature on July 1, 2020 unless repurchased or converted in accordance with their terms prior to such date.

The 1.25% Notes are convertible only into cash, and not into shares of our common stock or any other securities. Holders may convert 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 may convert 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 will receive 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.

The initial conversion rate will be 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 will be subject to adjustment in some events but will not be adjusted for any accrued and unpaid interest. In addition, following certain corporate events that occur prior to the maturity date, we will pay a cash make-whole premium by increasing the conversion rate for a holder who elects to convert such holder's 1.25% Notes in connection with such a corporate event in certain circumstances. We may not redeem the 1.25% Notes prior to the maturity date, and no sinking fund is provided for the 1.25% Notes.

If we undergo a fundamental change (as defined in the Indenture), holders may require 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 Indenture provides for customary events of default, including cross acceleration to certain other indebtedness of ours, and our subsidiaries.

The 1.25% Notes are senior unsecured obligations, and rank senior in right of payment to any of our indebtedness that is expressly subordinated in right of payment to the 1.25% Notes; equal in right of payment to any of our unsecured indebtedness that is 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 contain an embedded cash conversion option. We have determined that the embedded cash conversion option is 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 settles or expires. 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 11, "Derivative Financial Instruments."

The reduced carrying value of the 1.25% Notes resulted in a debt discount that is 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 extends 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. As of December 31, 2016, we expect the 1.25% Notes to be outstanding until their July 1, 2020 maturity date, for a remaining amortization period of approximately three and a half years. As of December 31, 2016, the if-converted value of the 1.25% Notes did not exceed the 1.25% Notes' principal amount.

In connection with the settlement of the 1.25% Notes, we paid \$8.4 million in transaction costs. Such costs have been 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 is being amortized over the expected term of the 1.25% Notes. The remaining aggregate amounts allocated to the 1.25% Call Option and 1.25% Warrants were not significant. The outstanding capitalized amount of transaction costs related to the 1.25% Notes was \$4.1 million and is reported as a reduction of long-term debt on our consolidated balance sheet as of December 31, 2016.

Accrued and unpaid interest on the 1.25% Notes of \$2.2 million is included in accrued expenses in the accompanying consolidated balance sheet as of December 31, 2016.

1.25% Notes Call Spread Overlay

Also 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 is 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 of the proceeds from the settlement 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 is a derivative financial instrument and is discussed further in Note 11, "Derivative Financial Instruments." The 1.25% Warrants are equity instruments and are further discussed in Note 9, "Stockholders' Equity."

Senior Secured Credit Facility Amendment

On September 30, 2015, we entered into a Replacement Facility Amendment (the "2015 Credit Agreement") to our existing Credit Agreement, dated as of June 28, 2013, as amended on June 8, 2015, with a syndicate of financial institutions and JPMorgan Chase Bank, N.A., as administrative agent. The 2015 Credit Agreement provides for a \$250 million senior secured term loan (the "Term Loan") and a \$550 million senior secured revolving facility (the "Revolving Facility"), each with a five year term (collectively the "Senior Secured Credit Facility"). These amounts represent increases in total borrowing limits of \$25 million and \$125 million, respectively, compared with our existing Credit Agreement. The Term Loan is repayable in quarterly installments, which commenced on December 31, 2015 and end on September 30, 2020. 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.

Proceeds from the borrowings under the 2015 Credit Agreement were used for the refinancing of the term loan and revolving facility under our existing Credit Agreement. The proceeds of the Revolving Facility can be used to finance our working capital needs and for general corporate purposes, including financing of permitted acquisitions, share repurchases, and other investments. We may also request to add one or more incremental revolving and/or term loan facilities in an aggregate amount of up to \$300 million, subject to certain conditions.

Borrowings under the Senior Secured Credit Facility bear interest, at our option, at a rate per annum equal to either (1) the rate (adjusted for statutory reserve requirements for eurocurrency liabilities and mandatory costs, if any) for deposits in the applicable currency for a period equal to one, two, three or six months or, with respect to loans under the Revolving Facility denominated in United States dollars, subject to availability to all affected lenders, 7 days (as selected by us), appearing on pages LIBOR01, LIBOR02, EURIBOR01, as applicable, or other page displaying such rate for such currency of the Reuters Screen (the "Eurocurrency Rate") plus the applicable margin or (2) the highest of (a) the rate of interest publicly announced by JPMorgan Chase Bank, N.A. as its prime rate in effect at its principal office in New York City, (b) the federal funds effective rate from time to time plus 0.5%, and (c) the Eurocurrency Rate for United States dollars for a one month interest period plus 1.0% (the "Base Rate"), plus, in each case, the applicable margin. The initial applicable interest rate margin for Base Rate borrowings was 1.25%, and for Eurocurrency Rate borrowings was 2.25%. Future applicable interest rate margins will be determined from a pricing table and will depend upon our total leverage ratio. The applicable interest rate margins under the 2015 Credit Agreement for Base Rate borrowings range from 0.00% to 1.25% and for Eurocurrency Rate loans range from 1.00% to 2.25%. These ranges are 50 basis points lower at each level of the leverage-based pricing grid compared with our existing Credit Agreement.

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, dated as of June 28, 2013, 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 Senior Secured Credit Facility requires us to maintain a minimum interest coverage ratio of 4.0 to 1.0, a maximum total leverage ratio of 4.0 to 1.0 and a maximum senior secured leverage ratio of 3.0 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 leverage ratio is calculated by dividing total indebtedness by earnings before interest expense, income tax expense, depreciation and amortization expense, subject to various agreed upon adjustments. The senior secured leverage ratio is calculated by dividing senior secured indebtedness by earnings before interest expense, income tax expense, depreciation and amortization expense, subject to various agreed upon adjustments. The 2015 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 and a maximum senior secured leverage ratio of 3.25 to 1.0. In addition, the 2015 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 Senior Secured Credit Facility also contains certain customary events of default, including relating to non-payment, breach of covenants, cross-default, bankruptcy and change of control.

In connection with our entry into the 2015 Credit Agreement, during the year ended December 31, 2015, we incurred fees and other costs totaling \$3.0 million, of which \$2.7 million were capitalized and included in the net carrying amounts outstanding under the Senior Secured Credit Facility as of December 31, 2015. In addition, \$3.3 million of deferred costs associated with our existing Credit Facility carried over to the 2015 Credit Agreement. Also, in connection with our entry into the 2015 Credit Agreement, \$1.1 million of deferred costs associated with our existing Credit Agreement and \$0.3 million of fees and other costs associated with the 2015 Credit Agreement were written off to interest expense and are included in other losses, net in the accompanying consolidated statement of cash flows for the year ended December 31, 2015.

As of December 31, 2016, \$234.4 million under the Term Loan, \$207.5 million under the Revolving Facility, and \$0.8 million in letters of credit were outstanding under the 2015 Credit Agreement.

As of December 31, 2016, the interest rate on the Senior Secured Credit Facility was LIBOR plus 2.00%, which totaled 2.77%. We were in compliance with all financial covenants under the 2015 Credit Agreement as of December 31, 2016.

As of December 31, 2016, we had \$341.7 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.

Netsmart Non-Recourse Debt

On April 19, 2016, Netsmart entered into a First and Second Lien Credit Agreement (the “Netsmart First Lien Credit Agreement” and the “Netsmart Second Lien Credit Agreement”, respectively), with a syndicate of financial institutions and UBS AG, Stamford Branch, as administrative agent. The Netsmart First Lien Credit Agreement provides for a \$395 million senior secured 7-year term loan credit facility (the “Netsmart First Lien Term Loan”) and a \$50 million senior secured 5-year revolving loan credit facility (the “Netsmart Revolving Facility”). The Netsmart Second Lien Credit Agreement provides for a \$167 million senior secured 7.5-year term loan credit facility (the “Netsmart Second Lien Term Loan,” and, together with the Netsmart First Lien Credit Agreement, the “Netsmart Credit Agreements”). Each of Netsmart’s obligations under the Netsmart Credit Agreements are guaranteed by Intermediate, each other Borrower, each Subsidiary Guarantor and any other person who becomes a party to the Netsmart Credit Agreements, under an unconditional guaranty. Netsmart’s debt under the Netsmart Credit Agreements is non-recourse to Allscripts and its wholly-owned subsidiaries.

On October 27, 2016, Netsmart signed a definitive agreement to acquire HealthMEDX, LLC. The acquisition agreement resulted in Netsmart issuing additional first lien debt under the new facility of \$40 million. In connection with this additional first lien debt Netsmart incurred debt issuance costs of \$0.6 million.

On November 10, 2016, Netsmart amended its First Lien Credit Agreement to reduce the effective interest rate by 25 basis points. No other terms or conditions were impacted by this amendment. The Netsmart Revolving Facility and the Netsmart Second Lien Term Loan were not impacted by the amendment. There were no debt issuance costs associated with the amendment. Debt issuance costs of \$5.2 million were written off to interest expense in connection with this amendment due to the changes in members of the lending bank syndicate.

The Netsmart Revolving Facility will terminate on April 19, 2021 and the Netsmart First Lien Term Loan matures on April 19, 2023. The Netsmart Second Lien Term Loan matures on October 19, 2023. All unpaid principal of, and interest accrued on, such loans must be repaid on their respective maturity dates. The outstanding principal amount of the Netsmart First Lien Term Loan bears interest at a rate equal to (a) with respect to LIBO Rate Loans, Adjusted LIBO Rate plus 4.50% and (b) with respect to ABR Loans, 3.50%. The outstanding principal amount of the Netsmart Revolving Facility bears interest at a rate equal to (a) with respect to LIBO Rate Loans, Adjusted LIBO Rate plus 4.75% and (b) with respect to ABR Loans, 3.75% (provided, however, such rate may step-down to 4.25% and 3.25%, respectively, depending on the then-applicable leverage ratio). The outstanding principal amount of the Netsmart Second Lien Term Loan bears interest at a rate equal to (a) with respect to LIBO Rate Loans, Adjusted LIBO Rate plus 9.50% and (b) with respect to ABR Loans, 8.50%. The proceeds from the funding of the Netsmart Credit Agreements were used to, among other things, finance a portion of the Netsmart aggregate consideration and to pay fees and expenses in connection therewith.

The Netsmart Credit Agreements contain a financial covenant that Intermediate and its subsidiaries maintain a maximum ratio of total debt to Consolidated Adjusted EBITDA. The entire principal amount of the Netsmart Credit Agreements and any accrued but unpaid interest may be declared immediately due and payable if an event of default occurs. Events of default under the Netsmart Credit Agreements include (but are not limited to) failure to make payments when due, a default in the performance of any covenants in the Netsmart Credit Agreements or related documents or certain changes of control of Intermediate and/or of Netsmart.

The Netsmart First Lien Credit Agreement requires Netsmart to maintain a total net leverage ratio of not more than 8.75 to 1.00 commencing with the September 30, 2016 period, with gradual step-downs to 6.75 to 1.00 for the period ending March 31, 2019 and each three-month period ending thereafter. The Netsmart Second Lien Credit Agreement requires Netsmart to maintain a certain total leverage ratio of not more than 9.75 to 1.00 commencing with the September 30, 2016 period, with gradual step-downs to 7.75 to 1.00 for the period ending March 31, 2019 and each period ending thereafter.

In connection with the Netsmart Credit Agreements, during the second quarter of 2016, Netsmart incurred fees and other costs totaling \$27.9 million, which were capitalized and included in the net borrowings outstanding under Netsmart's Credit Agreements as of December 31, 2016.

As of December 31, 2016, \$432.9 million under the Netsmart First Lien Term Loan, \$167.0 million under the Netsmart Second Lien Term Loan and \$1.5 million in letters of credit under the Netsmart Revolving Facility were outstanding.

As of December 31, 2016, the interest rate on the borrowings under the Netsmart First Lien Term Loan was Adjusted LIBO plus 4.50%, which totaled 5.50%, and the Netsmart Revolving Facility was Adjusted LIBO plus 4.75%, which totaled 5.75%. As of December 31, 2016, the interest rate on the borrowings under the Netsmart Second Lien Term Loan was Adjusted LIBO plus 9.5%, which totaled 10.5%. Netsmart was in compliance with all covenants under its Credit Agreements as of December 31, 2016.

As of December 31, 2016, Netsmart had \$48.5 million available borrowing capacity, net of outstanding letters of credit, under the Netsmart Revolving Facility. There can be no assurance that Netsmart will be able to draw on the full available balance of the Netsmart Revolving Facility if the financial institutions that have extended such credit commitments become unwilling or unable to fund such borrowings.

The following table summarizes future debt payments as of December 31, 2016:

(In thousands)	Total	2017	2018	2019	2020	2021	Thereafter
1.25% Cash Convertible Senior Notes (1)	\$ 345,000	\$ 0	\$ 0	\$ 0	\$ 345,000	\$ 0	\$ 0
Term Loan (2)	234,375	15,625	28,125	40,625	150,000	0	0
Revolving Facility (2)	207,500	0	0	0	207,500	0	0
Netsmart Non-Recourse Debt (2)							
First Lien Term Loan	432,925	4,351	4,351	4,351	4,351	4,351	411,170
Second Lien Term Loan	167,000	0	0	0	0	0	167,000
Other debt	13	13	0	0	0	0	0
Total debt	<u>\$ 1,386,813</u>	<u>\$ 19,989</u>	<u>\$ 32,476</u>	<u>\$ 44,976</u>	<u>\$ 706,851</u>	<u>\$ 4,351</u>	<u>\$ 578,170</u>

(1) Assumes no cash conversions of the 1.25% Notes prior to their maturity on July 1, 2020.

(2) Assumes no additional borrowings after December 31, 2016 and that all drawn amounts are repaid upon maturity.

7. Income Taxes

The following is a geographic breakdown of income (loss) before income tax benefits:

(In thousands)	Year Ended December 31,		
	2016	2015	2014
United States	\$ (13,317)	\$ (5,357)	\$ (62,987)
Foreign	(1,467)	5,927	(5,130)
Total income (loss) before income taxes	\$ (14,784)	\$ 570	\$ (68,117)

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

(In thousands)	Year Ended December 31,		
	2016	2015	2014
Current tax provision			
Federal	\$ 323	\$ 570	\$ 840
State	606	658	213
Foreign	3,857	4,083	(399)
	4,786	5,311	654
Deferred tax provision			
Federal	(18,369)	(2,928)	(581)
State	(3,354)	898	(3,261)
Foreign	(877)	(655)	1,524
	(22,600)	(2,685)	(2,318)
Income tax provision (benefit)	\$ (17,814)	\$ 2,626	\$ (1,664)

Taxes computed at the statutory federal income tax rate of 35% are reconciled to the provision for income taxes as follows:

(In thousands)	Year Ended December 31,		
	2016	2015	2014
United States federal tax at statutory rate	\$ (4,714)	\$ 200	\$ (23,844)
Items affecting federal income tax rate			
Non-deductible acquisition and reorganization expenses	1,400	(2)	(56)
Research credits	(3,360)	(3,000)	(3,133)
Change in unrecognized tax benefits	(545)	(208)	(519)
State income taxes, net of federal benefit	(371)	182	(2,120)
Compensation	651	765	1,017
Meals and entertainment	1,341	1,023	954
Impact of foreign operations	2,847	1,848	2,505
Provision-to-Return adjustments	(1,116)	(136)	0
Settlements with taxing authorities	0	(4,218)	0
Deemed Dividends	887	1,408	0
Dividends Accrued	2,198	1,190	0
Federal, state and local rate changes	344	1,104	(268)
Bilateral Advance Pricing Agreement impact	0	524	(199)
Non-deductible items	70	(5)	82
Valuation allowance	(17,504)	1,816	24,666
Other	58	135	(749)
Income tax provision (benefit)	\$ (17,814)	\$ 2,626	\$ (1,664)

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

(In thousands)	December 31,	
	2016	2015
Deferred tax assets		
Accruals and reserves, net	\$ 22,305	\$ 24,548
Allowance for doubtful accounts	12,386	12,194
Stock-based compensation, net	15,939	12,086
Deferred revenue	15,092	13,294
Net operating loss carryforwards	91,859	78,909
Research and development tax credit	32,952	26,863
AMT credits	7,085	6,070
State tax credits	2,911	0
Other	15,065	7,012
Less: Valuation Allowance	(23,761)	(43,043)
Total deferred tax assets	191,833	137,933
Deferred tax liabilities		
Prepaid expense	(9,532)	(8,594)
Property and equipment, net	(15,879)	(3,953)
Acquired intangibles, net	(305,361)	(145,252)
Other	(22)	0
Total deferred tax liabilities	(330,794)	(157,799)
Net deferred tax liabilities	\$ (138,961)	\$ (19,866)

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

(In thousands)	December 31,	
	2016	2015
Non-current deferred tax assets, net	\$ 2,791	\$ 2,298
Non-current deferred tax liabilities, net	(141,752)	(22,164)
Non-current deferred tax liabilities, net	\$ (138,961)	\$ (19,866)

Allscripts Income Taxes

As of December 31, 2016 and 2015, we had federal net operating loss (“NOL”) carryforwards of \$192 million and \$238 million, respectively. Of the total federal NOL carryforwards, \$11 million relates to stock-based compensation tax deductions that will be tax-effected and the related benefit credited to additional paid-in capital when realized. As of December 31, 2016 and 2015, we had state NOL carryforwards of \$5 million. The NOL carryforwards expire in various amounts starting in 2019 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; however, we are not subject to any material limits at this point in time due to excess limitations in prior years. We have Israeli NOL carryovers of \$60 million that do not expire.

We use the tax law ordering approach for determining when tax benefits derived from stock-based awards are utilized. Under this approach, the utilization of excess tax deductions associated with stock-based awards is dictated by provisions in the tax law that identify the sequence in which such benefits are utilized for tax purposes when net operating losses exist.

For federal purposes, 2013 to 2016 tax years remain subject to income tax examination by federal authorities. For our state tax jurisdictions, 2005 to 2016 tax years remain open to income tax examination by state tax authorities. In Canada, the 2013 to 2016 tax years remain open for examination and in India the 2012 to 2016 tax years remain open.

We have a subsidiary in India that is entitled to a tax holiday that allows for tax-free operations during such tax holiday. The tax holiday for the subsidiary began to partially expire in 2012 and will fully expire in 2017. Tax savings realized from this holiday totaled \$0.7 million, \$0.4 million and \$0.8 million for the years ended December 31, 2016, 2015 and 2014, respectively, which reduced our diluted loss per share by less than \$0.01 in each of those years.

U.S. 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:

(In thousands)	Year Ended December 31,		
	2016	2015	2014
Beginning balance as of January 1	\$ 11,777	\$ 15,314	\$ 18,283
Increases for tax positions related to the current year	733	600	627
Decreases for tax positions related to prior years	(16)	0	(3,239)
Increases for tax positions related to prior years	104	50	173
Decreases relating to settlements with taxing authorities	0	(3,805)	(384)
Increases acquired in business acquisitions	617	0	0
Foreign currency translation	(1)	(24)	(26)
Reductions due to lapsed statute of limitations	(1,834)	(358)	(120)
Ending balance as of December 31	\$ 11,380	\$ 11,777	\$ 15,314

During the three months ended September 30, 2015, we concluded our IRS audit for all open years through December 31, 2012. The conclusion of this audit provided us with confirmation about the NOL carryforwards actual balance as of December 31, 2012. As a result, we recognized certain unrecognized income tax benefits totaling \$4.0 million during the three months ended September 30, 2015. The recognition of these benefits did not impact our effective tax rate due to the valuation allowance. We were not able to obtain confirmation regarding the actual balance of our research and development credit carryforwards because none of these research and development credits have been utilized against any tax liability as of the date of this Form 10-K. Therefore, our analysis of eligible research and development credit carryforwards remains unchanged.

We had gross unrecognized tax benefits of \$11.4 million and \$11.8 million as of December 31, 2016 and 2015, respectively. If the current gross unrecognized tax benefits were recognized, the result would be an increase in our income tax benefit of \$1.0 million and \$1.5 million, respectively. These amounts are net of accrued interest and penalties relating to unrecognized tax benefits of \$1.2 million. We believe that it is reasonably possible that \$1.0 million of our currently remaining unrecognized tax benefits may be recognized by the end of 2017, as a result of audit settlements and/or 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:

(In thousands)	Year Ended December 31,		
	2016	2015	2014
Interest and penalties included in the provision for income taxes	\$ (6)	\$ (103)	\$ (715)

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

(In thousands)	December 31,	
	2016	2015
Interest and penalties included in the liability for uncertain tax positions	\$ 1,187	\$ 1,193

During the year ended December 31, 2016, we released valuation allowance of \$17.5 million related to federal credit carryforwards, and foreign and state NOL carryforwards to offset current year taxable income. During the year ended December 31, 2015, we recorded valuation allowances of \$1.8 million for federal credit carryforwards, and foreign and state NOL carryforwards. 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.

Our effective rate was lower for the year ended December 31, 2016 as compared with the prior year, primarily due to the release of valuation allowance of \$17.5 million, and the fact that the permanent items and the impact of foreign earnings had a greater impact on the near break-even pre-tax income of \$0.6 million in the year ended December 31, 2015, compared to the impacts of these items on a pre-tax loss of \$14.8 million for the year ended December 31, 2016. Lastly, the effective tax rate for the year ended December 31, 2016 was impacted by the consolidation of Netsmart's financial results starting on April 19, 2016. On December 18, 2015, the Consolidated Appropriations Act of 2016 was enacted into law, which both reinstated retroactively to January 1, 2015 the research and development credit and made it permanent. Our effective tax rate for the years ended December 31, 2016 and December 31, 2015 includes the estimated impacts of this credit of \$3.0 million.

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 of December 31, 2016 we have established a Netherlands holding company, which holds our India subsidiary, and by early 2017 it is expected that all subsequent international subsidiaries will be contributed to this holding company. We have formal sales proposals in a number of foreign jurisdictions, where subsidiaries already exist or otherwise, that will require significant investment. Accordingly, no deferred taxes have been recorded for the difference between the financial and tax basis investment in our foreign subsidiaries. If these earnings were distributed to the United States, we would have additional United States taxable income and, depending on our tax position in the year of repatriation, may have to pay additional United States income taxes. Withholding taxes may also apply to the repatriated earnings. Determination of the amount of unrecognized income tax liability related to these permanently reinvested and undistributed foreign subsidiary earnings is currently not practicable. There are limited instances where we may repatriate only current year earnings of any subsidiary at the discretion of management. We will record deferred taxes for these instances on a case by case basis. There is a current intent to repatriate all current 2016 earnings of the India subsidiary, and all estimated deferred taxes have been accrued and reflected in our consolidated balance sheet and statement of operations for the year ended December 31, 2016.

During 2016, we determined that \$37.2 million of these foreign subsidiaries' undistributed earnings are now indefinitely reinvested outside the United States. As we have determined that the earnings of these subsidiaries are not required as a source of funding for our United States operations, such earnings are not planned to be distributed to the United States in the foreseeable future.

Netsmart Income Taxes

The Company has both U.S. federal and state net operating losses which are carried forward 20 years for federal tax purposes and from 5 to 20 years for state tax purposes. Both the federal and state loss carryovers are analyzed each year to determine the likelihood of realization. The U.S. federal loss carryover at December 31, 2016, was \$80.4 million and if not used, would begin to expire in 2034. The state net operating loss was \$118 million and if not used, would begin to expire in part beginning in 2018. In addition, the Company has \$6.9 million of federal and state tax credit carryovers consisting of \$0.4 million of federal Alternative Minimum Tax credits, \$3.9 million of federal and state research and development tax credits which if not used, will begin to expire in 2028 and \$2.7 million of Kansas High Performance Incentive Program credits which if not used, will begin to expire in 2027.

Netsmart files a U.S. consolidated return. The 2013 through 2016 tax returns of Netsmart, Inc. remain subject to examination by the Internal Revenue Service (IRS). The Company has been notified the IRS will commence an examination of the 2013, 2014 and 2015 federal income tax returns. The Company also files state tax returns with varying statutes of limitations. The 2012 through 2016 state tax returns remain subject to examination by most state tax authorities.

8. Stock Award Plans

Total recognized stock-based compensation expense was as follows:

(In thousands)	Year Ended December 31,		
	2016	2015	2014
Cost of revenue:			
Software delivery, support and maintenance	\$ 4,228	\$ 4,224	\$ 1,492
Client services	4,493	4,508	4,422
Total cost of revenue	8,721	8,732	5,914
Selling, general and administrative expenses	27,256	20,069	25,376
Research and development	8,175	7,826	7,964
Total stock-based compensation expense	\$ 44,152	\$ 36,627	\$ 39,254

The estimated income tax benefit of stock-based compensation expense included in the provision for income taxes for the year ended December 31, 2016 is approximately \$7 million. No stock-based compensation costs were capitalized during the years ended December 31, 2016, 2015 and 2014. The calculation of stock-based compensation expenses includes an estimate for forfeitures at the time of grant. This estimate can be revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. As of December 31, 2016, total unrecognized stock-based compensation expense related to non-vested awards and options was \$51.4 million and this expense is expected to be recognized over a weighted-average period of 2.4 years.

Allscripts Long-Term Incentive Plan

Allscripts Amended and Restated 2011 Stock Incentive Plan (the "Plan") provides for the granting of stock options, service-based share awards, performance-based share awards and market-based share awards, among other awards. As of December 31, 2016, there were 3.0 million shares 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, stock options or shares. A description of each category of awards is presented below.

Service-based Share Awards

Service-based share awards include stock options, restricted stock units and restricted shares, 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. Deferred share units are awarded to directors and vest within one year, when issued in lieu of annual share awards, or immediately, when issued in lieu of cash compensation. We recognize the expense for service-based share awards over the requisite service period on a straight-line basis, net of estimated forfeitures.

As of December 31, 2016, there was \$38.7 million of total estimated unrecognized stock-based compensation expense related to the service-based share awards, which is expected to be recognized over a weighted-average period of 2.6 years.

Performance-based Share Awards

Performance-based share awards include restricted stock units and restricted shares. 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, including, but not limited to, non-GAAP EBITDA and revenue growth, as defined in the grant agreements. The awards are earned based on actual results achieved compared to targeted amounts. Stock-based compensation expense related to these awards is recognized over three-year and four-year vesting periods under the accelerated attribution method if and when we conclude that it is probable that the performance conditions will be achieved.

As of December 31, 2016, there was \$4.3 million of total estimated unrecognized stock-based compensation expense, assuming various target attainments related to the performance-based share awards, which is expected to be recognized over a weighted-average period of 1.4 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. Following completion of each of the three-year performance periods, the Compensation Committee of our Board will determine the number of awards that would vest considering overall performance over the three-year performance periods. If the number of shares that would vest under this scenario is greater than the amount vesting under the three annual performance segments, then such greater number of awards shall vest, reduced by the number of awards previously vested. Stock-based compensation expense related to these awards will be recognized over three-year vesting periods under the accelerated attribution method.

As of December 31, 2016, there was \$8.4 million of total estimated unrecognized stock-based compensation expense, which is expected to be recognized over a weighted-average period of 1.9 years.

Restricted Stock Units and Awards

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, 2013	5,734	\$ 13.94
Awarded	2,199	18.09
Vested	(2,044)	13.90
Forfeited	(793)	14.28
Unvested restricted stock units as of December 31, 2014	5,096	15.69
Awarded	2,937	12.07
Vested	(1,612)	14.84
Forfeited	(1,042)	14.74
Unvested restricted stock units as of December 31, 2015	5,379	14.15
Awarded	3,480	12.88
Vested	(2,095)	13.84
Forfeited	(517)	14.30
Unvested restricted stock units as of December 31, 2016	6,247	\$ 13.54

Net Share-settlements

Restricted stock units and awards 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, 2016, 2015 and 2014 were net-share settled such that we withheld shares with value equivalent to the employees' minimum statutory obligation for the applicable income and other employment taxes, and remitted the cash to the appropriate taxing authorities. Total payments for the employees' minimum statutory tax obligations to the taxing authorities are reflected as a financing activity within the accompanying consolidated statements of cash flows. The total shares withheld during the years ended December 31, 2016, 2015 and 2014 were 648 thousand, 523 thousand and 669 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 as a result of the vesting.

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, 2013	4,322	\$ 14.28	1,025	\$ 15.52
Options granted	0	0.00		
Options exercised	(289)	11.88		
Options forfeited	(606)	15.03		
Balance as of December 31, 2014	3,427	14.35	1,393	14.97
Options granted	0	0.00		
Options exercised	(317)	11.44		
Options forfeited	(767)	15.89		
Balance as of December 31, 2015	2,343	14.24	1,282	14.52
Options granted	0	0.00		
Options exercised	(6)	14.01		
Options forfeited	(434)	15.51		
Balance as of December 31, 2016	<u>1,903</u>	\$ 13.95	1,431	\$ 13.98

We estimate 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 have a contractual term of 7 years.

The aggregate intrinsic value of stock options outstanding or exercisable as of December 31, 2016 was zero, based on our closing stock price of \$10.21 as of December 31, 2016. 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:

(In thousands)	Year Ended December 31,		
	2016	2015	2014
Total intrinsic value of stock options exercised	\$ 1	\$ 972	\$ 1,535
Total fair value of share awards vested	\$ 26,892	\$ 21,673	\$ 31,672

The following table summarizes information about stock options outstanding under the Plan as of December 31, 2016:

Range of Exercise Prices	Number of Options Outstanding	Weighted-Average Exercise Price	Number of Options Exercisable	Weighted-Average Exercise Price
\$12.50 to \$14.78	1,727,810	\$ 13.77	1,289,044	\$ 13.76
\$14.94 to \$16.80	158,517	\$ 15.51	126,304	\$ 15.58
\$18.45 to \$18.74	15,940	\$ 18.70	15,940	\$ 18.70
	<u>1,902,267</u>		<u>1,431,288</u>	

The weighted average remaining contractual life of the options outstanding and exercisable as of December 31, 2016 is 3.2 years.

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. There were 756 thousand and 675 thousand shares purchased under the ESPP during the years ended December 31, 2016 and 2015, respectively.

Netsmart Long-Term Incentive Plan

Netsmart has established the Nathan Holding LLC 2016 Unit Option Plan (the “Netsmart Plan”) in order to provide key employees, managers, advisors and consultants of Netsmart and its affiliates with an opportunity to acquire an equity interest in Netsmart. The Plan provides for the maximum issuance of 116,491 thousand options related to Netsmart’s Class B Non-Voting Common Member Units (“Option Units”). The Option Unit grants may contain varying vesting conditions, including service, performance and market conditions established on a grant-by-grant basis as determined by the Compensation Committee of Netsmart’s Board of Directors and expire no more than 10 years after the date of grant. The Netsmart Plan includes a call right which enables Netsmart to repurchase any outstanding units in the event of termination of employment. At December 31, 2016, there were 28,918 thousand Class B Non-Voting Common Units available for further issuance under the Netsmart Plan. As discussed further below, during the period from April 19, 2016 (the date of the Netsmart Transaction) through December 31, 2016 (the “2016 Period”), Netsmart issued 89,889 thousand Option Units to officers and employees at an exercise price of \$1.00 per Option Unit, which was equal to the fair value of Netsmart’s Common Units at the date of grant.

Time-based Awards

During the 2016 Period, Netsmart granted 64,198 thousand Option Units to certain of its executives and employees. During the same period, 1,654 thousand time-based Option Units were forfeited. The Option Units vest ratably over a period of four years, with the first twenty-five percent vesting at the first anniversary of the issuance and the remaining vesting in equal monthly increments over the following thirty-six months. The Option Units are liability-classified awards requiring the Option Units to be re-measured at fair value at each reporting period.

Performance-based Awards

During the 2016 Period, Netsmart granted 25,691 thousand Option Units to certain of its executives and employees to reward the recipients if certain future financial objectives are met. During the same period, 662 thousand performance-based Option Units were forfeited. In addition to a service condition, these Option Units only vest upon attaining certain future performance and market conditions. There was no stock compensation expense recorded for these performance-based Option Units, since achievement of the performance conditions was not considered probable at December 31, 2016.

A summary of the activity under the Netsmart Plan during the 2016 Period is as follows:

(Option Units in thousands, except per unit amounts)	Option Units		Weighted Average Exercise Price
Granted	89,889	\$	1.00
Called	0		0.00
Exercised	0		0.00
Forfeited	(2,316)		1.00
Outstanding – December 31, 2016	<u>87,573</u>		1.00
Exercisable – December 31, 2016	<u>0</u>	\$	0.00

Option Units outstanding at December 31, 2016 are as follows:

(Option Units in thousands, except per unit amounts)		Outstanding		Exercisable		
Exercise price	Option Units	Weighted Average Fair Value	Weighted Average Remaining Life	Option Units	Average Fair Value	Weighted Average Remaining Life
\$ 1.00	87,573	\$ 0.54	9.31	0	\$ 0.00	0

As the current estimated fair value equals the exercise price of the Option Units as of December 31, 2016, there was no intrinsic value related to the outstanding Option Units.

The stock-based compensation expense was included in the following categories in our consolidated statement of operations for the year ended December 31, 2016:

(In thousands)	
Cost of revenue:	
System sales	\$ 103
Professional services	130
Total cost of revenue	233
Selling, general and administrative expenses	5,427
Research and development	146
Total stock-based compensation expense	\$ 5,806

At December 31, 2016 the liability for outstanding awards was \$5.8 million.

The fair value of Option Units outstanding as of December 31, 2016 was estimated using the Black-Scholes-Merton option pricing model using the following weighted-average assumptions:

Average expected term in years	6.31
Risk free rate (weighted average)	2.3%
Expected dividends	0.0%
Average volatility	53.7%

Netsmart determined the estimated share price of \$1.00 at December 31, 2016. The December 31, 2016 value was determined based on the transaction value of a Netsmart Common Unit as of the transaction date.

The expected term of the awards was determined based upon an estimate of the expected term of “plain vanilla” options as prescribed by the simplified method. The risk-free interest rate is based on the U.S. Treasury yield curve in effect at the time of grant. Netsmart estimates expected volatility based primarily on historical monthly volatility of comparable companies that are publicly traded.

Netsmart has \$27.7 million of share-based compensation expense remaining to be recognized (based on the December 31, 2016 fair value) over future periods as follows: \$6.7 million in 2017, \$8.4 million in 2018, \$8.4 million in 2019 and \$4.2 million in 2020.

9. Stockholders' Equity

Stock Repurchases

On November 17, 2016, we announced that our Board approved a new stock purchase program under which we may repurchase up to \$200 million of our common stock through December 31, 2019. The new stock program supersedes the previously existing stock repurchase program, which authorized us to repurchase up to \$150 million of our common stock through December 31, 2018. During 2016, we purchased 2.2 million shares of our common stock under the new program for a total of \$24 million and 8.1 million shares of our common stock under the prior program for a total of \$97 million. Any share repurchase transactions may be made through open market transactions, block trades, privately negotiated transactions (including accelerated share repurchase transactions) or other means, subject to market conditions. Any repurchase activity will depend on many factors such as 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 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 common stock at a price per share of \$14.34, and (iii) 1,100,000 shares of common stock at a price per share of \$15.59, in each case subject to customary anti-dilution adjustments. The warrants vest 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 of 1933, as amended. These warrants are not actively traded and were valued based on an option pricing model that uses observable and unobservable market data for inputs. The warrants are valued at \$11 million and are being amortized into earnings over the four year vesting period. The amortization of the warrant value is included as a reduction to revenue in the accompanying consolidated statements of operations.

In June 2015, we sold 7,434,944 unregistered shares of our common stock previously held as treasury shares and issued warrants to purchase 1,486,989 shares of our common stock at an exercise price equal to \$17.675 per share of common stock, subject to customary anti-dilution adjustments, to Nant Capital, LLC in a private placement exempt from registration pursuant to Section 4(a)(2) under the Securities Act of 1933, as amended. These transactions were meant to strengthen our strategic and commercial relationship with NantHealth and were made in conjunction with our investment in NantHealth as of the same date (refer to Note 2, "Business Combinations and Other Investments"). The common stock shares were sold at a price of \$13.45 per share, being the average closing price per share of our common stock on the NASDAQ Global Select Market for the 60 consecutive trading day period ending on and including June 24, 2015, for an aggregate purchase price of \$100.0 million. The total proceeds of \$100.0 million were allocated to the common stock shares and the warrants in the amounts of \$98.3 million and \$1.7 million, respectively. The warrants expired unexercised during 2016.

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, 2016 and 2015. The 1.25% Warrants expire over a period of 70 trading days beginning on October 1, 2020 and 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.

In June 2013, we agreed to issue a warrant to a commercial partner as part of an overall commercial relationship pursuant to which the warrant holder has the right to purchase 1.5 million shares of our common stock at a strike price of \$12.94 per share. The warrant vests in four equal annual installments of 375 thousand shares (beginning in June 2014) and expires in June 2020. Our issuance of the warrant was a private placement exempt from registration pursuant to Section 4(a)(2) under the Securities Act of 1933, as amended. This warrant is not actively traded and was valued based on an option pricing model that uses observable and unobservable market data for inputs. The warrant was valued at \$10.2 million and is being amortized into earnings over the four year vesting period. The amortization of the warrant value is included in stock-based compensation expense in the accompanying consolidated statements of cash flows.

10. 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 Available for Sale Securities	Unrealized Net Gains (Losses) on Interest Rate Swap	Unrealized Net Gains (Losses) on Foreign Exchange Contracts	Total
Balance as of December 31, 2013 (1)	\$ (1,590)	\$ 124	\$ (279)	\$ 0	\$ (1,745)
Other comprehensive income (loss) before reclassifications	(529)	16	(23)	0	(536)
Net losses (gains) reclassified from accumulated other comprehensive loss	0	0	302	0	302
Net other comprehensive (loss) income	(529)	16	279	0	(234)
Balance as of December 31, 2014 (2)	(2,119)	140	0	0	(1,979)
Other comprehensive income (loss) before reclassifications	(2,381)	0	0	191	(2,190)
Net losses (gains) reclassified from accumulated other comprehensive loss	0	(140)	0	67	(73)
Net other comprehensive (loss) income	(2,381)	(140)	0	258	(2,263)
Balance as of December 31, 2015 (3)	(4,500)	0	0	258	(4,242)
Other comprehensive (loss) income before reclassifications	(1,528)	(56,420)	0	683	(57,265)
Net losses (gains) reclassified from accumulated other comprehensive loss	0	0	0	(322)	(322)
Net other comprehensive (loss) income	(1,528)	(56,420)	0	361	(57,587)
Balance as of December 31, 2016 (4)	\$ (6,028)	\$ (56,420)	\$ 0	\$ 619	\$ (61,829)

(1) Net of taxes (benefits) of \$79 thousand for unrealized net gains on available for sale securities and \$(179) thousand for unrealized net losses on interest rate swap derivative

(2) Net of taxes of \$88 thousand for unrealized net gains on available for sale securities

(3) Net of taxes of \$166 thousand for unrealized net gains on foreign exchange contract derivatives

(4) Net of taxes of \$463 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")

(In thousands)	Year Ended December 31, 2016		
	Before-Tax Amount	Tax Effect	Net Amount
Foreign currency translation adjustments	\$ (1,528)	\$ 0	\$ (1,528)
Available for sale securities:			
Net gain arising during the period	(56,359)	(61)	(56,420)
Net gain reclassified into income	0	0	0
Net change in unrealized gains on available for sale securities	(56,359)	(61)	(56,420)
Derivatives qualifying as cash flow hedges:			
Foreign exchange contracts:			
Net gains (losses) arising during the period	1,128	(445)	683
Net (gains) losses reclassified into income	(531)	209	(322)
Net change in unrealized gains (losses) on foreign exchange contracts	597	(236)	361
Net gain (loss) on cash flow hedges	597	(236)	361
Other comprehensive loss	\$ (57,290)	\$ (297)	\$ (57,587)

(In thousands)	Year Ended December 31, 2015		
	Before-Tax Amount	Tax Effect	Net Amount
Foreign currency translation adjustments	\$ (2,381)	\$ 0	\$ (2,381)
Available for sale securities:			
Net gain arising during the period	0	0	0
Net gain reclassified into income	(228)	88	(140)
Net change in unrealized gains on available for sale securities	(228)	88	(140)
Derivatives qualifying as cash flow hedges:			
Foreign exchange contracts:			
Net gains (losses) arising during the period	314	(123)	191
Net (gains) losses reclassified into income	110	(43)	67
Net change in unrealized gains (losses) on foreign exchange contracts	424	(166)	258
Net gain (loss) on cash flow hedges	424	(166)	258
Other comprehensive loss	\$ (2,185)	\$ (78)	\$ (2,263)

(In thousands)	Year Ended December 31, 2014		
	Before-Tax Amount	Tax Effect	Net Amount
Foreign currency translation adjustments	\$ (529)	\$ 0	\$ (529)
Available for sale securities:			
Net gain arising during the period	25	(9)	16
Net gain reclassified into income	0	0	0
Net change in unrealized gains on available for sale securities	25	(9)	16
Derivatives qualifying as cash flow hedges:			
Interest rate swap:			
Net loss arising during the period	(38)	15	(23)
Net loss reclassified into income	496	(194)	302
Net change in unrealized losses on interest rate swap	458	(179)	279
Net gain (loss) on cash flow hedges	458	(179)	279
Other comprehensive loss	\$ (46)	\$ (188)	\$ (234)

11. Derivative Financial Instruments

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

(In thousands)	December 31, 2016			
	Asset Derivatives		Liability Derivatives	
	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	\$ 1,021	Accrued expenses	\$ 0
Derivatives not subject to hedge accounting:				
1.25% Call Option	Other assets	17,080	N/A	
1.25% Embedded cash conversion option	N/A		Other liabilities	17,659
Total derivatives		\$ 18,101		\$ 17,659

(In thousands)	December 31, 2015			
	Asset Derivatives		Liability Derivatives	
	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	\$ 424	Accrued expenses	\$ 0
Derivatives not subject to hedge accounting:				
1.25% Call Option	Other assets	80,208	N/A	
1.25% Embedded cash conversion option	N/A		Other liabilities	81,210
Total derivatives		\$ 80,632		\$ 81,210

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

Foreign Exchange Contracts

Starting in 2015, we 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 decreasing percentage of forecasted monthly INR expenses over time. As of December 31, 2016, there were 30 forward contracts outstanding that were staggered to mature monthly starting in January 2017 and ending in June 2018. 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 2018. As of December 31, 2016, the notional amounts of outstanding forward contracts ranged from 20 million to 120 million INR, or the equivalent of \$0.3 million to \$1.8 million United States dollars, based on the exchange rate between the United States dollar and the INR in effect as of December 31, 2016. These amounts also approximate the ranges of forecasted future INR expenses we target to hedge in any one month in the future.

The critical terms of the forward contracts and the related hedged forecasted future expenses matched and allowed us to designate the forward contracts as highly effective cash flow hedges. The effective portion of the change in fair value is initially recorded in AOCI and subsequently reclassified to income in the period in which the cash flows from the associated hedged transactions affect income. Any ineffective portion of the change in fair value of the cash flow hedges is recognized in current period income. During the year ended December 31, 2016, no amount was excluded from the effectiveness assessment and no gains or losses were reclassified from AOCI into income as a result of forecasted transactions that failed to occur. As of December 31, 2016, we estimate that \$1.0 million of net unrealized derivative gains included in AOCI will be reclassified into income within the next twelve months.

Interest Rate Swap Agreement

We previously had entered into an interest rate swap agreement with an effective date of October 29, 2010, which expired on October 31, 2014. The critical terms of the interest rate swap agreement and the related debt agreement matched and allowed us to designate the interest rate swap agreement as a highly effective cash flow hedge. As of December 31, 2016, we did not have any outstanding interest rate swap agreements. No gains or losses were reclassified from AOCI into income as a result of forecasted transactions that failed to occur during the year ended December 31, 2014.

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 loss:

(In thousands)	Amount of Gain (Loss) Recognized in OCI (Effective Portion)			Location of Gain (Loss) Reclassified from AOCI into Income (Effective Portion)	Amount of Gain (Loss) Reclassified from AOCI into Income (Effective Portion)		
	Year Ended December 31,				Year Ended December 31,		
	2016	2015	2014		2016	2015	2014
Foreign exchange contracts	\$ 1,128	\$ 314	\$ 0	Cost of Revenue	\$ 165	\$ (34)	\$ 0
				Selling, general and administrative expenses	133	(28)	0
				Research and development	233	(48)	0
Interest rate swap	\$ 0	\$ 0	\$ (38)	Interest expense	\$ 0	\$ 0	\$ (496)

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 is intended to offset cash payments in excess of the principal amount due upon any conversion of the 1.25% Notes.

Aside from the initial payment of a premium to the Option Counterparties of \$82.8 million for the 1.25% Call Option, we will not be required to make any cash payments to the Option Counterparties under the 1.25% Call Option, and, subject to the terms and conditions thereof, will be 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 exceeds the strike price of the 1.25% Call Option during the relevant valuation period. The strike price under the 1.25% Call Option is initially 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 is indexed to our common stock, is a derivative asset that requires mark-to-market accounting treatment due to the cash settlement features until the 1.25% Call Option settles or expires. The 1.25% Call Option is 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 1, “Basis of Presentation and Significant Accounting Policies.”

The 1.25% Call Option does not qualify for hedge accounting treatment. Therefore, the change in fair value of these instruments is recognized immediately in our consolidated statements of operations in other income, net. Because the terms of the 1.25% Call Option are substantially similar to those of the 1.25% Notes embedded cash conversion option, discussed next, we expect the net effect of those two derivative instruments on our results of operations to continue to be minimal.

1.25% Notes Embedded Cash Conversion Option

The embedded cash conversion option within the 1.25% Notes is 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, net until the cash conversion option settles or expires. 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 is 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 1, “Basis of Presentation and Significant Accounting Policies.”

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:

(In thousands)	Year Ended December 31,		
	2016	2015	2014
1.25% Call Option	\$ (63,128)	\$ 23,117	\$ (47,565)
1.25% Embedded cash conversion option	63,551	(23,371)	47,798
Net gain (loss) included in other income, net	\$ 423	\$ (254)	\$ 233

12. Commitments

Operating and Capital Leases

We conduct our operations from leased premises under a number of operating leases. We also lease office and IT equipment under capital leases. Certain office leases contain renewal options and rent escalation clauses calling for rent increases over the term of the leases. All leases which contain a rent escalation clause are accounted for on a straight-line basis. Total rent expense recognized, which consists of the base rental amount and other lessor charges when mandated in a lease agreement, was as follows:

(In thousands)	Year Ended December 31,		
	2016	2015	2014
Rent expense	\$ 24,745	\$ 18,164	\$ 16,259

Our future commitments under capital and operating leases are shown below. The capital lease amounts related to prepaid maintenance, as well as the related prepaid maintenance costs, are not included in our financials as they are considered executory costs. Future operating lease commitments are calculated using the base rental amount and foreign currency exchange rates in effect as of December 31, 2016.

(In thousands)	Capital Leases	Operating Leases
2017	\$ 11,608	\$ 23,085
2018	8,506	20,851
2019	3,820	18,218
2020	40	15,244
2021	3	13,079
Thereafter	0	42,262
	23,977	<u>\$ 132,739</u>
Less amount representing interest	(1,666)	
Less amount related to executory costs	<u>(3,308)</u>	
	19,003	
Current maturities of capital lease obligations	<u>9,126</u>	
Capital lease obligations, net of current maturities	<u>\$ 9,877</u>	

Commitment with Strategic Partner

We are currently in the sixth year of a ten-year agreement with Atos (f/k/a Xerox Consultant Services) to provide services to support our private cloud hosting services for our Sunrise acute care clients. We maintain all client relationships and domain expertise with respect to the hosted applications. This agreement includes the payment of an initial base amount of approximately \$50 million per year plus charges for services incremental to the base agreement. Expenses incurred under this agreement are included in cost of revenue in our consolidated statements of operations and were as follows:

(In thousands)	Year Ended December 31,		
	2016	2015	2014
Expenses incurred under Atos agreement	\$ 62,266	\$ 67,058	\$ 68,165

13. 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 2016, in an effort to further streamline and align our operating structure around our key ambulatory, acute and population health management solutions, we made several changes to our organizational and reporting structure. These changes included (i) the separation of the former Touchworks strategic business unit and its dedicated leadership team into acute and ambulatory businesses, (ii) the transfer of several ancillary analytics-type products between our existing Clinical and Financial Solutions and Population Health reportable segments, both effective as of January 1, 2016, and (iii) the establishment of the FollowMyHealth® and EPSi™ business units effective September 30, 2016.

In conjunction with these changes, we formed new Ambulatory and Acute strategic business units, which are deemed to be operating segments within the Clinical and Financial Solutions reportable segment. The ancillary products are extensions of our key ambulatory and acute solutions and in the future will be managed within the new Ambulatory and Acute strategic business units. Our FollowMyHealth® and EPSi™ businesses, which were previously managed as part of our Population Health reportable and operating segment, became standalone business units and operating segments. Based on the qualitative and quantitative criteria under ASC Topic 280, *Segment Reporting*, we concluded that the FollowMyHealth® and EPSi™ operating segments should continue to be included as part of the Population Health reportable segment. The prior period segment disclosures below were revised to conform to the current year presentation of the ancillary analytics-type products that were transferred between our existing Clinical and Financial Solutions and Population Health reportable segments.

Effective on April 19, 2016, we completed the Netsmart Transaction which resulted in the formation of Netsmart through the merger of our Homecare™ business with Netsmart, Inc.'s behavioral health technology business. Netsmart is deemed to be a separate operating and reportable segment and, therefore, is presented separately in the table below. Prior to the Netsmart Transaction, our Homecare™ business was included as part of the Population Health reportable segment. As a result, the Population Health reportable segment disclosures below for periods prior to the Netsmart Transaction were revised to exclude, and the "Unallocated Amounts" were revised to include, the results of our Homecare™ business, based on the quantitative thresholds under ASC Topic 280, *Segment Reporting*.

After the finalization of the above changes to our organizational and reporting structure, as of December 31, 2016, we had seven operating segments, which are aggregated into three reportable segments. The Clinical and Financial Solutions reportable segment includes the new Ambulatory and Acute, and the Payer and Life Sciences strategic business units, each of which represents a separate operating segment. This reportable segment derives its revenue from the sale of integrated clinical software applications and financial and information solutions, which primarily include Electronic Health Record-related software, financial and practice management software, related installation, support and maintenance, outsourcing, private cloud hosting, revenue cycle management, training and electronic claims administration services. The Population Health reportable segment is comprised of three separate operating segments which include Population Health, FollowMyHealth® and EPSi™. This reportable segment derives its revenue from the sale of health management and coordinated care solutions, which are mainly targeted at hospitals, health systems, other care facilities and Accountable Care Organizations ("ACOs"). These solutions enable clients to connect, transition, analyze, and coordinate care across the entire care community. The Netsmart reportable segment is comprised of the Netsmart strategic business unit, which represents a separate operating segment. Netsmart operates in the behavioral healthcare information technology field throughout the United States and provides software and technology solutions to the health and human services industry, which comprises behavioral health, addiction treatment, intellectual and developmental disability services, and child and family services.

Our Chief Operating Decision Maker ("CODM") uses segment revenues, gross profit and income from operations as measures of performance and to make decisions on allocation of resources. With the exception of the Netsmart segment, in determining these performance measures, we do not include in revenue the amortization of acquisition-related deferred revenue adjustments, which reflect the fair value adjustments to deferred revenues acquired in a business acquisition. With the exception of the Netsmart segment, we also exclude the amortization of intangible assets, stock-based compensation expense, non-recurring expenses and transaction-related costs, and non-cash asset impairment charges from the operating segment data provided to our CODM. Non-recurring expenses relate to certain severance, product consolidation, legal, consulting and other charges incurred in connection with activities that are considered one-time. Accordingly, these amounts are not included in our reportable segment results and are included in an "Unallocated Amounts" category within our segment disclosure. The "Unallocated Amounts" category also includes corporate general and administrative expenses (including marketing expenses), which are centrally managed, as well as revenue and the associated cost from the resale of certain ancillary products, primarily hardware, other than the respective amounts associated with the Netsmart segment. The historical results of our Homecare™ business prior to the Netsmart Transaction are also included in the "Unallocated Amounts" category. The Netsmart segment, as presented, includes all revenue and expenses incurred by Netsmart since it operates as a stand-alone business entity and its resources allocation and performance are reviewed and measured at such all-inclusive level. The eliminations of intercompany transactions between Allscripts and Netsmart are included in the "Unallocated Amounts" category. We do not track our assets by segment.

(In thousands)	Year Ended December 31,		
	2016	2015	2014
Revenue:			
Clinical and Financial Solutions	\$ 1,125,073	\$ 1,105,504	\$ 1,112,432
Population Health	235,206	219,861	208,535
Netsmart	173,361	0	0
Unallocated Amounts	16,259	61,028	56,906
Total revenue	\$ 1,549,899	\$ 1,386,393	\$ 1,377,873
Gross Profit:			
Clinical and Financial Solutions	\$ 471,345	\$ 452,058	\$ 427,069
Population Health	171,969	147,095	146,970
Netsmart	70,286	0	0
Unallocated Amounts	(42,561)	(18,588)	(28,055)
Total gross profit	\$ 671,039	\$ 580,565	\$ 545,984
Income (loss) from operations:			
Clinical and Financial Solutions	\$ 251,417	\$ 234,146	\$ 196,263
Population Health	112,974	91,887	84,824
Netsmart	(7,416)	0	0
Unallocated Amounts	(297,204)	(294,150)	(320,275)
Total income (loss) from operations	\$ 59,771	\$ 31,883	\$ (39,188)

14. Supplemental Disclosures

(In thousands)	Year Ended December 31,		
	2016	2015	2014
Cash paid during the period for:			
Interest	\$ 41,954	\$ 15,750	\$ 15,585
Income taxes paid, net of tax refunds	\$ 2,951	\$ 5,037	\$ 7,104
Non-cash transactions:			
Exchange of Netsmart, Inc. common stock for redeemable convertible preferred stock in Netsmart by Netsmart, Inc. management	\$ 25,543	\$ 0	\$ 0
Accretion of redemption preference on redeemable convertible non-controlling interest in Netsmart	\$ 28,536	\$ 0	\$ 0
Obligations incurred to purchase capitalized software or enter into capital leases	\$ 28,970	\$ 393	\$ 4,800

(In thousands)	December 31,	
	2016	2015
Accrued expenses consist of the following:		
Royalties, certain third party product costs and licenses	\$ 17,359	\$ 16,456
Other	68,776	45,565
Total accrued expenses	\$ 86,135	\$ 62,021

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.

Other assets consist of the following:

(In thousands)	December 31, 2016	December 31, 2015
Investment in Nant Health, LLC	\$ 0	\$ 203,117
Fair value of 1.25% Call Option	17,080	80,208
Long-term prepaid commissions	40,668	43,756
Investments in non-marketable securities	29,603	20,312
Long-term deposits and other assets	10,440	12,272
Total other assets	<u>\$ 97,791</u>	<u>\$ 359,665</u>

15. 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,		
	2016	2015	2014
United States	\$ 1,500,629	\$ 1,338,095	\$ 1,327,840
Canada	18,694	18,024	20,727
Other international	30,576	30,274	29,306
Total	<u>\$ 1,549,899</u>	<u>\$ 1,386,393</u>	<u>\$ 1,377,873</u>

A summary of our long-lived assets, comprised of fixed assets by geographic area, is presented below:

(In thousands)	December 31, 2016	December 31, 2015
United States	\$ 140,552	\$ 116,731
India	5,735	5,739
Israel	1,568	1,786
Canada	353	545
Other international	602	816
Total	<u>\$ 148,810</u>	<u>\$ 125,617</u>

16. 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, certain of which are discussed below. We intend to vigorously defend ourselves 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. If one or more of these legal proceedings were resolved against us in a reporting period for amounts in excess of our management's expectations, our consolidated financial statements for that reporting period 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, which could further adversely affect our operating results.

In the opinion of our management, based on the information currently available, there was not at least a reasonable possibility that we may have incurred any material loss, or any material loss in excess of a recorded accrual, with respect to the following matters. Our management will continue to evaluate the potential exposure related to these matters in future periods.

On September 14, 2010, Pegasus Imaging Corporation filed a complaint against us in the Circuit Court of the Thirteenth Judicial Circuit of the State of Florida in and for Hillsborough County, Florida, which we transferred to the Special Superior Court for Complex Business Cases. The lawsuit also named former officers Jeffrey Amrein and John Reinhart as defendants. The amended complaint added two defunct Florida corporations that did business with us, and asserted causes of action against defendants for fraudulent misrepresentations, negligent misrepresentations, and deceptive and unfair trade practices under Florida law, allegedly arising from previous business dealings between the plaintiff and Advanced Imaging Concepts, Inc., a software company that we acquired in August 2003, and from our testing of a software development toolkit pursuant to a free trial license from the plaintiff in approximately 1999. On April 16, 2013, the plaintiff filed a Second Amended Complaint adding claims against us for breach of contract, fraud, and negligence. On June 27, 2013, we filed our First Amended Answer, Defenses, and Counterclaims to the plaintiff's Second Amended Complaint, denying all material allegations, and asserting counterclaims against the plaintiff for breach of two license agreements, breach of warranty, breach of a settlement and arbitration agreement, and three counts of negligent misrepresentation. On July 7, 2014, the Court granted our motion for summary judgment on the plaintiff's claim of unfair trade practices under Florida law and our motion for summary judgment as to the aforementioned defunct corporations, and granted the plaintiff's motion for summary judgment on our counterclaims. Trial had been scheduled for February 2017, but, by motion of the plaintiff, it has been rescheduled for April 2017.

On May 1, 2012, Physicians Healthsource, Inc. filed a class action complaint in the U.S. District Court for the Northern District of Illinois against us. The complaint alleges that, on multiple occasions between July 2008 and December 2011, we or our agent sent advertisements by fax to the plaintiff and a class of similarly situated persons, without first receiving the recipients' express permission or invitation in violation of the Telephone Consumer Protection Act, 47 U.S.C. § 227 (the "TCPA"). The plaintiff seeks \$500 for each alleged violation of the TCPA, treble damages if the Court finds the violations to be willful, knowing or intentional; and injunctive and other relief. Allscripts answered the complaint denying all material allegations and asserting a number of affirmative defenses, as well as counterclaims for breach of a license agreement. After plaintiff's motion to compel arbitration of the counterclaims was granted, Allscripts made a demand in arbitration where the counterclaims remain pending. Discovery in the proposed class action has now concluded. On March 31, 2016, plaintiff filed its motion for class certification. On May 31, 2016, we filed our opposition to plaintiff's motion for class certification, and simultaneously moved for summary judgment on all of plaintiff's claims. Both motions have been fully briefed since August 22, 2016 and remain pending. On January 10, 2017, at the request of the Magistrate Judge presiding over the case, the parties participated in a mediation session with a private mediator. A second mediation session is ongoing. In the interim, our counterclaims were heard in an arbitration proceeding before the American Arbitration Association in North Carolina on January 30, 2017. The arbiter had not yet issued a decision.

17. Quarterly Financial Information (Unaudited)

The following tables contain a summary of our unaudited quarterly consolidated results of operations for our last eight fiscal quarters.

(In thousands, except per share amounts)	Quarter Ended			
	December 31, 2016 ⁽¹⁾	September 30, 2016 ⁽¹⁾	June 30, 2016 ⁽¹⁾	March 31, 2016
Revenue	\$ 425,436	\$ 392,384	\$ 386,521	\$ 345,558
Cost of revenue	239,138	226,225	219,837	193,660
Gross profit	186,298	166,159	166,684	151,898
Selling, general and administrative expenses	115,132	98,778	94,802	84,153
Research and development	47,836	45,142	47,891	47,037
Asset impairment charges	0	0	0	4,650
Amortization of intangible and acquisition-related assets	10,903	5,365	5,417	4,162
Income from operations	12,427	16,874	18,574	11,896
Interest expense	(25,384) ⁽⁴⁾	(19,367)	(16,421)	(6,969)
Other income (expense), net	621	(6)	106	366
Equity in net loss of unconsolidated investments	0	0	(4,898)	(2,603)
(Loss) income before income taxes	(12,336)	(2,499)	(2,639)	2,690
Income tax benefit (provision)	15,218 ⁽³⁾	2,656 ⁽³⁾	503 ⁽³⁾	(563) ⁽³⁾
Net income (loss)	2,882	157	(2,136)	2,127
Less: Net (income) loss attributable to non-controlling interest	(4)	(151)	87	(78)
Less: Accretion of redemption preference on redeemable convertible non-controlling interest - Netsmart	(10,192)	(10,191)	(8,153)	0
Net (loss) income attributable to Allscripts Healthcare Solutions, Inc. stockholders	\$ (7,314)	\$ (10,185)	\$ (10,202)	\$ 2,049
(Loss) earnings per share - basic and diluted attributable to Allscripts Healthcare Solutions, Inc. stockholders	\$ (0.04)	\$ (0.06)	\$ (0.05)	\$ 0.01

(In thousands, except per share amounts)	Quarter Ended			
	December 31, 2015 ⁽²⁾	September 30, 2015 ⁽²⁾	June 30, 2015 ⁽²⁾	March 31, 2015
Revenue	\$ 345,647	\$ 354,476	\$ 351,718	\$ 334,552
Cost of revenue	191,844	201,128	208,094	204,762
Gross profit	153,803	153,348	143,624	129,790
Selling, general and administrative expenses	79,354	91,043	86,749	82,029
Research and development	45,995	47,702	44,367	46,727
Asset impairment charges	1,203	22	293	26
Amortization of intangible and acquisition-related assets	4,133	5,712	6,624	6,703
Income (loss) from operations	23,118	8,869	5,591	(5,695)
Interest expense	(7,403)	(9,254) ⁽⁴⁾	(7,483)	(7,256)
Other (expense) income, net	(98)	423	(28)	1,886
Equity in net (loss) earnings of unconsolidated investments	(797)	(1,479)	176	0
Income (loss) before income taxes	14,820	(1,441)	(1,744)	(11,065)
Income tax benefit (provision)	1,557	(3,692) ⁽³⁾	(1,472)	981
Net income (loss)	16,377	(5,133)	(3,216)	(10,084)
Less: Net income attributable to non-controlling interest	(50)	(111)	(9)	0
Net income (loss) attributable to Allscripts Healthcare Solutions, Inc. stockholders	\$ 16,327	\$ (5,244)	\$ (3,225)	\$ (10,084)
Income (loss) per share - basic and diluted attributable to Allscripts Healthcare Solutions, Inc. stockholders	\$ 0.09	\$ (0.03)	\$ (0.01)	\$ (0.06)

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- (1) Results of operations for the quarter include the results of operations of Netsmart since April 19, 2016, the results of HealthMEDX since October 27, 2016, and the results of operations of three third-parties in which we acquired a controlling interest during the quarters ended September 30th and December 31st, 2016 from the date of each transaction.
 - (2) Results of operations for the quarter include the results of operations of a third party with a proportionate share allocated to non-controlling interest for the period subsequent to April 17, 2015, which was the date on which we acquired a majority interest in the third party.
 - (3) Income tax benefit (provision) reflects the recognition (release) of a valuation allowance of (\$14.3) million, (\$3.3) million, \$0.9 million, (\$0.9) million and \$5.9 million for federal credit carryforwards, and foreign and state net operating loss carryforwards in the quarters ended December 31, 2016, September 30, 2016, June 30, 2016, March 31, 2016 and September 30, 2015, respectively.
 - (4) Interest expense includes the write-off of \$5.2 million deferred debt issuance costs in connection with Netsmart's amendment of its First Lien Credit Agreement during the quarter ended December 31, 2016 and the write-off of \$1.4 million of deferred debt issuance costs in connection with amending the Senior Secured Credit Facility during the quarter ended September 30, 2015.

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 are effective 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 Rule 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, 2016 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, 2016. 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, 2016 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

There have been no changes in our internal control over financial reporting during the quarter ended December 31, 2016, 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. We excluded Netsmart from our evaluation of internal control over financial reporting as of December 31, 2016 because the Netsmart acquisition was completed on April 19, 2016, as further described in Note 2, "Business Combinations and Other Investments" to consolidated financial statements in Part II, Item 8, "Financial Statements and Supplementary Data" of this Form 10-K. Netsmart's total assets and revenues represent 32% and 11%, respectively, of the consolidated financial statements as of and for the year ended December 31, 2016.

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 4A of this Form 10-K, under the heading “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 Expert” under the heading “Corporate Governance” in our 2017 Proxy Statement (the “2017 Proxy Statement”) to be filed with the U.S. Securities and Exchange Commission (the “SEC”) within 120 days after December 31, 2016.

Item 11. Executive Compensation

The information required by this Item is incorporated by reference from information contained under the heading “Compensation Discussion and Analysis” 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 2017 Proxy Statement to be filed with the SEC within 120 days after December 31, 2016.

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 2017 Proxy Statement to be filed with the SEC within 120 days after December 31, 2016.

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 and Committees” under the heading “Corporate Governance” in the 2017 Proxy Statement to be filed with the SEC within 120 days after December 31, 2016.

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 2017 Proxy Statement to be filed with the SEC within 120 days after December 31, 2016.

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:

	<u>Page</u>
Report of Independent Registered Public Accounting Firm	62
Report of Independent Registered Public Accounting Firm	63
Consolidated Balance Sheets as of December 31, 2016 and 2015	64
Consolidated Statements of Operations for the years ended December 31, 2016, 2015 and 2014	65
Consolidated Statements of Comprehensive (Loss) Income for the years ended December 31, 2016, 2015 and 2014	66
Consolidated Statements of Stockholders' Equity for the years ended December 31, 2016, 2015 and 2014	67
Consolidated Statements of Cash Flows for the years ended December 31, 2016, 2015 and 2014	68
Notes to Consolidated Financial Statements	69

(a)(2) Financial Statement Schedules

Schedule II—Valuation and Qualifying Accounts

<u>(In thousands)</u>	<u>Balance at Beginning of Year</u>	<u>Charged to Expenses/ Against Revenue</u>	<u>Deferred Revenue Reclassification</u>	<u>Write-Offs, Net of Recoveries</u>	<u>Balance at End of Year</u>
Allowance for doubtful accounts and sales credits					
Year ended December 31, 2016	\$ 31,266	11,039	616	(10,251)	\$ 32,670
Year ended December 31, 2015	\$ 36,047	8,089	(363)	(12,507)	\$ 31,266
Year ended December 31, 2014	\$ 54,252	9,592	(5,340)	(22,457)	\$ 36,047

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

The information required by this Section (a)(3) of Item 15 is set forth on the exhibit index that follows the Signatures page of this Form 10-K.

Item 16. Form 10-K Summary

None.

Exhibit Number	Exhibit Description	Filed Herewith	Furnished Herewith	Incorporated by Reference		
				Form	Exhibit	Filing Date
2.1	Agreement and Plan of Merger, dated June 9, 2010, by and among Allscripts-Misys Healthcare Solutions, Inc., Arsenal Merger Corp. and Eclipsys Corporation			8-K	2.1	June 9, 2010
2.2	Share Purchase Agreement, dated as of March 4, 2013, among Allscripts Healthcare Solutions, Inc., Allscripts Healthcare International Holdings, LLC, dbMotion, Ltd., the Sellers party thereto and Shareholder Representative Services LLC, as representative of the Sellers			8-K	2.1	March 5, 2013
2.3	Contribution and Investment Agreement, dated as of March 20, 2016, by and among Allscripts Healthcare Solutions, Inc., GI Netsmart Holdings LLC, Nathan Holding LLC and Andrews Henderson LLC			8-K	2.1	March 23, 2016
2.4	Agreement and Plan of Merger, dated as of March 20, 2016, by and among Nathan Intermediate LLC, Nathan Merger Co., Netsmart, Inc. and Genstar Capital Partners V, L.P.			8-K	2.2	March 23, 2016
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 June 18, 2013, between Allscripts Healthcare Solutions, Inc. and Wells Fargo Bank, National Association, as Trustee			8-K	4.1	June 18, 2013
4.2	Form of 1.25% Cash Convertible Senior Note due 2020 (included in Exhibit 4.1)			8-K	4.2	June 18, 2013
10.1	Replacement Facility Amendment, dated as of September 30, 2015, among Allscripts Healthcare Solutions, Inc., Allscripts Healthcare, LLC, the lenders party thereto and JPMorgan Chase Bank, N.A., as administrative agent			8-K	10.1	October 2, 2015
10.2	First Amendment, dated as of March 28, 2016, to the Amended and Restated Credit Agreement, among Allscripts Healthcare Solutions, Inc., Allscripts Healthcare, LLC, the lenders party thereto and JPMorgan Chase Bank, N.A., as administrative agent			10-Q	10.4	May 6, 2016
10.3	First Lien Credit Agreement, dated April 19, 2016, by and among Nathan Intermediate LLC, Nathan Merger Co., Andrews Henderson LLC, Netsmart, Inc., Netsmart Technologies, Inc., the subsidiaries of the borrowers party thereto, the lenders party thereto, and UBS AG, Stamford Branch, as administrative agent and collateral agent for the lenders party thereto			8-K	10.1	April 25, 2016

Exhibit Number	Exhibit Description	Filed Herewith	Furnished Herewith	Incorporated by Reference		
				Form	Exhibit	Filing Date
10.4	Second Lien Term Loan Agreement, dated April 19, 2016, by and among Nathan Intermediate LLC, Nathan Merger Co., Andrews Henderson LLC, Netsmart, Inc., Netsmart Technologies, Inc., the subsidiaries of the borrowers party thereto, the lenders party thereto, and UBS AG, as administrative agent and collateral agent for the lenders party thereto			8-K	10.2	April 25, 2016
10.5	Amendment to First Lien Credit Agreement and Incremental Assumption Agreement, dated as of October 27, 2016, by and among Andrews Henderson LLC, Netsmart, Inc., Netsmart Technologies, Inc., the subsidiaries of the borrowers party hereto, the lenders party hereto, and UBS AG, as administrative agent thereto.	X				
10.6	Amendment to First Lien Credit Agreement, dated as of November 10, 2016, by and among Andrews Henderson LLC, Netsmart, Inc., Netsmart Technologies, Inc., the subsidiaries of the borrowers party hereto, the lenders party hereto, and UBS AG, as administrative agent thereto.	X				
10.7	* Nathan Holding LLC Amended and Restated Limited Liability Company Agreement, dated as of April 19, 2016			10-Q	10.3	August 5, 2016
10.8	Amendment No. 1 to Nathan Holding LLC Amended and Restated Limited Liability Company Agreement, dated as of June 28, 2016			10-Q	10.4	August 5, 2016
10.9	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
10.10	Convertible note hedge transaction confirmation, dated as of June 12, 2013, by and between JPMorgan Chase Bank, National Association, London Branch and Allscripts Healthcare Solutions, Inc.			8-K	10.1	June 18, 2013
10.11	Amendment to convertible note hedge transaction, dated as of June 14, 2013, by and between JPMorgan Chase Bank, National Association, London Branch and Allscripts Healthcare Solutions, Inc.			8-K	10.2	June 18, 2013
10.12	Convertible note hedge transaction confirmation, dated as of June 12, 2013, by and between Citibank, N.A. and Allscripts Healthcare Solutions, Inc.			8-K	10.3	June 18, 2013
10.13	Amendment to convertible note hedge transaction, dated as of June 14, 2013, by and between Citibank, N.A., and Allscripts Healthcare Solutions, Inc.			8-K	10.4	June 18, 2013
10.14	Convertible note hedge transaction confirmation, dated as of June 12, 2013, by and between Deutsche Bank AG, London Branch and Allscripts Healthcare Solutions, Inc.			8-K	10.5	June 18, 2013

Exhibit Number	Exhibit Description	Filed Herewith	Furnished Herewith	Incorporated by Reference		
				Form	Exhibit	Filing Date
10.15	Amendment to convertible note hedge transaction, dated as of June 14, 2013, by and between Deutsche Bank AG, London Branch and Allscripts Healthcare Solutions, Inc.			8-K	10.6	June 18, 2013
10.16	Warrant transaction confirmation, dated as of June 12, 2013, by and between JPMorgan Chase Bank, National Association, London Branch and Allscripts Healthcare Solutions, Inc.			8-K	10.7	June 18, 2013
10.17	Warrant transaction confirmation, dated as of June 14, 2013, by and between JPMorgan Chase Bank, National Association, London Branch and Allscripts Healthcare Solutions, Inc.			8-K	10.8	June 18, 2013
10.18	Warrant transaction confirmation, dated as of June 12, 2013, by and between Citibank, N.A., and Allscripts Healthcare Solutions, Inc.			8-K	10.9	June 18, 2013
10.19	Warrant transaction confirmation, dated as of June 14, 2013, by and between Citibank, N.A., and Allscripts Healthcare Solutions, Inc.			8-K	10.10	June 18, 2013
10.20	Warrant transaction confirmation, dated as of June 12, 2013, by and between Deutsche Bank AG, London Branch, and Allscripts Healthcare Solutions, Inc.			8-K	10.11	June 18, 2013
10.21	Warrant transaction confirmation, dated as of June 14, 2013, by and between Deutsche Bank AG, London Branch, and Allscripts Healthcare Solutions, Inc.			8-K	10.12	June 18, 2013
10.22	† 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
10.23	† Allscripts Healthcare Solutions, Inc. 2001 Non-Statutory Stock Option Plan			10-K	10.19	March 31, 2003
10.24	† Amendments to the Allscripts Healthcare Solutions, Inc. 2001 Nonstatutory Stock Option Plan			10-Q	10.12	November 10, 2008
10.25	† Amended and Restated Allscripts Healthcare Solutions Inc. Incentive Plan			8-K	10.1	May 23, 2014
10.26	† Allscripts Healthcare Solutions, Inc. Amended and Restated 2011 Stock Incentive Plan			8-K	10.1	May 24, 2013
10.27	† Amended and Restated Allscripts Healthcare Solutions, Inc. Director Deferred Compensation Plan			10-Q	10.16	August 9, 2013
10.28	† Form of Restricted Stock Unit Award Agreement (Directors)			10-KT	10.37	March 1, 2011
10.29	† Form of Restricted Stock Unit Award Agreement (February 2011)			10-KT	10.38	March 1, 2011

Exhibit Number		Exhibit Description	Filed Herewith	Furnished Herewith	Incorporated by Reference		
					Form	Exhibit	Filing Date
10.30	†	Form of Performance-Based Restricted Stock Unit Award Agreement			10-KT	10.39	March 1, 2011
10.31	†	Form of Performance-Based Restricted Stock Unit Award Agreement (TSR)			10-KT	10.40	March 1, 2011
10.32	†	Form of Restricted Stock Unit Award Agreement for Non-Employee Directors (2011 Stock Incentive Plan)			10-Q	10.4	August 9, 2011
10.33	†	Form of Time-Based Vesting Restricted Stock Unit Award Agreement for Employees (2011 Stock Incentive Plan)			10-Q	10.5	August 9, 2011
10.34	†	Form of Stock Option Agreement			10-K	10.38	March 1, 2013
10.35	†	Form of Performance-Based Restricted Stock Unit Award Agreement (TSR)			10-K	10.39	March 1, 2013
10.36	†	Form of Performance-Based Restricted Stock Unit Award Agreement (TSR) (February 2014)			10-K	10.29	March 3, 2014
10.37	†	Form of Performance-Based Restricted Stock Unit Award Agreement (TSR) for Paul M. Black			10-K	10.40	March 1, 2013
10.38	†	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
10.39	†	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
10.40	†	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
10.41	†	Form of Restricted Stock Unit Award Agreement for Paul M. Black			10-K	10.41	March 1, 2013
10.42	†	Employment Agreement, dated as of December 19, 2012, between Allscripts Healthcare Solutions, Inc. and Paul M. Black			8-K	10.1	December 19, 2012
10.43	†	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
10.44	†	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

Exhibit Number	Exhibit Description	Filed Herewith	Furnished Herewith	Incorporated by Reference		
				Form	Exhibit	Filing Date
10.45	† 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
10.46	† Employment Agreement, dated as of May 28, 2013, between Allscripts Healthcare Solutions, Inc. and Brian Farley			10-K	10.40	March 3, 2014
10.47	† Employment Agreement, dated as of December 11, 2015, between Allscripts Healthcare Solutions, Inc. and James Hewitt			10-K	10.41	February 29, 2016
10.48	† Employment Agreement, dated as of January 29, 2016, between Allscripts Healthcare Solutions, Inc. and Melinda D. Whittington			8-K	10.1	February 2, 2016
10.49	† Employment Agreement, dated as of October 30, 2016, effective November 1, 2016, between Allscripts Healthcare Solutions, Inc. and Lisa Khorey	X				
12.1	Ratio of Earnings to Fixed Charges	X				
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	XBRL Instance Document	X				
101.SCH	XBRL Taxonomy Extension Schema	X				
101.CAL	XBRL Taxonomy Extension Calculation Linkbase	X				
101.LAB	XBRL Taxonomy Extension Label Linkbase	X				
101.PRE	XBRL Taxonomy Extension Presentation Linkbase	X				
101.DEF	XBRL Taxonomy Definition Linkbase	X				

* Portions of this exhibit have been omitted pursuant to the Commission's grant of confidential treatment.

† Indicates management contract or compensatory plan.

AMENDMENT NO. 1 TO FIRST LIEN CREDIT AGREEMENT AND INCREMENTAL ASSUMPTION AGREEMENT

This AMENDMENT NO. 1 TO FIRST LIEN CREDIT AGREEMENT AND INCREMENTAL ASSUMPTION AGREEMENT, dated as of October 27, 2016 (this "Amendment & Agreement"), is by and among ANDREWS HENDERSON LLC, a Delaware limited liability company ("Henderson"), NETSMART, INC., a Delaware corporation (the "Company"), NETSMART TECHNOLOGIES, INC., a Delaware corporation ("Netsmart Technologies"); Netsmart Technologies, collectively with Henderson and the Company, the "Borrowers"), as a Borrower and Borrower Representative, each other Loan Party party hereto under, and as defined in, the Credit Agreement referred to below, the Incremental Term Lenders party hereto, and UBS AG, STAMFORD BRANCH, as Administrative Agent.

WHEREAS, reference is hereby made to the First Lien Credit Agreement, dated as of April 19, 2016, among the Borrowers, the Subsidiaries of the Borrowers from time to time party thereto, NATHAN INTERMEDIATE LLC, a Delaware limited liability company ("Holdings"), UBS AG, Stamford Branch as the Administrative Agent, the Lenders from time to time party thereto, and the other agents, issuers and arrangers party thereto (as the same may be amended, restated, amended and restated, supplemented, extended, refinanced or otherwise modified prior to giving effect to this Amendment & Agreement, the "Credit Agreement");

WHEREAS, substantially concurrently with the execution of this Amendment & Agreement, (a) pursuant to that certain Agreement and Plan of Merger, dated as of October 27, 2016 (the "First Amendment Merger Agreement"), by and among the Company, HMX Acquisition LLC, a Delaware limited liability company ("First Amendment Merger Sub"), HealthMEDX, LLC, a Delaware limited liability company ("HealthMEDX") and, together with First Amendment Merger Sub, collectively, the "New Loan Parties"), and SEI VI HMX AIV, L.P., as Members' Representative, First Amendment Merger Sub shall merge (such merger, the "First Amendment Transaction") with and into HealthMEDX, with HealthMEDX as the surviving entity of such merger; and (b) the New Loan Parties shall execute and deliver a Joinder Agreement in substantially the form attached as Exhibit D to the Credit Agreement (the "First Amendment Joinder Agreement"), a Security Agreement Joinder Agreement (the "First Amendment Security Agreement Joinder Agreement"), and a joinder agreement to the Intercreditor Agreement (the "First Amendment Intercreditor Joinder Agreement");

WHEREAS, the Borrowers have requested pursuant to Section 2.23(a)(E) of the Credit Agreement an Incremental Term Facility in an aggregate principal amount of \$40,000,000 (the "Term B-1 Commitments"), which will be available on the Effective Date, and which Term B-1 Commitments shall constitute an Incremental Term Facility under the Credit Agreement and the loans thereunder (the "Term B-1 Loans") Incremental Term Loans under the Credit Agreement;

WHEREAS, each Incremental Term Lender is willing to make the Term B-1 Loans in each case in the amounts set forth opposite such Incremental Term Lender's name in Schedule 1.01A hereof; and

WHEREAS, this Amendment & Agreement shall constitute a written request by the Borrowers to the Administrative Agent to add the Incremental Term Facility as set forth in Section 2.23 of the Credit Agreement.

NOW, THEREFORE, in consideration of the premises and agreements, provisions and covenants herein contained, the parties hereto agree as follows:

Section 1. *Defined Terms; References.* Unless otherwise specifically defined herein, each capitalized term used herein has the meaning assigned to such term in the Credit Agreement. The rules of construction and other interpretive provisions specified in Sections 1.03 and 1.04 of the Credit Agreement shall apply to this Amendment & Agreement, including terms defined in the preamble and recitals hereto.

Section 2. *New Term B-1 Loans*. The Credit Agreement is, as of the Effective Date and subject to the satisfaction of the applicable conditions precedent set forth in Section 5 of this Amendment & Agreement, hereby amended as follows:

(a) The following new definitions are hereby added to Section 1.01 of the Credit Agreement in the appropriate alphabetical order:

““Amendment No. 1” means that certain Amendment No. 1 to First Lien Credit Agreement and Incremental Assumption Agreement, dated as of October 27, 2016, by and among the Borrowers, the other Loan Parties party thereto, the Incremental Term Lenders (as defined therein) and the Administrative Agent.”

““Amendment No. 1 Effective Date” means the date on which Amendment No. 1 to this Agreement becomes effective in accordance with its terms.”

““Term B-1 Commitment” has the meaning assigned to such term in Amendment No. 1.”

““Term B-1 Loan Lender” means, at any time, any Lender that has a Term B-1 Commitment or Term B-1 Loan at such time.”

““Term B-1 Loan” has the meaning assigned to such term in Amendment No. 1.”

(b) Schedule 1.01(b) of the Credit Agreement is amended by adding thereto the table provided in Schedule 1.01(a) hereto.

(c) Pursuant to Section 2.23 of the Credit Agreement, upon the funding of the Term B-1 Loans on the Effective Date, the Term B-1 Loans shall automatically and without further action by any Person constitute additional Term Loans for all purposes of the Credit Agreement and the other Loan Documents. Except as set forth below, the terms and provisions of the Term B-1 Loans shall be identical to those of the existing Term Loan under the Credit Agreement and references in the Credit Agreement to the Term Loan shall include the Incremental Term Loans. For the avoidance of doubt, it is understood and agreed that the Term B-1 Loans shall constitute a separate Class of Term Loans than the Initial Term Loans.

(d) Pursuant to Section 2.23(a)(ix) of the Credit Agreement, for the avoidance of doubt, the Borrowers and the Term B-1 Loan Lenders hereby direct the Administrative Agent to apply any prepayments of Term Loans (other than scheduled amortization payments pursuant to Section 2.11(a) of the Credit Agreement) to the Initial Term Loans and the Term B-1 Loans on a *pro rata* basis.

(e) The Incremental Term Facility (and commitment in respect thereof) provided for hereunder shall terminate on the Effective Date immediately upon the borrowing of Incremental Term Loans pursuant to Section 5 below.

(f) The definition of the term “Adjusted LIBO Rate” shall be amended by adding the words “and the Term B-1 Loans” after the words “Initial Term Loans” contained therein.

(g) The definition of the term “Alternate Base Rate” shall be amended by adding the words “and the Term B-1 Loans” after the words “Initial Term Loans” in clause (ii) of the proviso contained therein.

(h) The definition of the term “Applicable Rate” shall be amended by replacing clause (a) thereof in its entirety with the following:

“(a) (x) with respect to Initial Revolving Loans and Initial Term Loans (i) with respect to any LIBO Rate Loan, 4.75% and (ii) with respect to any ABR Loan, 3.75% and (y) with respect to the Term B-1 Loans, (i) with respect to any LIBO Rate Loan, 4.50% and (ii) with respect to any ABR Loan, 3.50%,”

(i) The definition of the term "Class" shall be amended by adding the phrase "Term B-1 Loans," immediately after the phrase "Initial Term Loans," in clause (a) thereof.

(j) The definition of the term "Maturity Date" shall be amended by adding the words "and the Term B-1 Loans" immediately after the words "Initial Term Loans" in clause (a) thereof.

(k) The definition of the term "Term Loans" shall be amended by adding the words "the Term B-1 Loans," immediately after the words "Initial Term Loans," contained therein.

(l) Section 2.01 of the Credit Agreement is hereby amended and restated in its entirety as set forth below:

"Subject to the terms and conditions set forth herein or in Amendment No. 1, as the case may be, each Term Lender agrees, severally and not jointly, to make (x) Initial Term Loans to the Borrowers on the Closing Date or (y) Term B-1 Loans to the Borrowers on the Amendment No. 1 Effective Date, in each case in an aggregate principal amount requested by the Borrowers not to exceed such Lender's respective Term Loan Commitments with respect to Initial Term Loans or Term B-1 Loans, as the case may be. Amounts paid or prepaid in respect of the Initial Term Loans and the Term B-1 Loans may not be reborrowed."

(m) Section 2.03(a)(a) of the Credit Agreement is hereby amended by inserting the phrase "or on the Amendment No. 1 Effective Date" after the phrase "on the Closing Date" contained therein.

(n) Section 2.11(a) of the Credit Agreement is hereby amended by inserting the following sentence immediately following the first sentence contained therein:

"Each Borrower jointly and severally hereby unconditionally promise to repay the outstanding Term B-1 Loans to the Administrative Agent for the account of each Term B-1 Lender (i) on each Loan Installment Date, commencing on the last Business Day of December 2016, in each case in an amount equal to \$100,250.63 (as such payments may be reduced from time to time as a result of the application of prepayments in accordance with Section 2.12 and Section 9.05(g) or increased as a result of any increase in the amount of such Term B-1 Loans pursuant to Section 2.23(a)), and (ii) on the Term Loan Maturity Date, the remainder of the principal amount of the Term B-1 Loans outstanding on such date, together in each case with accrued and unpaid interest on the principal amount to be paid to but excluding the date of such payment."

(o) The final of sentence of Section 2.12(a)(ii) of the Credit Agreement is hereby amended and restated in its entirety as follows:

"Each prepayment of Term Loans made pursuant to this Section 2.12(a) shall be applied (i) ratably between the Initial Term Loans and the Term B-1 Loans and (ii) within each Class of Term Loans, against the remaining scheduled installments of principal due in respect of such Class of Term Loans in the manner specified by the Borrowers or, if not so specified on or prior to the date of such optional prepayment, in direct order of maturity."

(p) Section 2.12(b)(ii) of the Credit Agreement is hereby amended by inserting the parenthetical "(ratably between the Initial Term Loans and the Term B-1 Loans)" immediately following the words "Term Loans" the first time such words are used in such section.

(q) Section 2.12(b)(iii) of the Credit Agreement is hereby amended by inserting the parenthetical "(ratably between the Initial Term Loans and the Term B-1 Loans)" immediately following the words "Term Loans" in each case such words are used in such section.

(r) Section 2.12(b)(iv) of the Credit Agreement is hereby amended by inserting the parenthetical "(ratably between the Initial Term Loans and the Term B-1 Loans)" immediately following the words "Term Loans" the final time such words are used in such section.

(s) The first sentence of Section 5.11 of the Credit Agreement is hereby amended and restated in its entirety as follows:

“The Borrowers shall use proceeds of the Initial Term Loans solely to finance a portion of the Transactions (including working capital, payment of Transaction Costs and/or purchase price adjustments under the Acquisition Agreement) and the Borrowers shall use proceeds of the Term B-1 Loans on the Amendment No. 1 Effective Date solely to finance a portion of the First Amendment Transaction (as defined in Amendment No. 1) (including working capital and/or purchase price adjustments in connection therewith and the payment of transaction costs associated therewith).”

Section 3. *Incremental Term Lenders*. Each Incremental Term Lender party hereto hereby acknowledges and agrees that it has an Incremental Term Facility in the amount set forth opposite such Incremental Term Lender’s name on Schedule 1.01A to this Amendment & Agreement and severally and not jointly agrees to make to the Borrowers Incremental Term Loans on the Effective Date, in Dollars, in an aggregate amount not in excess of the Incremental Term Lender’s Incremental Term Facility hereunder. From and after the Effective Date, (i) the Incremental Term Lender party hereto shall be a Term B-1 Lender for all purposes under the Credit Agreement and the other Loan Documents and (ii) the Incremental Term Facility of the Incremental Term Lender party hereto shall be a Term B-1 Commitment for all purposes under the Credit Agreement and the other Loan Documents.

Section 4. *Effect of Amendment & Agreement; Reaffirmation and Ratification of Obligations; Etc.* Except as expressly set forth herein or in the Credit Agreement (as amended by this Amendment & Agreement), this Amendment & Agreement shall not by implication or otherwise limit, impair, constitute a waiver of or otherwise affect the rights and remedies of the Lenders or the Administrative Agent (including its capacity as First Lien Collateral Agent, as defined in the Pledge and Security Agreement) under the Credit Agreement or under any other Loan Document or constitute a course of conduct or dealing among the parties, and shall not alter, modify, amend or in any way affect any of the terms, conditions, obligations, covenants or agreements contained in the Credit Agreement or any other provision of the Credit Agreement or of any Loan Document, all of which are ratified and affirmed in all respects and shall continue in full force and effect. The Borrowers and each other Loan Party acknowledges and agrees that (A) the Credit Agreement (as amended by this Amendment & Agreement) and each other Loan Document to which it is a party and the Loan Guaranty contained therein is hereby confirmed and ratified and shall remain in full force and effect according to its respective terms and (B) the Credit Agreement and the other Loan Documents do, and all of the Collateral does, and in each case shall continue to, secure the payment of all Obligations (including with respect to the Term B-1 Loans) on the terms and conditions set forth in the Credit Agreement and the other Loan Documents, and hereby ratifies the security interests and guarantees granted by it pursuant to the Credit Agreement and the other Loan Documents. On and as of the Effective Date (as defined below), each reference in the Credit Agreement to “this Agreement”, “hereof”, “hereunder”, “herein” and “hereby” and each other similar reference, and each reference in any Loan Document to “the Credit Agreement”, “thereof”, “thereunder”, “therein” or “thereby” or any other similar reference to the Credit Agreement shall refer to the Credit Agreement (as amended by this Amendment & Agreement). This Amendment & Agreement constitutes a Loan Document.

Section 5. *Conditions to Effectiveness*. This Amendment & Agreement, and the obligations of the Lenders to make Term B-1 Loans, shall become effective on the first date (the “Effective Date”) when, and only when, each of the applicable conditions set forth below have been satisfied (or waived) in accordance with the terms herein:

(a) Amendment. The Administrative Agent shall have received counterparts of this Amendment & Agreement duly executed and delivered by each of (A) the Borrowers and the other Loan Parties (excluding the New Loan Parties), (B) the Incremental Term Lenders providing 100% of the Incremental Term Commitments, and (C) the Administrative Agent;

(b) Legal Opinions. The Administrative Agent shall have received, on behalf of itself, the Issuing Banks, the Swing Line Lender and the Lenders (including the Incremental Term Lenders) on the Effective Date, a customary written opinion of Paul Hastings LLP, counsel for Parent, the Borrowers and each other Loan Party (including the New Loan Parties) (i) dated the Effective Date, (ii) addressed to the Administrative Agent, each Issuing Bank, the Swing Line Lender and the Lenders (including the Incremental Term Lenders) and (iii) in form and substance reasonably satisfactory to the Administrative Agent and covering such matters relating to the Loan Documents as the Administrative Agent shall reasonably request;

(c) Closing Certificates; Certified Charters; Good Standing Certificates. The Administrative Agent shall have received (i) a certificate of each Loan Party (including the New Loan Parties), dated the Effective Date and executed by a Responsible Officer of such Loan Party, which shall (A) certify that attached thereto is a true and complete copy of the resolutions or written consents of its board of directors, members or other governing body (including any committee thereof) authorizing the execution, delivery and performance of the Loan Documents to which it is a party and, in the case of the Borrowers, the Borrowings hereunder, and that such resolutions or written consents have not been modified, rescinded or amended and are in full force and effect, (B) identify by name and title and bear the signatures of the Responsible Officer or authorized signatory of such Loan Party authorized to sign the Loan Documents to which it is a party on the Effective Date, (C) certify that attached thereto is a true and complete copy of the certificate or articles of incorporation or organization (or memorandum of association or other equivalent thereof) of such Loan Party certified by the relevant authority of the jurisdiction of organization of such Loan Party and a true and correct copy of its by-laws or operating, management, partnership or similar agreement (to the extent applicable) and that such documents or agreements have not been amended since the date of the last amendment thereto shown on the certificate of good standing referred to below (except as otherwise attached to such certificate and certified therein as being the only amendments thereto as of such date) and (D) a certification as to the incumbency of the Responsible Officer signing the certificates delivered pursuant to this clause (c)(i), (ii) a certificate of good standing (or subsistence) with respect to each Loan Party (including the New Loan Parties) from the Secretary of State (or similar official) of the state of such Loan Party's organization (to the extent relevant and available in the jurisdiction of organization of such Loan Party) and (iii) a customary officer's certificate dated the Effective Date and executed by a Responsible Officer of the Borrower Representative, certifying that (A) no Event of Default shall have occurred and be continuing or would result from the issuance of the Term B-1 Loans, (B) the Borrowers are in compliance with clauses (a), (b), and (c) of the definition of "Permitted Acquisition" and (C) the execution and delivery of this Amendment & Agreement by each Loan Party party thereto and the performance by such Loan Party thereof does not violate or result in a default under the Second Lien Term Loan Agreement or any of the Loan Documents (as defined in the Second Lien Term Loan Agreement).

(d) Representations and Warranties. Each of the representations and warranties made by any Loan Party in Section 6 of this Amendment and Agreement or in or pursuant to the other Loan Documents shall be true and correct in all material respects on and as of the Effective Date as if made on and as of such date except, (A) to the extent that such representations and warranties expressly relate to an earlier date, in which case they shall be true and correct in all material respects as of such date and (B) that any representation and warranty that is qualified as to "materiality" or "Material Adverse Effect" shall be true and correct in all respects.

(e) Fees. (i) Golub Capital Markets LLC shall have received all fees required to be paid by the Borrowers on the Effective Date pursuant to that certain Fee Letter, dated as of October 27, 2016, among the Borrowers and Golub Capital Markets LLC, and (ii) all expenses required to be paid pursuant to the Credit Agreement on the Effective Date, to the extent invoiced at least one Business Days prior to the Effective Date, shall have been or concurrently herewith will be paid (which amounts may be offset against the proceeds of the Term B-1 Loans).

(f) First Amendment Joinder Agreement, First Amendment Security Agreement Joinder Agreement, First Amendment Intercreditor Joinder Agreement, Pledged Stock, Stock Powers, Etc. The Administrative Agent shall have received the First Amendment Joinder Agreement, the First Amendment Security Agreement Joinder Agreement, the First Amendment Intercreditor Joinder Agreement, a Joinder Agreement in substantially the form attached as Exhibit D to the Second Lien Term Loan Agreement and a Security Agreement Joinder Agreement (as defined in the Second Lien Term Loan Agreement), in each case, duly executed and delivered by the New Loan Parties and (ii) the Administrative Agent (or its bailee) shall have received the certificates representing the Capital Stock pledged pursuant to the Pledge and Security Agreement (as amended by the First Amendment Security Agreement Joinder Agreements), together with an undated stock or similar power for each such certificate executed in blank by a duly authorized officer of the pledgor thereof.

(g) Filings Registrations and Recordings. Subject to the terms of each applicable Collateral Document, each document (including any UCC (or similar) financing statement) required by the Collateral Documents or under law or reasonably requested by the Administrative Agent to be filed, registered or recorded in order to create in favor of the Administrative Agent, for the benefit of itself and the other Secured Parties, a perfected Lien on the Collateral described therein, prior and superior in right to any other Person (other than with respect to Permitted Liens), shall be in proper form for filing, registration or recordation.

(h) Refinancings. The Administrative Agent shall have received evidence reasonably satisfactory to it of the repayment, redemption, defeasance, discharge, refinancing or termination in full of all amounts, if any, due or owing under (x) that certain Loan and Security Agreement, dated as of March 11, 2016, between HealthMEDX and Comerica Bank and (y) that certain loan arrangement between ACD Holdings, Inc., a Missouri corporation (f/k/a HealthMEDX, Inc.), and HealthMEDX (together with the credit agreement referenced in clause (x), the “Existing Credit Agreements”), and the release of all guarantees in connection with the Existing Credit Agreements and security therefor, and the termination of all commitments under the Existing Credit Agreements.

(i) First Amendment Transaction. Substantially concurrently with the initial funding of the Term B-1 Loans hereunder, the transactions contemplated by the First Amendment Merger Agreement shall have been consummated in accordance in all material respects with the terms of the First Amendment Merger Agreement, which shall be in form and substance reasonably satisfactory to the Administrative Agent.

(j) Borrowing Requests. The Administrative Agent shall have received, in accordance with Section 2.03 of the Credit Agreement, a duly executed Borrowing Request with respect to the Term B-1 Loans to be borrowed on the Effective Date.

(k) USA PATRIOT Act. No later than one Business Days in advance of the Closing Date, the Administrative Agent shall have received all documentation and other information reasonably requested by it in writing in advance of the Closing Date, which documentation or other information is required by regulatory authorities under applicable “know your customer” and anti-money laundering rules and regulations, including the USA PATRIOT Act.

For purposes of determining whether the conditions specified in this Section 5 have been satisfied, by funding its Term B-1 Loans hereunder, the Administrative Agent and each Incremental Term Lender that has executed this Amendment & Agreement shall be deemed to have consented to, approved or accepted, or to be satisfied with, each document or other matter required hereunder to be consented to or approved by or acceptable or satisfactory to the Administrative Agent or such Incremental Term Lender, as the case may be.

Section 6. Representations and Warranties. Each of Holdings (solely to the extent applicable to it), the Borrowers and the other Loan Parties, on behalf of themselves and their respective Subsidiaries, represent and warrant on the date hereof to the Lenders holding Term B-1 Commitments on the date hereof and the Administrative Agent that:

(a) Authorization; Enforceability. The execution, delivery and performance of this Amendment & Agreement are within each applicable Loan Party’s corporate or other organizational powers and have been duly authorized by all necessary corporate or other organizational action of such Loan Party. This Amendment & Agreement has been duly executed and delivered by each Loan Party and is a legal, valid and binding obligation of such Loan Party, enforceable in accordance with its terms, subject to applicable bankruptcy, insolvency or similar laws affecting creditors’ rights generally and to general principles of equity and principles of good faith and fair dealing.

(b) Governmental Approvals; No Conflicts. The execution and delivery of this Amendment & Agreement by each Loan Party party thereto and the performance by such Loan Party thereof (a) do not require any consent or approval of, registration or filing with, or any other action by, any Governmental Authority, except (i) such as have been obtained or made and are in full force and effect, (ii) for filings necessary to perfect Liens created pursuant to the Loan Documents or the “Loan Documents” (as defined in the Second Lien Term Loan Agreement) and (iii) such consents, approvals, registrations, filings, or other actions the failure to obtain or make which could not be reasonably expected to have a Material Adverse Effect, (b) will not violate any (i) of such Loan Party’s Organizational Documents or (ii) any Requirements of Law applicable to such Loan Party which, in the case of this clause (b)(ii), could reasonably be expected to have a Material Adverse Effect and (c) will not violate or result in a default under any Contractual Obligation of any of the Loan Parties which would reasonably be expected to result in a Material Adverse Effect.

(c) Secured Net Leverage Ratio. After giving effect to the incurrence of the Term B-1 Loans anticipated hereby, the First Lien Net Leverage Ratio does not exceed 4.75:1.00, calculated on a Pro Forma Basis as of the last day of the most recently ended Test Period for which financial statements have been delivered pursuant to Section 5.01(b) or (c), as applicable, of the Credit Agreement, and, in each case, disregarding the Cash proceeds thereof for

the purposes of determining the Unrestricted Cash Amount in connection with calculating the First Lien Net Leverage Ratio.

Section 7. *Further Assurances.* The Loan Parties hereto shall execute and deliver such additional documents and take such additional action as may be reasonably necessary or desirable to effectuate the provisions and purposes of this Amendment & Agreement.

Section 8. *Severability.* Any provision of this Amendment & Agreement that is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof, and any such prohibition or unenforceability in any jurisdiction shall not invalidate or render unenforceable such provision in any other jurisdiction.

Section 9. *Headings.* The headings listed herein are for convenience only and do not constitute matters to be construed in interpreting this Amendment & Agreement.

Section 10. *Governing Law.* THIS AMENDMENT & AGREEMENT AND ANY CLAIM, CONTROVERSY OR DISPUTE ARISING UNDER OR RELATED TO THIS AMENDMENT & AGREEMENT (OTHER THAN AS EXPRESSLY SET FORTH IN THE OTHER LOAN DOCUMENTS), WHETHER IN TORT, CONTRACT (AT LAW OR IN EQUITY) OR OTHERWISE, SHALL BE GOVERNED BY, AND CONSTRUED AND INTERPRETED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK.

Section 11. *Jurisdiction; Consent to Service of Process; Waiver of Jury Trial.* Each of the provisions provided in the following sections of the Credit Agreement is hereby incorporated herein by this reference with the same effect as though set forth in its entirety herein, mutatis mutandis, and as if the phrase “this Agreement” in any such provision referred to this Amendment & Agreement: Section 9.10(b), (c) and (d) and Section 9.11.

Section 12. *Counterparts.* This Amendment & Agreement may be executed in any number of counterparts (and by different parties hereto on different counterparts), all of which, when so executed, shall be deemed an original, but all such counterparts shall constitute one and the same agreement. Any signature delivered by a party by facsimile or electronic transmission shall be deemed to be an original signature hereto.

[SIGNATURE PAGES FOLLOW]

IN WITNESS WHEREOF, the parties hereto have caused this Amendment & Agreement to be duly executed by their respective authorized officers as of the day and year first above written.

ANDREWS HENDERSON LLC,
a Delaware limited company, as Borrower

By: /s/Anthony Ritz
Name: Anthony Ritz
Title: Chief Financial Officer

NETSMART, INC.,
a Delaware Corporation, as Borrower

By: /s/Anthony Ritz
Name: Anthony Ritz
Title: Chief Financial Officer

NETSMART TECHNOLOGIES, INC.,
a Delaware corporation, as Borrower and Borrower
Representative

By: /s/Anthony Ritz
Name: Anthony Ritz
Title: Chief Financial Officer

NATHAN INTERMEDIATE LLC,
A Delaware limited liability company, as Holdings

By: /s/Anthony Ritz
Name: Anthony Ritz
Title: Chief Financial Officer

NETSMART ILLINOIS, INC.,
a Delaware corporation, as Subsidiary Guarantor

By: /s/Anthony Ritz
Name: Anthony Ritz
Title: Chief Financial Officer

NETSMART NEW YORK, INC.,
a Delaware corporation, as Subsidiary Guarantor

By: /s/Anthony Ritz
Name: Anthony Ritz
Title: Chief Financial Officer

LWS ACQUISITION CORP.,
a Delaware corporation, as Subsidiary Guarantor

By: /s/Anthony Ritz
Name: Anthony Ritz
Title: Chief Financial Officer

[Signature Page to Amendment No. 1 to First Lien Credit Agreement and Incremental Assumption Agreement]

DEFRAN SYSTEMS, INC.,
a New York, as Subsidiary Guarantor

By: /s/Anthony Ritz
Name: Anthony Ritz
Title: Chief Financial Officer

SEQUEST PARENT COMPANY, INC.,
a Delaware corporation, as Subsidiary Guarantor

By: /s/Anthony Ritz
Name: Anthony Ritz
Title: Chief Financial Officer

SEQUEST HEALTHCARE BILLING, INC.,
a Delaware corporation, as Subsidiary Guarantor

By: /s/Anthony Ritz
Name: Anthony Ritz
Title: Chief Financial Officer

SEQUEST TECHNOLOGIES, INC.,
an Illinois corporation, as Subsidiary Guarantor

By: /s/Anthony Ritz
Name: Anthony Ritz
Title: Chief Financial Officer

TREND ACQUISITION CORP.,
a Delaware corporation, as Subsidiary Guarantor

By: /s/Anthony Ritz
Name: Anthony Ritz
Title: Chief Financial Officer

[Signature Page to Amendment No. 1 to First Lien Credit Agreement and Incremental Assumption Agreement]

UBS AG, STAMFORD BRANCH,
as Administrative Agent

By: /s/ Darlene Arias

Name: Darlene Arias
Title: Director

By: /s/ Kenneth Chin

Name: Kenneth Chin
Title: Director

[Signature Page to Amendment No. 1 to First Lien Credit Agreement and Incremental Assumption Agreement]

PEACH FUNDING CORPORATION,
As Incremental Term Lender

By: GC Advisors LLC its Manager,

By: /s/ Robert G. Tuchscherer

Name: **Robert G. Tuchscherer**

Title: **Managing Director**

[Signature Page to Amendment No. 1 to First Lien Credit Agreement and Incremental Assumption Agreement]

Schedule 1.01A

Incremental Term Facility

Incremental Term Lender	Incremental Term Commitment
Peach Funding Corporation	\$40,000,000.00
Total:	\$40,000,000.00

AMENDMENT NO. 2 TO FIRST LIEN CREDIT AGREEMENT

This AMENDMENT NO. 2 TO FIRST LIEN CREDIT AGREEMENT, dated as of November 10, 2016 (this "Amendment"), is by and among ANDREWS HENDERSON LLC, a Delaware limited liability company ("Henderson"), NETSMART, INC., a Delaware corporation (the "Company"), NETSMART TECHNOLOGIES, INC., a Delaware corporation ("Netsmart Technologies"; Netsmart Technologies, collectively with Henderson and the Company, the "Borrowers"), as a Borrower and Borrower Representative, each other Loan Party party hereto under, and as defined in, the Credit Agreement referred to below, the Fronting Banks (as defined below) party hereto, the Participating Lenders (as defined below) party hereto, and UBS AG, STAMFORD BRANCH, as Administrative Agent.

WHEREAS, reference is hereby made to the First Lien Credit Agreement, dated as of April 19, 2016, among the Borrowers, the Subsidiaries of the Borrowers from time to time party thereto, NATHAN INTERMEDIATE LLC, a Delaware limited liability company ("Holdings"), UBS AG, Stamford Branch as the Administrative Agent, the Lenders from time to time party thereto, and the other agents, issuers and arrangers party thereto (as amended by that certain Amendment No. 1 to First Lien Credit Agreement and Incremental Assumption Agreement, dated October 27, 2016, by and among the Borrowers, the Borrower Representative, each other Loan Party party thereto, the Lenders party thereto and the Administrative Agent and as the same may be further amended, restated, amended and restated, supplemented, extended, refinanced or otherwise modified prior to giving effect to this Amendment, the "Existing Credit Agreement" and, as the same may be further amended, restated, amended and restated, supplemented, extended, refinanced or otherwise modified after giving effect to this Amendment, the "Credit Agreement");

WHEREAS, the Borrowers have requested that the Lenders reduce the interest rates applicable to all existing Term Loans outstanding under the Existing Credit Agreement immediately prior to effectiveness of this Amendment (the "Existing Term Loans") on the terms and conditions set forth herein, which reduction in interest rates with respect to the Existing Term Loans shall be effected by the exchange of Term Loans for Term C-1 Loans (as defined below) otherwise having the same terms (except as otherwise provided in this Amendment) as the Existing Term Loans;

WHEREAS, this Amendment constitutes a Refinancing Amendment, and the Borrowers are hereby notifying the Administrative Agent that they are requesting the establishment of Replacement Term Loans, pursuant to Section 9.02(c)(i) of the Credit Agreement;

WHEREAS, the Borrowers request Replacement Term Loans in an aggregate principal amount of \$434,012,500.00 (the "Term C-1 Loans"; the commitments relating thereto, the "Term C-1 Commitments"; and the Lenders with Term C-1 Commitments and any permitted assignees thereof, the "Term C-1 Loan Lenders"), which will be available on the Effective Date (as defined below) to refinance the Existing Term Loans, and which Term C-1 Loans shall constitute Replacement Term Loans and Term Loans (as applicable) for all purposes of the Credit Agreement and the other Loan Documents; it being understood that the aggregate principal amount of the Existing Term Loans immediately prior to effectiveness of this Amendment is \$434,012,500.00;

WHEREAS, each Lender holding Existing Term Loans under the Existing Credit Agreement immediately prior to effectiveness of this Amendment (each, an "Existing Lender") executing and delivering a notice of participation in the Term C-1 Loans in the form attached as Exhibit A hereto (a "Participation Notice") and electing the cashless settlement option therein (each such Lender in such capacity, a "Converting Lender" and, together with each other Person providing a commitment in respect of the Term C-1 Loans, the "Participating Lenders") shall be deemed to have exchanged on the Effective Date the aggregate outstanding amount of its Existing Term Loans under the Existing Credit Agreement for an equal aggregate principal amount of Term C-1 Loans under the Credit Agreement;

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

WHEREAS, the Borrowers have appointed Golub Capital Markets LLC to act, and Golub Capital Markets LLC agrees to act, as sole lead arranger and sole bookrunner (in such capacity, the "Second Amendment Lead Arranger") in respect of the Term C-1 Loans;

WHEREAS, the Second Amendment Lead Arranger has agreed to act (or to designate one of its affiliates to act) as a fronting bank for the syndication of the Term C-1 Loans;

WHEREAS, pursuant to Section 2.20 of the Existing Credit Agreement, the Second Amendment Lead Arranger (or one of its affiliates) and one or more Persons (in addition to the Second Amendment Lead Arranger) who agrees to act as an additional fronting bank for the syndication of the Term C-1 Loans (such Persons in such capacity, together with the Second Amendment Lead Arranger or its designated affiliate, the "Fronting Banks") will purchase, and the applicable Existing Lenders will sell to the Fronting Banks, immediately prior to effectiveness of this Amendment, Term Loans of Existing Lenders that do not execute and deliver a Participation Notice electing the cashless settlement option therein (the "Non-Participating Lenders") (the Loans described in the foregoing paragraph being the "Reallocated Loans");

WHEREAS, to the extent there exist any Reallocated Loans, the Fronting Banks shall be deemed to exchange on the Effective Date such Reallocated Loans on a cashless settlement basis for an equal aggregate principal amount of Term C-1 Loans under the Credit Agreement, and such Reallocated Loans shall promptly thereafter be purchased by, Participating Lenders (other than Converting Lenders)(the "New Lenders") and Converting Lenders purchasing additional Term C-1 Loans in accordance with such Participating Lenders' respective Term C-1 Commitments and as allocated by the Second Amendment Lead Arranger; and

WHEREAS, contemporaneously with the effectiveness of the Term C-1 Commitments, the Borrower wishes to make certain amendments to the Existing Credit Agreement to provide for the incurrence of the Term C-1 Loans and the other modifications to the Existing Credit Agreement set forth herein.

NOW, THEREFORE, in consideration of the premises and agreements, provisions and covenants herein contained, the parties hereto agree as follows:

Section 1. *Defined Terms; References.* Unless otherwise specifically defined herein, each capitalized term used herein has the meaning assigned to such term in the Credit Agreement. The rules of construction and other interpretive provisions specified in Sections 1.03 and 1.04 of the Credit Agreement shall apply to this Amendment, including terms defined in the preamble and recitals hereto.

Section 2. *New Term C-1 Loans.* The Credit Agreement is, as of the Effective Date and subject to the satisfaction of the applicable conditions precedent set forth in Section 5 of this Amendment, hereby amended as follows:

(a) The following new definitions are hereby added to Section 1.01 of the Credit Agreement in the appropriate alphabetical order:

“Amendment No. 2” means that certain Amendment No. 2 to First Lien Credit Agreement, dated as of November 10, 2016, by and among the Borrowers, the other Loan Parties party thereto, the Participating Lenders (as defined therein), the Fronting Banks (as defined therein) and the Administrative Agent.”

“Amendment No. 2 Effective Date” means the date on which Amendment No. 2 to this Agreement becomes effective in accordance with its terms.”

“Term C-1 Commitment” has the meaning assigned to such term in Amendment No. 2.”

“Term C-1 Loan Lender” means, at any time, any Lender that has a Term C-1 Commitment or Term C-1 Loan at such time.”

“Term C-1 Loan” has the meaning assigned to such term in Amendment No. 2.”

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

(b) Upon the funding of the Term C-1 Loans on the Effective Date, the Term C-1 Loans shall automatically and without further action by any Person constitute additional Term Loans for all purposes of the Credit Agreement and the other Loan Documents. Except as set forth below, the terms and provisions of the Term C-1 Loans shall be identical to those of the Existing Term Loans under the Credit Agreement and references in the Credit Agreement to the Term Loans shall include the Term C-1 Loans.

(c) The definition of the term "Adjusted LIBO Rate" shall be amended by (x) deleting the "and" before the words "the Term B-1 Loans" and replacing it with a "," and (y) adding the words "and the Term C-1 Loans" after the words "Term B-1 Loans" contained therein.

(d) The definition of the term "Alternate Base Rate" shall be amended by (x) deleting the "and" before the words "the Term B-1 Loans" and replacing it with a "," and (y) adding the words "and the Term C-1 Loans" after the words "Term B-1 Loans" in clause (ii) of the proviso contained therein.

(e) The definition of the term "Applicable Rate" shall be amended by replacing clause (a) thereof in its entirety with the following:

"(a) (x) with respect to Initial Revolving Loans (i) with respect to any LIBO Rate Loan, 4.75% and (ii) with respect to any ABR Loan, 3.75% and (y) with respect to the Term C-1 Loans, (i) with respect to any LIBO Rate Loan, 4.50% and (ii) with respect to any ABR Loan, 3.50%";

(f) The definition of the term "Class" shall be amended by adding the phrase "Term C-1 Loans," immediately after the phrase "Term B-1 Loans," in clause (a) thereof.

(g) The definition of the term "Maturity Date" shall be amended by (x) deleting the "and" before the words "the Term B-1 Loans" and replacing it with a "," and (y) adding the words "and the Term C-1 Loans" immediately after the words "Term B-1 Loans" in clause (a) thereof.

(h) The definition of "Repricing Transaction" shall be amended by deleting each reference to "Initial Term Loans" therein and replacing it with a reference to "Term C-1 Loans";

(i) The definition of the term "Term Loans" shall be amended by adding the words "the Term C-1 Loans," immediately after the words "the Term B-1 Loans," contained therein.

(j) Section 2.01 of the Credit Agreement is hereby amended and restated in its entirety as set forth below:

"Subject to the terms and conditions set forth herein or in Amendment No. 2, as the case may be, each Term Lender agrees, severally and not jointly, to (x) make Initial Term Loans to the Borrowers on the Closing Date, (y) make Term B-1 Loans to the Borrowers on the Amendment No. 1 Effective Date or (z) make and/or exchange Term C-1 Loans to the Borrowers on the Amendment No. 2 Effective Date, in each case in an aggregate principal amount requested by the Borrowers not to exceed such Lender's respective Term Loan Commitments with respect to Initial Term Loans, Term B-1 Loans, or Term C-1 Loans, as the case may be. Amounts paid or prepaid in respect of the Initial Term Loans, Term B-1 Loans and the Term C-1 Loans may not be reborrowed."

(k) Section 2.03(a)(a) of the Credit Agreement is hereby amended by inserting the phrase "or on the Amendment No. 2 Effective Date" after the phrase "or on the Amendment No. 1 Effective Date" contained therein.

(l) Section 2.11(a) of the Credit Agreement is hereby amended by inserting the following sentence immediately following the second sentence contained therein:

"Each Borrower jointly and severally hereby unconditionally promise to repay the outstanding Term C-1 Loans to the Administrative Agent for the account of each Term C-1 Loan Lender (i) on each Loan Installment Date, commencing on the last Business Day of December 2016, in each case in an amount equal to \$1,087,750.63 (as such payments may be reduced from time to time as a result of the application of

prepayments in accordance with Section 2.12 and Section 9.05(g) or increased as a result of any increase in the amount of such Term C-1 Loans pursuant to Section 2.23(a)), and (ii) on the Term Loan Maturity Date, the remainder of the principal amount of the Term C-1 Loans outstanding on such date, together in each case with accrued and unpaid interest on the principal amount to be paid to but excluding the date of such payment.”

(m) The final of sentence of Section 2.12(a)(ii) of the Credit Agreement is hereby amended and restated in its entirety as follows:

“Each prepayment of Term Loans made pursuant to this Section 2.12(a) shall be applied against the remaining scheduled installments of principal due in respect of the Term Loans in the manner specified by the Borrowers or, if not so specified on or prior to the date of such optional prepayment, in direct order of maturity.”

(n) Section 2.12(b)(ii) of the Credit Agreement is hereby amended by deleting the parenthetical “(ratably between the Initial Term Loans and the Term B-1 Loans)” immediately following the words “Term Loans” the first time such words are used in such section.

(o) Section 2.12(b)(iii) of the Credit Agreement is hereby amended by deleting the parenthetical “(ratably between the Initial Term Loans and the Term B-1 Loans)” immediately following the words “Term Loans” in each case such words are used in such section.

(p) Section 2.12(b)(iv) of the Credit Agreement is hereby amended by deleting the parenthetical “(ratably between the Initial Term Loans and the Term B-1 Loans)” immediately following the words “Term Loans” the final time such words are used in such section.

(q) The last sentence of Section 2.12(b)(vii) of the Credit Agreement is hereby amended by deleting the phrase “Closing Date” and replacing it with “Amendment No. 2 Effective Date” and by deleting the reference to “Initial Term Loans” and replacing it with “Term C-1 Loans”.

(r) The first sentence of Section 2.13(e) of the Credit Agreement is hereby amended by deleting the phrase “Closing Date” and replacing it with “Amendment No. 2 Effective Date” and by deleting each reference to “Initial Term Loans” and replacing it with “Term C-1 Loans”.

(s) The last sentence of Section 2.20(b) of the Credit Agreement is hereby amended by deleting the phrase “Section 2.13(c)” in each place that it appears and replacing it with “Section 2.13(e)”;

(t) The first sentence of Section 5.11 of the Credit Agreement is hereby amended and restated in its entirety as follows:

“The Borrowers shall use proceeds of the Initial Term Loans solely to finance a portion of the Transactions (including working capital, payment of Transaction Costs and/or purchase price adjustments under the Acquisition Agreement), the Borrowers shall use proceeds of the Term B-1 Loans on the Amendment No. 1 Effective Date solely to finance a portion of the First Amendment Transaction (as defined in Amendment No. 1) (including working capital and/or purchase price adjustments in connection therewith and the payment of transaction costs associated therewith), and the Borrowers shall use proceeds of the Term C-1 Loans on the Amendment No. 2 Effective Date solely to prepay in full the aggregate principal amount of the Initial Term Loans and the Term B-1 Loans outstanding on the Amendment No. 2 Effective Date and to pay any interest, fees, and/or expenses related thereto.”

Section 3. *Exchange Mechanics.*

(a) This Amendment represents a request by the Borrowers to borrow Term C-1 Loans from the Term C-1 Lenders as set forth on the applicable Notice of Borrowing to be delivered by the Borrowers under the Credit Agreement (and, notwithstanding anything to the contrary herein, each Participating Lender hereby consents to any such non-conforming Interest Period elected therein).

(b) Each New Lender (i) confirms that it has received a copy of the Credit Agreement and the other Loan Documents and the exhibits and schedules thereto, together with copies of the financial statements referred to therein and such other documents and information as it has deemed appropriate to make its own credit analysis and decision to enter into this Amendment; (ii) agrees that it will, independently and without reliance upon the Administrative Agent or any other Lender and based on such documents and information as it shall deem appropriate at the time, continue to make its own credit decisions in taking or not taking action under the Credit Agreement; (iii) appoints and authorizes the Administrative Agent to take such action as agent on its behalf and to exercise such powers under the Credit Agreement and the other Loan Documents as are delegated to the Administrative Agent by the terms thereof, together with such powers as are reasonably incidental thereto; and (iv) agrees that it will perform in accordance with their terms all of the obligations which by the terms of the Credit Agreement are required to be performed by it as a Lender, as the case may be. Each New Lender acknowledges and agrees that it shall become a “Lender” under, and for all purposes of, the Credit Agreement and the other Loan Documents, and shall be subject to and bound by the terms thereof, and shall have all rights of a Lender thereunder.

(c) Except as set forth in this Amendment, the Term C-1 Loans shall otherwise be subject to the provisions of the Credit Agreement and the other Loan Documents.

(d) It is acknowledged and agreed that each Converting Lender has agreed to accept as satisfaction in full of its right to receive payment on the outstanding amount of Existing Term Loans of such Converting Lender the conversion of its Existing Term Loans into Term C-1 Loans in accordance herewith, in lieu of the prepayment amount that would otherwise be payable by the Borrowers pursuant to the Credit Agreement in respect of the outstanding amount of Existing Term Loans of such Converting Lender. Notwithstanding anything to the contrary herein, each Converting Lender hereby waives any break funding payments in respect of such Lender’s Existing Term Loans.

Section 4. *Effect of Amendment; Reaffirmation and Ratification of Obligations; Etc.* Except as expressly set forth herein or in the Credit Agreement (as amended by this Amendment), this Amendment shall not by implication or otherwise limit, impair, constitute a waiver of or otherwise affect the rights and remedies of the Lenders or the Administrative Agent under the Credit Agreement or under any other Loan Document or constitute a course of conduct or dealing among the parties, and shall not alter, modify, amend or in any way affect any of the terms, conditions, obligations, covenants or agreements contained in the Credit Agreement or any other provision of the Credit Agreement or of any Loan Document, all of which are ratified and affirmed in all respects and shall continue in full force and effect. The Borrowers and each other Loan Party acknowledges and agrees that (A) the Credit Agreement (as amended by this Amendment) and each other Loan Document to which it is a party and the Loan Guaranty contained therein is hereby confirmed and ratified and shall remain in full force and effect according to its respective terms and (B) the Credit Agreement and the other Loan Documents do, and all of the Collateral does, and in each case shall continue to, secure the payment of all Obligations (including with respect to the Term C-1 Loans) on the terms and conditions set forth in the Credit Agreement and the other Loan Documents, and hereby ratifies the security interests and guarantees granted by it pursuant to the Credit Agreement and the other Loan Documents. On and as of the Effective Date (as defined below), each reference in the Credit Agreement to “this Agreement”, “hereof”, “hereunder”, “herein” and “hereby” and each other similar reference, and each reference in any Loan Document to “the Credit Agreement”, “thereof”, “thereunder”, “therein” or “thereby” or any other similar reference to the Credit Agreement shall refer to the Credit Agreement (as amended by this Amendment). This Amendment constitutes a Loan Document.

Section 5. *Conditions to Effectiveness.*

(a) This Amendment, and the obligations of the Lenders to make Term C-1 Loans, shall become effective on the first date (the “Effective Date”) when, and only when, each of the applicable conditions set forth below have been satisfied (or waived) in accordance with the terms herein:

(i) Amendment. The Administrative Agent shall have received counterparts of this Amendment duly executed and delivered by each of (A) the Borrowers and the other Loan Parties, (B) each Fronting Bank, (C) each Participating Lender representing 100% of the aggregate outstanding principal amount of the Existing Term Loans (other than the Reallocated Loans) and (D) the Administrative Agent.

(ii) Participation Notices. The Administrative Agent shall have received fully executed and delivered Participation Notices from Participating Lenders and Fronting Banks representing 100% of the aggregate outstanding principal amount of the Existing Term Loans.

(iii) Borrowing Notice. The Administrative Agent shall have received an executed Borrowing Request in accordance with the terms hereof and Section 2.03(a) of the Credit Agreement.

(iv) Representations and Warranties. Each of the representations and warranties made by any Loan Party in Section 6 of this Amendment or in or pursuant to the other Loan Documents shall be true and correct in all material respects on and as of the Effective Date as if made on and as of such date except, (A) to the extent that such representations and warranties expressly relate to an earlier date, in which case they shall be true and correct in all material respects as of such date and (B) that any representation and warranty that is qualified as to “materiality” or “Material Adverse Effect” shall be true and correct in all respects.

(v) No Default or Event of Default. No Default or Event of Default shall exist on the Effective Date immediately before or immediately after giving effect to the effectiveness of this Amendment and the incurrence of the Term C-1 Loans.

(vi) Certificate. The Administrative Agent shall have received a certificate of the Borrower Representative dated as of the Effective Date signed by a Responsible Officer of the Borrower Representative certifying as to the matters set forth in subclauses (iv) and (v) above.

(vii) Fees. (i) Golub Capital Markets LLC shall have received all fees required to be paid by the Borrowers on the Effective Date pursuant to that certain Fee Letter, dated as of October 26 2016, among the Borrowers and Golub Capital Markets LLC, and (ii) all expenses required to be paid pursuant to the Credit Agreement on the Effective Date, to the extent invoiced at least one Business Days prior to the Effective Date, shall have been or concurrently herewith will be paid.

(viii) USA PATRIOT Act. No later than one Business Days in advance of the Effective Date, the Administrative Agent shall have received all documentation and other information reasonably requested by it in writing in advance of the Effective Date, which documentation or other information is required by regulatory authorities under applicable “know your customer” and anti-money laundering rules and regulations, including the USA PATRIOT Act.

(ix) Accrued Interest on Existing Term Loans. Borrowers shall have paid or have caused to be paid, to the Administrative Agent, for the account of each Lender with Existing Term Loans on the Effective Date, all accrued interest owing on the Existing Term Loans to and until the Effective Date.

(b) On the Effective Date, upon the satisfaction of the conditions set forth in clause (a) hereof, the outstanding amount of Term Loans of each Converting Lender shall be deemed to be exchanged for an equal outstanding principal amount of Term C-1 Loans under the Credit Agreement. Such exchange shall be effected by book entry in such manner, and with such supporting documentation, as may be reasonably determined by the Administrative Agent.

(c) On or prior to the Effective Date, the Lenders (including Existing Lenders and the Fronting Banks, if applicable) shall sell and purchase Existing Term Loans, and make and receive payments, in immediately available funds, among themselves (and the Fronting Banks, if applicable), as directed by the Second Amendment Lead Arranger, in order to permit the exercise of Section 2.20 of the Existing Credit Agreement. All such sales and purchases shall be made in compliance with Sections 2.20 and 9.05 of the Existing Credit Agreement.

(d) To the extent there exist any Reallocated Loans, promptly following the Effective Date (but not later than 30 days following the Effective Date), each New Lender and each Converting Lender purchasing additional Term C-1 Loans shall purchase Reallocated Loans from the Fronting Banks in accordance with Section 9.05 of the Credit Agreement as directed by the Second Amendment Lead Arranger in accordance with such Participating Lender’s Term C-1 Commitment and as allocated by the Second Amendment Lead Arranger. Except to the extent otherwise

agreed by the Fronting Banks, purchases and sales of Reallocated Loans and any such excess Term C-1 Loans shall be made on a ratable basis among the Fronting Banks.

For purposes of determining whether the conditions specified in this Section 5 have been satisfied, by funding its Term C-1 Loans hereunder, the Administrative Agent, Fronting Bank and each Participating Lender that has executed this Amendment shall be deemed to have consented to, approved or accepted, or to be satisfied with, each document or other matter required hereunder to be consented to or approved by or acceptable or satisfactory to the Administrative Agent, Fronting Bank or such Participating Lender, as the case may be.

Section 6. *Representations and Warranties.* Each of Holdings (solely to the extent applicable to it), the Borrowers and the other Loan Parties, on behalf of themselves and their respective Subsidiaries, represent and warrant on the date hereof to the Lenders holding Term C-1 Commitments on the date hereof and the Administrative Agent that:

(a) Authorization; Enforceability. The execution, delivery and performance of this Amendment are within each applicable Loan Party's corporate or other organizational powers and have been duly authorized by all necessary corporate or other organizational action of such Loan Party. This Amendment has been duly executed and delivered by each Loan Party and is a legal, valid and binding obligation of such Loan Party, enforceable in accordance with its terms, subject to applicable bankruptcy, insolvency or similar laws affecting creditors' rights generally and to general principles of equity and principles of good faith and fair dealing.

(b) Governmental Approvals; No Conflicts. The execution and delivery of this Amendment by each Loan Party party thereto and the performance by such Loan Party thereof (a) do not require any consent or approval of, registration or filing with, or any other action by, any Governmental Authority, except (i) such as have been obtained or made and are in full force and effect, (ii) for filings necessary to perfect Liens created pursuant to the Loan Documents or the "Loan Documents" (as defined in the Second Lien Term Loan Agreement) and (iii) such consents, approvals, registrations, filings, or other actions the failure to obtain or make which could not be reasonably expected to have a Material Adverse Effect, (b) will not violate any (i) of such Loan Party's Organizational Documents or (ii) any Requirements of Law applicable to such Loan Party which, in the case of this clause (b)(ii), could reasonably be expected to have a Material Adverse Effect and (c) will not violate or result in a default under any Contractual Obligation of any of the Loan Parties which would reasonably be expected to result in a Material Adverse Effect.

Section 7. *Further Assurances.* The Loan Parties hereto shall execute and deliver such additional documents and take such additional action as may be reasonably necessary or desirable to effectuate the provisions and purposes of this Amendment.

Section 8. *Severability.* Any provision of this Amendment that is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof, and any such prohibition or unenforceability in any jurisdiction shall not invalidate or render unenforceable such provision in any other jurisdiction.

Section 9. *Headings.* The headings listed herein are for convenience only and do not constitute matters to be construed in interpreting this Amendment.

Section 10. *Governing Law.* THIS AMENDMENT AND ANY CLAIM, CONTROVERSY OR DISPUTE ARISING UNDER OR RELATED TO THIS AMENDMENT (OTHER THAN AS EXPRESSLY SET FORTH IN THE OTHER LOAN DOCUMENTS), WHETHER IN TORT, CONTRACT (AT LAW OR IN EQUITY) OR OTHERWISE, SHALL BE GOVERNED BY, AND CONSTRUED AND INTERPRETED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK.

Section 11. *Jurisdiction; Consent to Service of Process; Waiver of Jury Trial.* Each of the provisions provided in the following sections of the Credit Agreement is hereby incorporated herein by this reference with the same effect as though set forth in its entirety herein, mutatis mutandis, and as if the phrase "this Agreement" in any such provision referred to this Amendment: Section 9.10(b), (c) and (d) and Section 9.11.

Section 12. *Counterparts*. This Amendment may be executed in any number of counterparts (and by different parties hereto on different counterparts), all of which, when so executed, shall be deemed an original, but all such counterparts shall constitute one and the same agreement. Any signature delivered by a party by facsimile or electronic transmission shall be deemed to be an original signature hereto.

Section 13. *Prepayment Notice*. The Participating Lenders and the Fronting Bank party hereto, which constitute the Required Lenders, and the Administrative Agent hereby waive the requirement under Section 2.12(a)(ii) of the Credit Agreement to provide notice to the Administrative Agent not less than three (3) Business Days prior to the prepayment of the Initial Term Loans and Term B-1 Loans to be made hereunder. It is understood and agreed that this Amendment shall serve as the notice referred to in Section 2.12(a)(ii) of the Credit Agreement.

Section 14. *Register*. The Administrative Agent will record the Term C-1 Loans made by each Participating Lender in the Register in accordance with, and to the extent required by, the Credit Agreement.

Section 15. *Notice*. For purposes of the Credit Agreement, the initial notice address of each New Lender shall be as separately identified to the Administrative Agent.

Section 16. *Tax Forms*. For each New Lender, solely to the extent relevant and applicable, delivered herewith to the Administrative Agent are such forms, certificates or other evidence with respect to United States federal income tax withholding matters as such New Lender may be required to deliver to the Administrative Agent pursuant to Section 2.18 of the Credit Agreement and an Administrative Questionnaire.

[SIGNATURE PAGES FOLLOW]

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be duly executed by their respective authorized officers as of the day and year first above written.

ANDREWS HENDERSON LLC,
a Delaware limited liability company, as Borrower

By: /s/ Anthony Ritz
Name: Anthony Ritz
Title: Chief Financial Officer

NETSMART, INC.,
a Delaware corporation, as Borrower

By: /s/ Anthony Ritz
Name: Anthony Ritz
Title: Chief Financial Officer

NETSMART TECHNOLOGIES, INC.,
a Delaware corporation, as Borrower and Borrower Representative

By: /s/ Anthony Ritz
Name: Anthony Ritz
Title: Chief Financial Officer

NATHAN INTERMEDIATE LLC,
a Delaware limited liability company, as Holdings

By: /s/ Anthony Ritz
Name: Anthony Ritz
Title: Chief Financial Officer

NETSMART ILLINOIS, INC.,
a Delaware corporation, as Subsidiary Guarantor

By: /s/ Anthony Ritz
Name: Anthony Ritz
Title: Chief Financial Officer

NETSMART NEW YORK, INC.,
a Delaware corporation, as Subsidiary Guarantor

By: /s/ Anthony Ritz
Name: Anthony Ritz
Title: Chief Financial Officer

LWS ACQUISITION CORP.,
a Delaware corporation, as Subsidiary Guarantor

By: /s/ Anthony Ritz
Name: Anthony Ritz
Title: Chief Financial Officer

DEFRAN SYSTEMS, INC.,
a New York corporation, as Subsidiary Guarantor

By: /s/ Anthony Ritz
Name: Anthony Ritz
Title: Chief Financial Officer

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

SEQUEST PARENT COMPANY, INC.,
a Delaware corporation, as Subsidiary Guarantor

By: /s/ Anthony Ritz
Name: Anthony Ritz
Title: Chief Financial Officer

SEQUEST HEALTHCARE BILLING, INC.,
a Delaware corporation, as Subsidiary Guarantor

By: /s/ Anthony Ritz
Name: Anthony Ritz
Title: Chief Financial Officer

SEQUEST TECHNOLOGIES, INC.,
an Illinois corporation, as Subsidiary Guarantor

By: /s/ Anthony Ritz
Name: Anthony Ritz
Title: Chief Financial Officer

TREND ACQUISITION CORP.,
a Delaware corporation, as Subsidiary Guarantor

By: /s/ Anthony Ritz
Name: Anthony Ritz
Title: Chief Financial Officer

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

HEALTHMEDX, LLC,
a Delaware limited liability company, as Subsidiary Guarantor

By: /s/ Anthony Ritz

Name: Anthony Ritz

Title: Chief Financial Officer

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

PEACH FUNDING CORPORATION,
as a Fronting Bank

By: /s/ Robert G. Tuchscherer

Name: **Robert G. Tuchscherer**

Title: **Managing Director**

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

UBS AG, STAMFORD BRANCH
as Administrative Agent

By: /s/ Darlene Arias
Name: Darlene Arias
Title: Director

By: /s/ Denise Bushee
Name: Denise Bushee
Title: Associate Director

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

BEAN CREEK CLO, LTD.
as a Participating Lender

By: /s/ Bryan Higgins
Name: Bryan Higgins
Title: Manager

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

MILL CREEK CLO II, LTD.
as a Participating Lender

By: /s/ Bryan Higgins
Name: Bryan Higgins
Title: Manager

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

AMMC CLO 16, LIMITED
as a Participating Lender
By: American Money Management Corp.,
as Collateral Manager

By: /s/ David P. Meyer
Name: David P. Meyer
Title: Senior Vice President

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

AMMC CLO 18, LIMITED
as a Participating Lender
By: American Money Management Corp.,
as Collateral Manager

By: /s/ David Meyer

Name: David Meyer
Title: Senior Vice President

If a second signature is necessary:

By:

Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

DEUTSCHE BANK AG NEW YORK BRANCH
as a Participating Lender

By: /s/ Marcus M.Tarkington
Name: Marcus M.Tarkington
Title: Director

By: /s/ Dusan Lazarov
Name: Dusan Lazarov
Title: Director

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Aon Hewitt Group Trust - High Yield Plus Bond Fund
as a Participating Lender
By: Bain Capital Credit, LP, as Manager

By: /s/ Andrew Viens
Name: Andrew Viens
Title: Executive Vice President

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

AVAW Loans Sankaty z.H. Internationale
Kapitalanlagegesellschaft mbH
as a Participating Lender
By: Bain Capital Credit, LP, as Fund Manager

By: /s/ Andrew Viens
Name: Andrew Viens
Title: Executive Vice President

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Suzuka INKA
as a Participating Lender
By: Bain Capital Credit, LP, as Fund Manager

By: /s/ Andrew Viens
Name: Andrew Viens
Title: Executive Vice President

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Sunsuper Pooled Superannuation Trust
as a Participating Lender
By: Bain Capital Credit, LP, as Manager

By: /s/ Andrew Viens
Name: Andrew Viens
Title: Executive Vice President

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Sankaty Rio Grande FMC, L.P.
as a Participating Lender

By: /s/ Andrew Viens
Name: Andrew Viens
Title: Executive Vice President

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Sankaty Managed Account (TCCC), L.P.
as a Participating Lender

By: /s/ Andrew Viens
Name: Andrew Viens
Title: Executive Vice President

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Sankaty Managed Account (FSS), L.P.
as a Participating Lender

By: /s/ Andrew Viens
Name: Andrew Viens
Title: Executive Vice President

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

San Francisco City and County Employees'
Retirement System
as a Participating Lender
By: Bain Capital Credit, LP, as Investment Manager

By: /s/ Andrew Viens
Name: Andrew Viens
Title: Executive Vice President

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

RBS Pension Trustee Limited as Trustee to The
Royal Bank of Scotland Group Pension Fund
as a Participating Lender
By: Bain Capital Credit, LP, as Investment Manager

By: /s/ Andrew Viens

Name: Andrew Viens

Title: Executive Vice President

If a second signature is necessary:

By:

Name:

Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Los Angeles County Employees Retirement Association
as a Participating Lender
By: Bain Capital Credit, LP, as Manager

By: /s/ Andrew Viens
Name: Andrew Viens
Title: Executive Vice President

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Kaiser Permanente Group Trust
as a Participating Lender
By: Bain Capital Credit, LP, as Investment Adviser
and Manager

By: /s/ Andrew Viens

Name: Andrew Viens

Title: Executive Vice President

If a second signature is necessary:

By:

Name:

Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Kaiser Foundation Hospitals
as a Participating Lender
By: Bain Capital Credit, LP, as Investment Adviser
and Manager

By: /s/ Andrew Viens

Name: Andrew Viens

Title: Executive Vice President

If a second signature is necessary:

By:

Name:

Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Future Fund Board of Guardians
as a Participating Lender
By: Bain Capital Credit, LP, as Investment Manager

By: /s/ Andrew Viens
Name: Andrew Viens
Title: Executive Vice President

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

FirstEnergy System Master Retirement Trust
as a Participating Lender
By: Bain Capital Credit, LP, as Manager

By: /s/ Andrew Viens
Name: Andrew Viens
Title: Executive Vice President

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Catholic Health Initiatives Master Trust
as a Participating Lender
By: Bain Capital Credit, LP, as Investment Adviser
and Manager

By: /s/ Andrew Viens

Name: Andrew Viens

Title: Executive Vice President

If a second signature is necessary:

By:

Name:

Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

CHI Operating Investment Program L.P.
as a Participating Lender
By: Bain Capital Credit, LP, as Investment Adviser
and Manager

By: /s/ Andrew Viens
Name: Andrew Viens
Title: Executive Vice President

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Community Insurance Company
as a Participating Lender
By: Bain Capital Credit, LP, as Investment Manager

By: /s/ Andrew Viens
Name: Andrew Viens
Title: Executive Vice President

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

NF Investment Corp.,
as a Participating Lender

By: /s/ Mark Tamburello
Name: Mark Tamburello
Title: Vice President

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

FDF I Limited
as a Participating Lender
By: FDF I CM LLC, its collateral manager

By: /s/ Jennifer Sorkin
Name: Jennifer Sorkin
Title: Treasurer

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

FDF II Limited
as a Participating Lender
By: FDF II CM LLC, its collateral manager

By: /s/ Jennifer Sorkin
Name: Jennifer Sorkin
Title: Treasurer

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Fortress Credit BSL II Limited
as a Participating Lender
BY: FC BSL II CM LLC, its collateral manager

By: /s/ Jennifer Sorkin
Name: Jennifer Sorkin
Title: Managing Director/Treasurer

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Fortress Credit BSL III Limited
as a Participating Lender
By: FC BSL III CM LLC, its collateral manager

By: /s/ Jennifer Sorkin
Name: Jennifer Sorkin
Title: Treasurer

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

FORTRESS CREDIT BSL LIMITED
as a Participating Lender
BY: FC BSL CM LLC, its collateral manager

By: /s/ Jennifer Sorkin
Name: Jennifer Sorkin
Title: Managing Director/Treasurer

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Hildene CLO I Ltd
as a Participating Lender
By: CF H-BSL MANAGEMENT LLC, its Collateral
Manager

By: /s/ Jennifer Sorkin
Name: Jennifer Sorkin
Title: Treasurer

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Hildene CLO III Ltd
as a Participating Lender
By: CF H-BSL MANAGEMENT LLC, its Collateral
Manager

By: /s/ Jennifer Sorkin
Name: Jennifer Sorkin
Title: Treasurer

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

HILDENE CLO IV, Ltd
as a Participating Lender
By: CF H-BSL MANAGEMENT LLC, its Collateral
Manager

By: /s/ Jennifer Sorkin
Name: Jennifer Sorkin
Title: Treasurer

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

PEACH FUNDING CORPORATION,
as a Fronting Bank

By: /s/ Robert G. Tuchscherer

Name: Robert G. Tuchscherer

Title: Managing Director

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

PEACH FUNDING CORPORATION,
as a Participating Lender

By: /s/ Robert G. Tuchscherer
Name: Robert G. Tuchscherer
Title: Managing Director

GOLUB CAPITAL FINANCE FUNDING LLC
as a Participating Lender
By: GC Advisors LLC, its Manager

By: /s/ Robert G. Tuchscherer
Name: Robert G. Tuchscherer
Title: Managing Director

GOLUB CAPITAL BDC FUNDING LLC
as a Participating Lender
By: GC Advisors LLC, its Manager

By: /s/ Robert G. Tuchscherer
Name: Robert G. Tuchscherer
Title: Managing Director

GCIC FUNDING LLC
as a Participating Lender
By: Golub Capital Investment Corporation, its sole
member
By: GC Advisors LLC, its Manager

By: /s/ Robert G. Tuchscherer
Name: Robert G. Tuchscherer
Title: Managing Director

GCP FINANCE 4, LTD.
as a Participating Lender
By: GC Advisors LLC, as agent

By: /s/ Robert G. Tuchscherer
Name: Robert G. Tuchscherer
Title: Managing Director

Senior Credit Fund SPV I, LLC

By: Senior Credit Fund, LLC, its sole member

By: Goldman Sachs Asset Management, solely in its capacity as Administrative Agent, and not as Principal,
as a Participating Lender

By: /s/ Mehmet Barlas

Name: Mehmet Barlas

Title: Authorized Signatory

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Birchwood Park CLO, Ltd.
as a Participating Lender
By: GSO / Blackstone Debt Funds Management LLC
as Collateral Manager

By: /s/ Thomas Iannarone
Name: Thomas Iannarone
Title: Authorized Signatory

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Blackstone / GSO Long-Short Credit Income Fund
as a Participating Lender
BY: GSO / Blackstone Debt Funds Management LLC
as Investment Advisor

By: /s/ Thomas Iannarone
Name: Thomas Iannarone
Title: Authorized Signatory

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Blackstone / GSO Senior Floating Rate Term Fund
as a Participating Lender
BY: GSO / Blackstone Debt Funds Management LLC
as Investment Advisor

By: /s/ Thomas Iannarone
Name: Thomas Iannarone
Title: Authorized Signatory

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

BLACKSTONE/GSO STRATEGIC CREDIT FUND
as a Participating Lender
BY: GSO / Blackstone Debt Funds Management LLC
as Collateral Manager

By: /s/ Thomas Iannarone
Name: Thomas Iannarone
Title: Authorized Signatory

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Bowman Park CLO, Ltd.
as a Participating Lender
By: GSO / Blackstone Debt Funds Management LLC
as Collateral Manager

By: /s/ Thomas Iannarone
Name: Thomas Iannarone
Title: Authorized Signatory

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Cole Park CLO, Ltd.
as a Participating Lender
By: GSO / Blackstone Debt Funds Management LLC
as Collateral Manager

By: /s/ Thomas Iannarone
Name: Thomas Iannarone
Title: Authorized Signatory

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Cumberland Park CLO Ltd.
as a Participating Lender
By: GSO / Blackstone Debt Funds Management LLC
as Collateral Manager

By: /s/ Thomas Iannarone
Name: Thomas Iannarone
Title: Authorized Signatory

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Keuka Park CLO, Ltd.
as a Participating Lender
BY: GSO / Blackstone Debt Funds Management LLC
as Collateral Manager

By: /s/ Thomas Iannarone
Name: Thomas Iannarone
Title: Authorized Signatory

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Dorchester Park CLO Ltd.
as a Participating Lender
By: GSO / Blackstone Debt Funds Management LLC
as Collateral Manager

By: /s/ Thomas Iannarone
Name: Thomas Iannarone
Title: Authorized Signatory

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Pinnacle Park CLO, Ltd
as a Participating Lender
By: GSO / Blackstone Debt Funds Management LLC
as Collateral Manager

By: /s/ Thomas Iannarone
Name: Thomas Iannarone
Title: Authorized Signatory

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Jay Park CLO Ltd.
as a Participating Lender
By: Virtus Partners LLC
as Collateral Administrator

By: /s/ Thomas Iannarone
Name: Thomas Iannarone
Title: Authorized Signatory

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Seneca Park CLO, Ltd.
as a Participating Lender
By: GSO / Blackstone Debt Funds Management LLC
as Collateral Manager

By: /s/ Thomas Iannarone
Name: Thomas Iannarone
Title: Authorized Signatory

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Sheridan Square CLO, Ltd.
as a Participating Lender
By: GSO / Blackstone Debt Funds Management LLC
as Collateral Manager

By: /s/ Thomas Iannarone
Name: Thomas Iannarone
Title: Authorized Signatory

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Stewart Park CLO, Ltd.
as a Participating Lender
BY: GSO / Blackstone Debt Funds Management LLC
as Collateral Manager

By: /s/ Thomas Iannarone
Name: Thomas Iannarone
Title: Authorized Signatory

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Westcott Park CLO, Ltd.
as a Participating Lender
By: GSO / Blackstone Debt Funds Management LLC
as Collateral Manager to Warehouse Parent, Ltd.

By: /s/ Thomas Iannarone
Name: Thomas Iannarone
Title: Authorized Signatory

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Webster Park CLO, Ltd
as a Participating Lender
By: GSO / Blackstone Debt Funds Management LLC
as Collateral Manager

By: /s/ Thomas Iannarone
Name: Thomas Iannarone
Title: Authorized Signatory

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Tryon Park CLO Ltd.
as a Participating Lender
BY: GSO / Blackstone Debt Funds Management LLC
as Collateral Manager

By: /s/ Thomas Iannarone
Name: Thomas Iannarone
Title: Authorized Signatory

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Thacher Park CLO, Ltd.
as a Participating Lender
BY: GSO / Blackstone Debt Funds Management LLC
as Collateral Manager

By: /s/ Thomas Iannarone
Name: Thomas Iannarone
Title: Authorized Signatory

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Treman Park CLO, Ltd.
as a Participating Lender
BY: GSO / Blackstone Debt Funds Management LLC
as Collateral Manager

By: /s/ Thomas Iannarone
Name: Thomas Iannarone
Title: Authorized Signatory

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Highbridge Loan Management 3-2014 Ltd.
as a Participating Lender
By: HPS Investment Partners, LLC,
Its Investment Manager

By: /s/ Jamie Donsky
Name: Jamie Donsky
Title: Senior Vice President

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

HPS Loan Management 9-2016, Ltd.
as a Participating Lender
By: HPS Investment Partners, LLC
As the Collateral Manager

By: /s/ Jamie Donsky
Name: Jamie Donsky
Title: Senior Vice President

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Highbridge Loan Management 8-2016, Ltd.
as a Participating Lender
By: HPS Investment Partners, LLC
As the Collateral Manager

By: /s/ Jamie Donsky
Name: Jamie Donsky
Title: Senior Vice President

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Highbridge Loan Management 5-2015, Ltd.
as a Participating Lender
By: HPS Investment Partners, LLC
As the Collateral Manager

By: /s/ Jamie Donsky
Name: Jamie Donsky
Title: Senior Vice President

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Highbridge Loan Management 4-2014, Ltd.
as a Participating Lender
By: HPS Investment Partners, LLC
As the Collateral Manager

By: /s/ Jamie Donsky
Name: Jamie Donsky
Title: Senior Vice President

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

ING Capital LLC,
as a Participating Lender

By: /s/ Christopher J. Moon
Name: Christopher J. Moon
Title: Director

By: /s/ Pim Rothweiler
Name: Pim Rothweiler
Title: Managing Director

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

ICG US CLO 2015-1, Ltd
as a Participating Lender

By: /s/ Seth Katzenstein

Name: Seth Katzenstein

Title: Authorized Signatory

If a second signature is necessary:

By:

Name:

Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

ICG US CLO 2016-1, Ltd.
as a Participating Lender

By: /s/ Seth Katzenstein

Name: Seth Katzenstein

Title: Authorized Signatory

If a second signature is necessary:

By:

Name:

Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

ICG US CLO 2014-1, Ltd.
as a Participating Lender

By: /s/ Seth Katzenstein
Name: Seth Katzenstein
Title: Authorized Signatory

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

ICG US CLO 2014-2 Ltd
as a Participating Lender

By: /s/ Seth Katzenstein

Name: Seth Katzenstein

Title: Authorized Signatory

If a second signature is necessary:

By:

Name:

Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

ICG US CLO 2014-3, Ltd.
as a Participating Lender

By: /s/ Seth Katzenstein
Name: Seth Katzenstein
Title: Authorized Signatory

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

ICG US CLO 2015-2, Ltd.
as a Participating Lender

By: /s/ Seth Katzenstein
Name: Seth Katzenstein
Title: Authorized Signatory

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

IN WITNESS WHEREOF, the undersigned has caused this Participation Notice to be executed and delivered by a duly authorized officer.

CSCOP SE I LLC,
as a Lender (type name of the legal entity)

By: /s/ Philip Davidson
Name: Philip Davidson
Title: Authorized Signatory

If a second signature is necessary:

By: _____
Name:
Title:

Netsmart Technologies, Inc.

Participation Notice

BCBSM, Inc.
as a Participating Lender
BY: KKR Its Collateral Manager

By: /s/ Jeffrey Smith
Name: Jeffrey Smith
Title: Authorized Signatory

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Chubb Bermuda Insurance Ltd
as a Participating Lender

By: /s/ Jeffrey Smith
Name: Jeffrey Smith
Title: Authorized Signatory

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Chubb Tempest Reinsurance Ltd
as a Participating Lender
by KKR Credit Advisors (US) LLC

By: /s/ Jeffrey Smith
Name: Jeffrey Smith
Title: Authorized Signatory

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Chubb Tempest Reinsurance Ltd.
as a Participating Lender
by KKR Credit Advisors (US) LLC

By: /s/ Jeffrey Smith
Name: Jeffrey Smith
Title: Authorized Signatory

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Corporate Capital Trust II
as a Participating Lender

By: /s/ Jeffrey Smith
Name: Jeffrey Smith
Title: Authorized Signatory

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Geveran Investments Limited
as a Participating Lender

By: /s/ Jeffrey Smith
Name: Jeffrey Smith
Title: Authorized Signatory

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

HMO Minnesota
as a Participating Lender
BY: KKR Its Collateral Manager

By: /s/ Jeffrey Smith
Name: Jeffrey Smith
Title: Authorized Signatory

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

HYFI Aquamarine Loan Fund
as a Participating Lender

By: /s/ Jeffrey Smith
Name: Jeffrey Smith
Title: Authorized Signatory

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

KKR CLO 10 LTD.
as a Participating Lender

By: /s/ Jeffrey Smith
Name: Jeffrey Smith
Title: Authorized Signatory

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

KKR CLO 11 LTD.
as a Participating Lender

By: /s/ Jeffrey Smith
Name: Jeffrey Smith
Title: Authorized Signatory

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

KKR CLO 12 LTD.
as a Participating Lender

By: /s/ Jeffrey Smith
Name: Jeffrey Smith
Title: Authorized Signatory

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

KKR CLO 13 Ltd.
as a Participating Lender

By: /s/ Jeffrey Smith
Name: Jeffrey Smith
Title: Authorized Signatory

If a second signature is necessary:

By:
Name:
Title:

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KKR CLO 14 Ltd.
as a Participating Lender

By: /s/ Jeffrey Smith
Name: Jeffrey Smith
Title: Authorized Signatory

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

KKR CLO 9 LTD.
as a Participating Lender

By: /s/ Jeffrey Smith
Name: Jeffrey Smith
Title: Authorized Signatory

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

KKR FINANCIAL CLO 2012-1, LTD.
as a Participating Lender

By: /s/ Jeffrey Smith
Name: Jeffrey Smith
Title: Authorized Signatory

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

KKR FINANCIAL CLO 2013-1, LTD.
as a Participating Lender

By: /s/ Jeffrey Smith
Name: Jeffrey Smith
Title: Authorized Signatory

If a second signature is necessary:

By:
Name:
Title:

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KKR FINANCIAL CLO 2013-2, LTD.
as a Participating Lender

By: /s/ Jeffrey Smith
Name: Jeffrey Smith
Title: Authorized Signatory

If a second signature is necessary:

By:
Name:
Title:

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Maryland State Retirement and Pension System
as a Participating Lender

By: /s/ Jeffrey Smith
Name: Jeffrey Smith
Title: Authorized Signatory

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Oregon Public Employees Retirement Fund
as a Participating Lender

By: /s/ Jeffrey Smith
Name: Jeffrey Smith
Title: Authorized Signatory

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Bower 1 LLC
as a Participating Lender
By: Citibank, N.A.,

By: /s/ Mitesh Bhakta
Name: Mitesh Bhakta
Title: Associate Director

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

MidOcean Credit CLO III
as a Participating Lender
By: MidOcean Credit Fund Management LP,
as Portfolio Manager
By: Ultramar Credit Holdings, Ltd., its General
Partner

By: /s/ Michael Apfel
Name: Michael Apfel
Title: Managing Director

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

MidOcean Credit CLO IV
as a Participating Lender
By: MidOcean Credit Fund Management LP,
as Portfolio Manager
By: Ultramar Credit Holdings, Ltd., its General
Partner

By: /s/ Michael Apfel
Name: Michael Apfel
Title: Managing Director

If a second signature is necessary:

By:
Name:
Title:

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MidOcean Credit Opportunity Master Fund, LP
as a Participating Lender

By: /s/ Michael Apfel

Name: Michael Apfel

Title: Managing Director

If a second signature is necessary:

By:

Name:

Title:

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Monroe Capital BSL CLO 2015-1, Ltd.
as a Lender
By Monroe Capital Management LLC, as
Collateral Manager and Attorney-in Fact
as a participating Lender

By: /s/ Jeffrey Williams
Name: Jeffrey Williams
Title: Managing Director

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Regatta II Funding LP
as a Participating Lender
By: Napier Park Global Capital (US) LP
Attorney-in-fact

By: /s/ Melanie Hanlon
Name: Melanie Hanlon
Title: Managing Director

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Regatta III Funding Ltd
as a Participating Lender
By: Napier Park Global Capital (US) LP
Attorney-in-fact

By: /s/ Melanie Hanlon

Name: Melanie Hanlon
Title: Managing Director

If a second signature is necessary:

By:

Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Regatta IV Funding Ltd
as a Participating Lender
By: Napier Park Global Capital (US) LP
Attorney-in-fact

By: /s/ Melanie Hanlon
Name: Melanie Hanlon
Title: Managing Director

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Regatta V Funding Ltd
as a Participating Lender
By: Napier Park Global Capital (US) LP
Attorney-in-fact

By: /s/ Melanie Hanlon
Name: Melanie Hanlon
Title: Managing Director

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Regatta VI Funding Ltd
as a Participating Lender
By: Regatta Loan Management LLC its Collateral
Manager

By: /s/ Melanie Hanlon
Name: Hanlon, Melanie
Title: Managing Director

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

NMFC Senior Loan Program II LLC
as a Participating Lender

By: /s/ Robert A. Hamwee

Name: Robert A. Hamwee

Title: Chief Executive Officer & Director

If a second signature is necessary:

By:

Name:

Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

American Beacon Sound Point Floating Rate Income
Fund, a series of American Beacon Funds
as a Participating Lender
By: Sound Point Capital Management, LP
as Sub-Advisor

By: /s/ Misha Shah
Name: Misha Shah
Title: CLO Operations Associate

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Cavello Bay Reinsurance Limited
as a Participating Lender
By: Sound Point Capital Management, LP as
Manager

By: /s/ Misha Shah
Name: Misha Shah
Title: CLO Operations Associate

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Commonwealth of Pennsylvania, Treasury
Department
as a Participating Lender
BY: Sound Point Capital Management, LP as
Investment Advisor

By: /s/ Misha Shah
Name: Misha Shah
Title: CLO Operations Associate

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Commonwealth of Pennsylvania, Treasury
Department - Tuition Account Program
as a Participating Lender
BY: Sound Point Capital Management, LP as
Investment Advisor

By: /s/ Misha Shah
Name: Misha Shah
Title: CLO Operations Associate

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Kaiser Foundation Hospitals
as a Participating Lender
By: Sound Point Capital Management, LP as
Manager

By: /s/ Misha Shah
Name: Misha Shah
Title: CLO Operations Associate

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Kaiser Permanente Group Trust
as a Participating Lender
By: Sound Point Capital Management, LP as
Manager

By: /s/ Misha Shah
Name: Misha Shah
Title: CLO Operations Associate

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Privilege Underwriters Reciprocal Exchange
as a Participating Lender
By: Sound Point Capital Management, LP as
Manager

By: /s/ Misha Shah
Name: Misha Shah
Title: CLO Operations Associate

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

PURE Insurance Company
as a Participating Lender
By: Sound Point Capital Management, LP as
Manager

By: /s/ Misha Shah
Name: Misha Shah
Title: CLO Operations Associate

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

SOUND POINT FLOATING RATE FUND, A
SERIES OF TAYLOR INSURANCE SERIES LP
as a Participating Lender
BY: Sound Point Capital Management LP As
Investment Manager

By: /s/ Misha Shah
Name: Misha Shah
Title: CLO Operations Associate

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Sound Point CLO XI, Ltd.
as a Participating Lender
By: Sound Point Capital Management, LP as
Collateral Manager

By: /s/ Misha Shah
Name: Misha Shah
Title: CLO Operations Associate

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Sound Point Senior Floating Rate Master Fund, L.P.
as a Participating Lender
BY: Sound Point Capital Management, LP as
Investment Advisor

By: /s/ Misha Shah

Name: Misha Shah

Title: CLO Operations Associate

If a second signature is necessary:

By:

Name:

Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Teamsters Pension Trust Fund of Philadelphia &
Vicinity
as a Participating Lender
BY: Sound Point Capital Management, LP as
Investment Advisor

By: /s/ Misha Shah
Name: Misha Shah
Title: CLO Operations Associate

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

SCOF-2 LTD.
as a Participating Lender
By: Symphony Asset Management LLC

By: /s/ scott caraher
Name: scott caraher
Title: portfolio manager

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

SSF-1 LLC
as a Participating Lender
BY: Symphony Asset Management LLC

By: /s/ scott caraher
Name: scott caraher
Title: portfolio manager

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Symphony CLO XIV, Ltd
as a Participating Lender
By: Symphony Asset Management LLC

By: /s/ scott caraher
Name: scott caraher
Title: portfolio manager

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Symphony CLO XV, Ltd
as a Participating Lender
BY: Symphony Asset Management LLC

By: /s/ scott caraher
Name: scott caraher
Title: portfolio manager

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Symphony CLO XVI, LTD
as a Participating Lender
By: Symphony Asset Management LLC

By: /s/ scott caraher
Name: scott caraher
Title: portfolio manager

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Symphony CLO XVII, LTD
as a Participating Lender
By: Symphony Asset Management LLC

By: /s/ scott caraher
Name: scott caraher
Title: portfolio manager

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Gallatin CLO IV 2012-1, Ltd

As Assignee

By: MP Senior Credit Partners L.P.

as its Collateral Manager

as a Participating Lender

By: /s/ Niall Rosenzweig

Name: Niall Rosenzweig

Title: President

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Gallatin CLO V 2013-1, Ltd
As Assignee
By: MP Senior Credit Partners L.P.
as its Collateral Manager
as a Participating Lender

By: /s/ Niall Rosenzweig
Name: Niall Rosenzweig
Title: President

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Wellfleet CLO 2016-1, Ltd.
as a Participating Lender

By: /s/ Dennis Talley
Name: Dennis Talley
Title: Portfolio Manager

If a second signature is necessary:

By:
Name:
Title:

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

Henry's Fork II – A, LLC,
as a Participating Lender

By: /s/ Kristine Jurczyk

Name: Kristine Jurczyk

Title: Duly Authorized Signatory

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

PEACH FUNDING CORPORATION,
as a Participating Lender

By: /s/ Robert G. Tuchscherer
Name: Robert G. Tuchscherer
Title: Managing Director

GOLUB CAPITAL FINANCE FUNDING LLC
as a Participating Lender
By: GC Advisors LLC, its Manager

By: /s/ Robert G. Tuchscherer
Name: Robert G. Tuchscherer
Title: Managing Director

GOLUB CAPITAL BDC FUNDING LLC
as a Participating Lender
By: GC Advisors LLC, its Manager

By: /s/ Robert G. Tuchscherer
Name: Robert G. Tuchscherer
Title: Managing Director

GCIC FUNDING LLC
as a Participating Lender
By: Golub Capital Investment Corporation, its sole
member
By: GC Advisors LLC, its Manager

By: /s/ Robert G. Tuchscherer
Name: Robert G. Tuchscherer
Title: Managing Director

GCP FINANCE 4, LTD.
as a Participating Lender
By: GC Advisors LLC, as agent

By: /s/ Robert G. Tuchscherer
Name: Robert G. Tuchscherer
Title: Managing Director

[Signature Page to Amendment No. 2 to First Lien Credit Agreement]

ALLSCRIPTS HEALTHCARE SOLUTIONS, INC.

EMPLOYMENT AGREEMENT

THIS EMPLOYMENT AGREEMENT (this “**Agreement**”) is made this 13th day of October, 2016 (the “**Signing Date**”), to become effective the 1st day of November, 2016 (the “**Effective Date**”), by and between Allscripts Healthcare Solutions, Inc., a corporation organized and existing under the laws of the State of Delaware (“**Company**”), and Lisa Khorey (“**Executive**”). Provided, however, that the Effective Date may be changed by Executive to a later date of up to six months after Executive gives notice of her resignation from employment with current employer as may be required to comply with Executive’s contractual obligations to her current employer.

RECITALS

WHEREAS, commencing on the Effective Date, Company desires to employ Executive subject to the terms and conditions of this Agreement; and

WHEREAS, Executive desires to be employed by Company subject to the terms and conditions of this Agreement.

NOW THEREFORE, in consideration of the foregoing premises, of the mutual agreements and covenants contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

AGREEMENT

1. Employment.

Company hereby agrees to employ Executive, and Executive hereby accepts employment, as Executive Vice President, Chief Client Delivery Officer, of the Company, pursuant to the terms of this Agreement. Executive shall have the duties and responsibilities and perform such administrative and managerial services of these positions as are delegated or assigned to Executive from time to time by the President of Company (the “**President**”), the Chief Executive Officer of the Company (the “**CEO**”), or the individual holding the functional equivalent of either of those positions. Executive shall carry out Executive’s responsibilities hereunder on a full-time basis for and on behalf of Company; provided that Executive shall be entitled to devote time to personal investments, civic and charitable activities, and personal education and development, so long as such activities do not interfere with or conflict with Executive’s duties hereunder. Notwithstanding the foregoing, Executive agrees that, during the term of this Agreement, Executive shall not act as an officer of any entity other than Company without the prior written consent of Company. Executive shall perform her duties at the Company’s Pittsburgh, Pennsylvania office and her home in the Pittsburgh, Pennsylvania area, subject to normal business travel requirements.

2. Term.

The term of Executive's employment by Company under this Agreement (the "**Employment Period**") shall commence on the Effective Date and shall continue in effect through the third (3rd) anniversary of the Effective Date, unless earlier terminated as provided herein. Thereafter, unless Company or Executive shall elect not to renew the Employment Period upon the expiration of the initial term or any renewal term, which election shall be made by providing written notice of nonrenewal to the other party at least ninety (90) days prior to the expiration of the then current term, the Employment Period shall be extended for an additional twelve (12) months. If Company elects not to renew the Employment Period at the end of the initial term or any renewal term, such nonrenewal shall be treated as a termination of the Employment Period and Executive's employment without Cause by Company for the limited purpose of determining the payments and benefits available to Executive (i.e., Executive shall be entitled to the severance benefits set forth in Section 4.5.1). If Executive elects not to renew the Employment Period at the end of the initial term or any renewal term, such nonrenewal shall constitute a termination of Executive's employment and the Employment Period by Executive without Constructive Discharge, and Executive shall be entitled to the payments and benefits set forth in Section 4.5.3.

3. Compensation and Benefits.

In consideration for the services Executive shall render under this Agreement, Company shall provide or cause to be provided to Executive the following compensation and benefits:

3.1 Base Salary. During the Employment Period, Company shall pay to Executive an annual base salary at a rate of \$430,000 per annum, subject to all appropriate federal and state withholding taxes, which base salary shall be payable in accordance with Company's normal payroll practices and procedures. Executive's base salary shall be reviewed annually during the Employment Period by the President and/or and the Chief Executive Officer of the Company, who shall recommend any increases to the Compensation Committee (the "**Compensation Committee**") of the Board of Directors of the Company (the "**Board**") and may be increased in the sole discretion of the Board or Compensation Committee based on Executive's performance during the preceding calendar year. Executive's base salary, as such base salary may be increased hereunder, is hereinafter referred to as the "**Base Salary.**"

3.2 Bonuses.

3.2.1 Performance Bonus. Executive shall be eligible to receive cash bonuses in accordance with this Section 3.2.1 (each a "**Performance Bonus**"). The amount and payment of any Performance Bonus shall be subject to a recommendation by the CEO to the Compensation Committee, and such Performance Bonus shall be determined in the sole discretion of, and based upon criteria selected by, the Compensation Committee. Subject to the foregoing exercise of discretion, Executive's annual target Performance Bonus shall be 75% of Executive's Base Salary (the "**Target Performance Bonus**"), but may, based on performance, be less than or exceed such amount. Performance Bonuses shall be paid according to the terms of the bonus plan or program in which Executive participates from time to time.

4.1 Termination upon Death or Disability of Executive.

4.1.1 Executive's employment hereunder and the Employment Period shall terminate immediately upon the death of Executive. In such event, all rights of Executive and/or Executive's estate (or named beneficiary) shall cease except for the right to receive payment of the amounts set forth in Section 4.5.4 of the Agreement.

4.1.2 Company may terminate Executive's employment hereunder and the Employment Period upon the disability of Executive. For purposes of this Agreement, Executive shall be deemed to be "**disabled**" if Executive, as a result of illness or incapacity, shall be unable to perform substantially Executive's required duties for a period of three (3) consecutive months or for any aggregate period of three (3) months in any six (6) month period. In the event of a dispute as to whether Executive is disabled, Company may refer Executive to a licensed practicing physician selected by mutual agreement of Executive and the Company, which agreement shall not be unreasonably withheld, and Executive agrees to submit to such tests and examination as such physician shall deem appropriate to determine Executive's capacity to perform the services required to be performed by Executive hereunder. In such event, the parties hereby agree that the decision of such physician as to the disability of Executive shall be final and binding on the parties. Any termination of the Employment Period under this Section 4.1.2 shall be effected without any adverse effect on Executive's rights to receive benefits under any disability policy of Company, but shall not be treated as a termination without Cause.

4.2 Termination by Company for Cause. Company may terminate Executive's employment hereunder and the Employment Period for Cause (as defined herein) upon written notice to Executive, which termination shall be effective on the date specified by Company in such notice; provided, however, that Executive shall have a period of ten (10) days (or such longer period not to exceed thirty (30) days as would be reasonably required for Executive to cure such action or inaction) after the receipt of the written notice from Company to cure the particular action or inaction, to the extent a cure is possible. For purposes of this Agreement, the term "**Cause**" shall mean:

4.2.1 the willful or grossly negligent failure by Executive to perform Executive's duties and obligations hereunder in any material respect, other than any such failure resulting from the disability of Executive;

4.2.2 Executive's conviction of a crime or offense involving the property of Company, or any crime or offense constituting a felony or involving fraud or moral turpitude; provided that, in the event that Executive is arrested or indicted for a crime or offense related to any of the foregoing, then Company may, at its option, place Executive on paid leave of absence, pending the final outcome of such arrest or indictment;

4.2.3 Executive's violation of any law, which violation is materially and demonstrably injurious to the operations or reputation of Company; or

4.2.4 Executive's material violation of any generally recognized policy of Company or Executive's refusal to follow the lawful directions of the President, or Executive's insubordination to Executive's supervisor.

4.3 Termination by Company without Cause; Termination by Executive without Constructive Discharge. Executive may terminate Executive's employment and the Employment Period at any time for any reason upon thirty (30) days' prior written notice to Company. Company may terminate Executive's employment and the Employment Period without Cause upon thirty (30) days' prior written notice to Executive. Upon termination of Executive's employment with Company for any reason, Executive shall be deemed to have resigned from all positions with the other members of Company and its subsidiaries (provided, that any such deemed resignations shall not affect Executive's entitlement (if any) to severance pay and benefits hereunder).

4.4 Termination by Executive for Constructive Discharge.

4.4.1 Executive may terminate Executive's employment and the Employment Period, in accordance with the process set forth below, as a result of a Constructive Discharge. For purposes of this Agreement "**Constructive Discharge**" shall mean the occurrence of any of the following:

- (i) a failure of Company to meet its obligations in any material respect under this Agreement, including, without limitation, (x) any reduction in the Base Salary or (y) any failure to pay the Base Salary (other than, in the case of clause (y), the inadvertent failure to pay a de minimis amount of the Base Salary, which payment is immediately made by Company upon notice from Executive);
- (ii) a material diminution in or other substantial adverse alteration in the nature or scope of Executive's responsibilities or authority with Company from those in effect on the Effective Date (excluding, for this purpose, changes following a Change of Control (x) to Executive's reporting responsibilities and (y) arising by reason of Company ceasing to be a public company); or
- (iii) without Executive's prior written agreement, Executive's principal place of business is moved to a location that is more than fifty (50) miles from Company's offices located in Pittsburgh, Pennsylvania.

4.4.2 In the event of the occurrence of a Constructive Discharge, Executive shall have the right to terminate Executive's employment hereunder and receive the benefits set forth in Section 4.5.1 below, upon delivery of written notice to Company no later than the close of business on the sixtieth (60th) day following the effective date of the Constructive Discharge; provided, however, that such termination shall not be effective until the expiration of thirty (30) days after receipt by Company of such written notice if Company has not cured such Constructive Discharge within the thirty (30)-day period. If Company so effects a cure, the Constructive Discharge notice shall be deemed rescinded and of no force or effect. Notwithstanding the foregoing, such notice and lapse of time shall not be required with respect to any event or circumstance which is the same or substantially the same as an event or circumstance with respect to which notice and an opportunity to cure has been given within the previous six (6) months. The Termination Date of a Constructive Discharge shall be the date of the Executive's "separation from service" (within the meaning of Treas. Reg. Section 1.409A-1(h)).

4.5 **Rights upon Termination.** Upon termination of Executive's employment and the Employment Period, the following shall apply:

4.5.1 **Termination by Company Without Cause or for Constructive Discharge.** If Company terminates Executive's employment and the Employment Period without Cause, or if Executive terminates Executive's employment and the Employment Period as a result of a Constructive Discharge, in each case either (x) prior to a Change of Control, or (y) after the second anniversary of a Change of Control, Executive shall be entitled to receive payment of any Base Salary amounts that have accrued but have not been paid as of the Termination Date, the unpaid Performance Bonus, if any, with respect to the calendar year preceding the calendar year in which the Termination Date occurs (such Performance Bonus, if any, to be determined in the manner that it would have been determined, and payable at the time it would have been payable, under Section 3.2 had there been no termination of the Employment Period), reimbursement of business expenses properly incurred prior to termination, and any benefits, including conversion and continuation rights, provided upon termination of employment under the Company's employee benefit plans and policies (not including any severance, separation pay, or supplemental unemployment benefit plan) in accordance with the terms of such plans and policies (collectively the "Accrued Obligations"). In addition, subject to Sections 4.5.2 and 4.7, below, Company shall, subject to Section 7.14, be obligated to pay Executive (or provide Executive with) the following benefits as severance:

- (i) an amount equal to Executive's Base Salary plus Executive's Target Performance Bonus, payable in twelve (12) equal monthly installments commencing on the Termination Date, such amount to be payable regardless of whether Executive obtains other employment and is compensated therefor (but only so long as Executive is not in violation of Section 5 hereof) (with the first two installments to be paid on the sixtieth (60th) day following the Termination Date and the remaining ten (10) installments being paid on the ten (10) following monthly anniversaries of such date);
- (ii) continuation of Executive's then current enrollment (including family enrollment, if applicable) in all health and/or dental insurance benefits set forth in Section 3.3.2 for a period of twelve (12) months following the Termination Date, with Executive's contribution to such plans as if Executive were employed by Company, such contributions to be paid by Executive in the same period (e.g., monthly, bi-weekly, etc.) as all other employees of Company (but deductions from Executive's monthly severance payments may be deemed acceptable for this purpose in the discretion of Company); provided, however that Company may terminate such coverage if payment from Executive is not made within the COBRA grace period or ten (10) days of the date on which Executive receives written notice from Company that such payment is due, whichever period ends later; and provided, further, that such benefits may be discontinued earlier to the extent that Executive becomes entitled to comparable benefits from a subsequent employer; in addition, this benefit is contingent upon timely

election of COBRA continuation coverage and will run concurrent with the COBRA period; and

- (iii) subject to the terms of any equity award that may exclude special vesting treatment upon a resignation for Constructive Discharge, upon the sixtieth (60th) day following the Termination Date (or, for awards subject to the satisfaction of a performance condition, subject to the satisfaction of such performance condition and upon the satisfaction of such performance condition (but no earlier than the sixtieth (60th) day following the Termination Date), and based on the level of performance achieved) a portion of any unvested stock option, restricted stock unit or other equity award granted to Executive shall vest, which portion shall be the number of shares equal to (a) plus (b) (such sum not to exceed the number of shares that result in the full vesting of any such award) as follows:

- (a) the number of shares that would have vested to Executive per the applicable award as of the one-year anniversary of the Termination Date had Executive remained continuously employed by Company through such date; plus

- (b) the number of shares resulting from the following formula: (x) the number of shares of such award that would vest on the next vesting date of such award immediately following the Termination Date, multiplied by (y) a fraction, the numerator of which is the number of days elapsed since the last vesting date of such award (or the grant date, if no portion of such award has yet vested), and the denominator of which is the number of days between the last vesting date (or grant date, as the case may be) and the next vesting date.

4.5.2 Severance Upon Termination following a Change of Control.

- (i) If, within the period beginning on the date of a Change of Control through the second anniversary of the Change of Control, Executive terminates Executive's employment and the Employment Period pursuant to Section 4.4 or Company terminates Executive's employment pursuant to Section 4.3, then Executive shall, subject to Sections 4.7 and 7.14, receive the payment and benefits provided in Section 4.5.1; provided, however, that (A) in place of the twelve (12) monthly payments provided for in Section 4.5.1(i), Executive shall receive a lump sum amount of cash equal to two (2) times the sum of (x) Executive's Base Salary plus (y) Executive's Target Performance Bonus, with such lump sum paid on the sixtieth (60th) day following the Termination Date, and (B) in place of the equity vesting provided for in Section 4.5.1(iii), all unvested equity awards held by Executive shall vest upon the Termination Date.

(ii) Anything in this Agreement to the contrary notwithstanding, if (A) a Change of Control occurs, (B) Executive's employment with Company is terminated by Company without Cause or if Executive terminates her employment as a result of a Constructive Discharge, in either case within one hundred eighty (180) days prior to the date on which the Change of Control occurs, and (C) it is reasonably demonstrated by Executive that such termination of employment or events constituting Constructive Discharge was (x) at the request of a third party who had taken steps reasonably calculated to effect a Change of Control or (y) otherwise arose in connection with or in anticipation of a Change of Control, then for all purposes of this Agreement such Change of Control shall be deemed to have occurred during the Employment Period and the Termination Date shall be deemed to have occurred after the Change of Control, so that Executive is entitled to the vesting and other benefits provided by this Section 4.5.2. If Executive is entitled to additional vesting of any equity awards that were cancelled as a result of Executive's termination of employment prior to the Change of Control, Company or its successor shall deliver to Executive the consideration Executive would have received in the Change of Control had the cancelled equity awards been outstanding and vested at the time of the Change of Control. Any additional amounts due Executive as a result of the application of this paragraph to a termination prior to a Change of Control shall be paid to Executive under this Section 4.5.2. in a lump sum on the sixtieth (60th) day following the Change of Control.

(iii) For purposes of this Agreement, a "**Change of Control**" shall mean any one of the following events following the Effective Date:

(a) the date of acquisition by any person or group other than Company or any subsidiary of Company (and other than any employee benefit plans (or related trust) of Company or any of its subsidiaries) of beneficial ownership of securities possessing more than thirty percent (30%) of the total combined voting power of Company's then outstanding voting securities which generally entitle the holder thereof to vote for the election of directors ("**Voting Power**"), provided, however, that no Change of Control shall be deemed to have occurred solely by reason of any such acquisition by a corporation with respect to which, after such acquisition, more than sixty percent (60%) of the then outstanding shares of common stock of such corporation and the Voting Power of such corporation are then beneficially owned, directly or indirectly, by the persons who were the beneficial owners of the stock and Voting Power of Company immediately before such acquisition, in substantially the same proportions as their ownership immediately before such acquisition; or

(b) the date the individuals who constitute the Board as of immediately following the Effective Date (the "**Incumbent Board**") cease for any reason other than their deaths to constitute at least a majority of the Board; provided that any individual who becomes a director after the Effective Date whose election or nomination for election by Company's stockholders was approved by a vote of at least a majority of the directors then comprising the Incumbent Board shall be considered, for purposes of this Section, as though such individual were a member of the Incumbent Board, but excluding, for this purpose, any such individual whose initial assumption of

office is in connection with an actual or threatened election contest relating to the election of the directors of Company (as such terms are used in Rule 14a-11 under the 1934 Act (defined below)); or

(c) Company effects (A) a merger or consolidation of Company with one or more corporations or entities, as a result of which the holders of the outstanding Voting Stock of Company immediately prior to such merger, reorganization or consolidation hold less than 50% of the Voting Power of the surviving or resulting corporation or entity immediately after such merger or consolidation; (B) a liquidation or dissolution of Company; or (C) a sale or other disposition of all or substantially all of the assets of Company other than to an entity of which Company owns at least 50% of the Voting Power.

For purposes of the foregoing definition, the terms “**beneficially owned**” and “**beneficial ownership**” and “**person**” shall have the meanings ascribed to them in SEC rules 13d-5(b) under the 1934 Act, and “**group**” means two or more persons acting together in such a way to be deemed a person for purposes of Section 13(d) of the 1934 Act. Further, notwithstanding anything herein to the contrary, the definition of Change of Control set forth herein shall not be broader than the definition of “change in control event” as set forth under Section 409A of the Code, and the guidance promulgated thereunder, and if a transaction or event does not otherwise fall within such definition of change in control event, it shall not be deemed a Change of Control for purposes of this Agreement.

4.5.3 Termination With Cause by Company or Without Constructive Discharge by Executive. If Company terminates Executive’s employment and the Employment Period with Cause, or if Executive terminates Executive’s employment and the Employment Period other than as a result of a Constructive Discharge, Company shall be obligated to pay Executive only the Accrued Obligations.

4.5.4 Termination Upon Death or Disability. If Executive’s employment and the Employment Period are terminated because of the death or disability of Executive, Company shall, subject to Section 7.14, be obligated to pay Executive or, if applicable, Executive’s estate, the Accrued Obligations.

4.6 Effect of Notice of Termination. Any notice of termination by Company, whether for Cause or without Cause, may specify that, during the notice period, Executive need not attend to any business on behalf of Company.

4.7 Requirement of a Release; Exclusivity of Severance Payments under this Agreement. As a condition to the receipt of the severance payments and termination benefits (but not the Accrued Obligations) to be provided to Executive pursuant to this Section 4 upon termination of Executive’s employment, Executive shall execute and deliver to Company (without revoking) a general release of claims against Company and its affiliates in a form reasonably satisfactory to Company within forty-five (45) days following the Termination Date (provided, that Executive shall not be required to release any rights under this Agreement or any right to indemnification, advance of expenses or insurance coverage, and shall not be subject to any restrictive covenants in excess of those contained in Section 5 of this Agreement). In addition, the severance payments and termination benefits to be provided to Executive pursuant to this Section 4

upon termination of Executive's employment shall constitute the exclusive payments in the nature of severance or termination pay or salary continuation which shall be due to Executive upon a termination of employment and shall be in lieu of any other such payments under any severance plan, program, policy or other arrangement which has heretofore been or shall hereafter be established by Company or any of its affiliates.

5. Restrictive Covenants.

The growth and development of Company and its affiliates and subsidiaries (collectively, "**Allscripts**") depends to a significant degree on the possession and protection of its customer list, customer information and other confidential and proprietary information relating to Allscripts' products, services, methods, pricing, costs, research and development and marketing. All Allscripts employees and others engaged to perform services for Allscripts have a common interest and responsibility in seeing that such customer information and other confidential information is not disclosed to any unauthorized persons or used other than for Allscripts' benefit. This Section 5 expresses a common understanding concerning Company's and Executive's mutual responsibilities. Therefore, in consideration for Company's agreement to employ Executive and grant Executive access to its confidential information and customer relationships, and for other good and valuable consideration from Company, including, without limitation, compensation, benefits, raises, bonus payments or promotions, the receipt and sufficiency of which are hereby acknowledged, Executive covenants and agrees as follows, which covenant and agreement is essential to this Agreement and Executive's employment with Company:

5.1 Non-Solicitation; No-Hire. Executive acknowledges that Allscripts has near permanent relationships with, and a proprietary interest in the identity of, its customers and their particular needs and requirements; and that documents and information regarding Allscripts' pricing, sales, costs and specialized requirements of Allscripts' customers are highly confidential and constitute trade secrets. Accordingly, Executive covenants and agrees that during the Employment Period and for a period of twelve (12) months after the Termination Date, regardless of the reason for such termination, Executive will not, except on behalf of Allscripts during and within the authorized scope of Executive's employment with Allscripts, directly or indirectly: (i) call on, solicit or otherwise deal with any accounts, customers or prospects of Allscripts which Executive called upon, contacted, solicited, sold to, or about which Executive learned Confidential Information (as defined herein) while employed by Allscripts, for the purpose of soliciting, selling and/or providing, to any such account, customer or prospect, any products or services similar to or in competition with any products or services then-being represented or sold by Allscripts; and (ii) solicit, or accept if offered to Executive, with or without solicitation, the services of any person who is an employee of Allscripts, nor solicit any employee of Allscripts to terminate employment with Allscripts, nor agree to hire on behalf of Executive or any entity or other person any employee of Allscripts into employment with Executive or any other person or entity. Executive agrees not to solicit, directly or indirectly, such accounts, customers, prospects or employees for Executive or for any other person or entity. For purposes of this paragraph, "**prospects**" means entities or individuals which have had more than de minimus contact with Allscripts in the context of entering into a relationship with Allscripts being a provider of products or services to such entity or individual.

5.2 **Non-Interference with Business Relationships.** Executive covenants and agrees that during the Employment Period and for a period of twelve (12) months after the Termination Date, regardless of the reason for such termination, Executive will not interact with any person or entity with which Allscripts has a business relationship, or with which Allscripts is preparing to have a business relationship, with the intent of affecting such relationship or intended relationship in a manner adverse to Allscripts.

5.3 **Non-Competition.** Executive agrees that during the Employment Period and for a period of twelve (12) months after the Termination Date, regardless of the reason for such termination, Executive shall not, directly or indirectly, for Executive's own benefit or for the benefit of others, render services for a Competing Organization in connection with Competing Products or Services anywhere within the Restricted Territory. These prohibitions apply regardless of where such services physically are rendered.

For purposes of this Agreement, "**Competing Products or Services**" means products, processes, or services of any person or organization other than Allscripts, in existence or under development, which are substantially the same, may be substituted for, or applied to substantially the same end use as any product, process, or service of Allscripts with which Executive works or worked during the time of Executive's employment with Allscripts or about which Executive acquires or acquired Confidential Information through Executive's work with Allscripts.

For purposes of this Agreement, "**Competing Organization**" means persons or organizations, including Executive, engaged in, or about to become engaged in research or development, production, distribution, marketing, providing or selling of a Competing Product or Service.

For purposes of this Agreement, the terms Competing Products or Services and Competing Organization do not include (i) hospitals or health systems and (ii) consulting companies.

For purposes of this Agreement, "**Restricted Territory**" means either: (i) during Executive's employment with Allscripts, anywhere in the world; or (ii) after cessation of Executive's employment with Allscripts, then, in descending order of preference based on legal enforceability, (A) within the United States (including its territories) and within each country in which Allscripts has conducted business or directed material resources in soliciting business in the prior twenty-four (24) month period, (B) within the United States (including its territories) and within any other country that at any time was within the scope of Executive's employment with Allscripts, (C) within any country that at any time during the last two (2) years of Executive's employment with Allscripts was within the scope of such employment, or (D) within any geographic region(s) that at any time during the last two (2) years of Executive's employment with Allscripts was within the scope of such employment. Executive agrees that in the event a court determines the length of time or the geographic area or activities prohibited under this Section 5 are too restrictive to be enforceable, the court may reduce the scope of the restriction to the extent necessary to make the restriction enforceable.

5.4 **Reasonableness of Restriction.** Executive acknowledges that the foregoing non-solicitation, non-competition and non-interference restrictions placed upon Executive are necessary and reasonable to avoid the improper disclosure or use of Confidential Information, and

that it has been made clear to Executive that Executive's compliance with Section 5 of this Agreement is a material condition to Executive's employment by Company. Executive further acknowledges and agrees that, if Executive breaches any of the requirements of Section 5.1, 5.2 or 5.3, the twelve (12) month restricted period set forth therein shall be tolled during the time of such breach.

Executive further acknowledges and agrees that Allscripts has attempted to impose the restrictions contained hereunder only to the extent necessary to protect Allscripts from unfair competition and the unauthorized use or disclosure of Confidential Information. However, should the scope or enforceability of any restrictive covenant be disputed at any time, Executive specifically agrees that a court may modify or enforce the covenant to the full extent it believes to be reasonable under the circumstances existing at the time.

5.5 **Non-Disclosure.** Executive further agrees that, other than as needed to fulfill the authorized scope of Executive's duties with Allscripts, Executive will not during the Employment Period or thereafter use for herself or for others or divulge or convey to any other person (except those persons designated by Allscripts) any Confidential Information obtained by Executive during the period of Executive's employment with Allscripts. Executive agrees to observe all Company policies and procedures concerning such Confidential Information. Executive agrees that, except as may be permitted by written Company policies, Executive will not remove from Company's premises any of such Confidential Information without the written authorization of Company. Executive's obligations under this Agreement will continue with respect to Confidential Information until such information becomes generally available from public sources through no fault of Executive's. During the Employment Period and thereafter Executive shall not disclose to any person the terms and conditions of Executive's employment by Allscripts, except: (i) to close family members, (ii) to legal and accounting professionals who require the information to provide a service to Executive, (iii) as required by law (iv) in order to inform a prospective or actual subsequent employer of Executive's duties and obligations under this Agreement or (v) if the terms of Executive's employment are disclosed by the Company pursuant to applicable securities laws. If Executive is requested, becomes legally compelled by subpoena or otherwise, or is required by a regulatory body to make any disclosure that is prohibited by this Section 5.5, Executive will promptly notify Company so that Allscripts may seek a protective order or other appropriate remedy if Allscripts deems such protection or remedy necessary under the circumstances. Subject to the foregoing, Executive may furnish only that portion of Confidential Information that Executive is legally compelled or required to disclose. The restrictions set forth herein are in addition to and not in lieu of any obligations Executive may have by law with respect to Confidential Information, including any obligations Executive may have under the Uniform Trade Secrets Act and/or similar statutes as applicable in the state of Executive's residence and/or the state of Executive's primary work location.

5.6 **Definition of Confidential Information.** As used herein, "**Confidential Information**" shall include, but is not limited to, the following categories of information, knowledge, or data currently known or later developed or acquired relating to Allscripts' business or received by Allscripts in confidence from or about third parties, in each case when the same is not in the public domain or otherwise publicly available (other than as result of a wrongful act of an agent or employee of Allscripts):

5.6.1 Any information concerning Allscripts' products, business, business relationships, business plans or strategies, marketing plans, contract provisions, actual or prospective suppliers or vendors, services, actual or anticipated research or development, new product development, inventions, prototypes, models, solutions, discussion guides, documentation, techniques, actual or planned patent applications, technological or engineering data, formulae, processes, designs, production plans or methods, or any related technical or manufacturing know-how or other information;

5.6.2 Any information concerning Allscripts' financial or profit data, pricing or cost formulas, margins, marketing information, sales representative or distributor lists, or any information relating to corporate developments (including possible acquisitions or divestitures);

5.6.3 Any information concerning Allscripts' current or prospective customer lists or arrangements, equipment or methods used or preferred by Allscripts' customers, or the patients of customers;

5.6.4 Any information concerning Allscripts' use of computer software, source code, object code, or algorithms or architecture retained in or related to Allscripts' computer or computer systems;

5.6.5 Any personal or performance information about any Allscripts' employee;

5.6.6 Any information supplied to or acquired by Allscripts under an obligation to keep such information confidential, including without limitation Protected Health Information (PHI) as that term is defined by the Health Insurance Portability and Accountability Act (HIPAA);

5.6.7 Any information, whether or not designated as confidential, obtained or observed by Executive or other Allscripts employees during training sessions related to Executive's work for Allscripts; and

5.6.8 Any other information treated as trade secrets or otherwise confidential by Allscripts.

Executive hereby acknowledges that some of this information may not be a "trade secret" under applicable law. Nevertheless, Executive agrees not to disclose it. Nothing in this Agreement shall be construed to prevent disclosure of Confidential Information as may be required by applicable law or regulation, or pursuant to the valid order of a court of competent jurisdiction or an authorized government agency, provided that the disclosure does not exceed the extent of disclosure required by such law, regulation or order. Executive shall promptly provide written notice of any such order to an authorized officer of the Company. Nothing in this Agreement prohibits or restricts Executive (or Executive's attorney) from initiating communications directly with, responding to an inquiry from, or providing testimony before the Securities and Exchange Commission (SEC), the Financial Industry Regulatory Authority (FINRA), any other self-regulatory organization or any other federal or state regulatory authority regarding a possible securities law violation.

5.7 **Inventions, Discoveries, and Work for Hire.** Executive recognizes and agrees that all ideas, works of authorship, inventions, patents, copyrights, designs, processes (e.g.,

development processes), methodologies (e.g., development methodologies), machines, manufactures, compositions of matter, enhancements, and other developments or improvements and any derivative works based thereon, including, without limitation, potential marketing and sales relationships, research, plans for products or services, marketing plans, computer software (including source code and object code), computer programs, original works of authorship, characters, know-how, trade secrets, information, data, developments, discoveries, improvements, modifications, technology and algorithms, whether or not subject to patent or copyright protection (the “**Inventions**”) that (i) were made, conceived, developed, authored or created by Executive, alone or with others, during the time of Executive’s employment, whether or not during working hours, that relate to the business of Allscripts or to the actual or demonstrably anticipated research or development of Allscripts, (ii) were used by Executive or other personnel of Allscripts during the time of Executive’s employment, even if such Inventions were made, conceived, developed, authored or created by Executive prior to the start of Executive’s employment, (iii) are made, conceived, developed, authored or created by Executive, alone or with others, within two (2) years from the Termination Date and that relate to the business of Allscripts or to the actual or demonstrably anticipated research or development of Allscripts, or (iv) result from any work performed by Executive for Allscripts, (collectively with (i)-(iii), the “**Company Inventions**”) are the sole and exclusive property of Company.

Notwithstanding the foregoing, Company Inventions do not include any Inventions made, conceived, developed, authored or created by Executive, alone or with others, for which no equipment, supplies, facility or trade secret information of Allscripts was used and which were developed entirely on Executive’s own time, unless (1) the Invention relates (A) to the business of Allscripts, or (B) to the actual or demonstrably anticipated research or development of Allscripts, or (2) the Company Invention results from any work performed by Executive for Allscripts.

For the avoidance of doubt, Executive expressly disclaims any and all right title and interest in and to all Company Inventions. Executive acknowledges that Executive has and shall forever have no right, title or interest in or to any patents, copyrights, trademarks, industrial designs or other rights in connection with any Company Inventions.

Executive hereby assigns to Company all present and future right, title and interest Executive has or may have in and to the Company Inventions. Executive further agrees that (i) Executive will promptly disclose all Company Inventions to Allscripts; and (ii) all of the Company Inventions, to the extent protectable under copyright laws, are “works made for hire” as that term is defined by the Copyright Act, 17 U.S.C. § 101, *et seq.*

At the request of and without charge to Company, Executive will do all things deemed by Company to be reasonably necessary to perfect title to the Company Inventions in Company and to assist in obtaining for Company such patents, copyrights or other protection in connection therewith as may be provided under law and desired by Company, including but not limited to executing and signing any and all relevant applications, assignments, or other instruments. Executive further agrees to provide, at Company’ request, declarations or affidavits and to give testimony, in depositions, hearings or trials, in support of inventorship. These obligations continue even after the Termination Date. Company agrees that Executive will be reimbursed for reasonable expenses incurred in providing such assistance to Company. In the event Company is unable, after reasonable effort, to secure Executive’s signature on any document or documents

needed to apply for or prosecute any patent, copyright or other right or protection relating to any Company Invention, for any reason whatsoever, Executive hereby irrevocably designates and appoints Company and its duly authorized officers and agents as Executive's agent and attorney-in-fact to act for and on Executive's behalf to execute and file any such application or other document and to do all other lawfully permitted acts to further the prosecution and issuance of patents, copyrights, or similar protections thereon with the same legal force and effect as if executed by Executive.

For purposes of this Agreement, a Company Invention shall be deemed to have been made during Executive's employment if, during such period, the Company Invention was conceived, in part or in whole, or first actually reduced to practice or fixed in a tangible medium during Executive's employment with Company. Executive further agrees and acknowledges that any patent or copyright application filed within one (1) year after the Termination Date shall be presumed to relate to a Company Invention made during the term of Executive's employment unless Executive can provide evidence to the contrary.

5.8 **Prior Employment.** Executive hereby agrees that during the course and scope of the employment relationship with Company, Executive shall neither disclose nor use any confidential information, invention, or work of authorship derived from, developed or obtained in any prior employment relationship, and understands that any such disclosure or use would be injurious to the economic and legal interests of Company. Executive represents she has informed Company of, and provided Company with copies of, any non-competition, non-solicitation, confidentiality, work-for-hire or similar agreements with her prior employers to which Executive is subject or may be bound. Executive further represents and agrees that, if any prior employer commences any legal proceeding in connection with any restrictive covenant, non-solicitation, non-disclosure, or non-competition agreement, Executive shall be entirely responsible for her own legal fees in connection with the defense of same .

5.9 **Return of Data.** In the event of the termination of Executive's employment with Company for any reason whatsoever, Executive agrees to deliver promptly to Company all formulas, correspondence, reports, computer programs and similar items, customer lists, marketing and sales data and all other materials pertaining to Confidential Information, and all copies thereof, obtained by Executive during the period of Executive's employment with Company which are in Executive's possession or under her control. Executive further agrees that she will not make or retain any copies of any of the foregoing and will so represent to Company upon termination of her employment.

5.10 **Non-Disparagement.** Executive agrees that during the Employment Period and for a period of twenty-four (24) months thereafter, Executive will not make any statement, nor imply any meaning through Executive's action or inaction, if such statement or implication would be adverse to the interests of Allscripts, its customers or its vendors or may reasonably cause any of the foregoing embarrassment or humiliation; nor will Executive otherwise cause or contribute to any of the foregoing being held in disrepute by the public or any other Allscripts customer(s), vendor(s) or employee(s). Company agrees that its executive officers and directors shall not make any adverse or disparaging comments about Executive which may tend to impugn or injure Executive's reputation and, upon Company having knowledge that an officer of the Company is making adverse or disparaging comments about Executive which may tend to impugn or injure

Executive's reputation, the Company shall promptly instruct such officer to cease making such comments. The restrictions of this Section 5.10 shall apply to, but are not limited to, communication via the Internet, any intranet, or other electronic means, such as social media web sites, electronic bulletin boards, blogs, email messages, text messages or any other electronic message. Nothing in this Section 5.10 is intended to prohibit, limit or prevent Executive or Company's officers or directors from providing truthful testimony in a court of law, to a regulatory or law enforcement agency or pursuant to a properly issued subpoena, and such testimony would not be deemed to be a violation of this Section 5.10.

5.11 Injunctive Relief and Additional Remedies for Breach. Executive further expressly acknowledges and agrees that any breach or threatened breach of the provisions of this Section 5 shall entitle Allscripts, in addition to any other legal remedies available to it, to obtain injunctive relief, to prevent any violation of this Section 5 without the necessity of Allscripts posting bond or furnishing other security and without proving special damages or irreparable injury. Executive recognizes, acknowledges and agrees that such injunctive relief is necessary to protect Allscripts' interest. Executive understands that in addition to any other remedies available to Allscripts at law or in equity or under this Agreement for violation of this Agreement, other agreements or compensatory or benefit arrangements Executive has with Allscripts may include provisions that specify certain consequences thereunder that will result from Executive's violation of this Agreement, which consequences may include repaying Allscripts or foregoing certain equity awards or monies, and any such consequences shall not be considered by Executive or any trier of fact as a forfeiture, penalty, duplicative remedy or exclusive remedy. Notwithstanding Section 7.9, the exclusive venue for any action for injunctive or declaratory relief with respect to this Section 5 shall be the state or federal courts located in Cook County, Illinois. Company and Executive hereby irrevocably consent to any such courts' exercise of jurisdiction over them for such purpose.

5.12 Notification to Third Parties. Company may, at any time during or after the termination of Executive's employment with Company, notify any person, corporation, partnership or other business entity employing or engaging Executive or evidencing an intention to employ or engage Executive as to the existence and provisions of this Agreement.

6. No Set-Off or Mitigation.

Company's obligation to make the payments provided for in this Agreement and otherwise to perform its obligations hereunder shall not be affected by any set-off, counterclaim, recoupment, defense or other claim, right or action which Company may have against Executive or others. In no event shall Executive be obligated to seek other employment or take any other action by way of mitigation of the amounts payable to Executive under any of the provisions of this Agreement and, except as otherwise provided herein, such amounts shall not be reduced whether or not Executive obtains other employment.

7. Miscellaneous.

7.1 Valid Obligation. This Agreement has been duly authorized, executed and delivered by Company and has been duly executed and delivered by Executive and is a legal, valid and binding obligation of Company and of Executive, enforceable in accordance with its terms.

7.2 **No Conflicts.** Executive represents and warrants that the performance by Executive of Executive's duties hereunder will not violate, conflict with, or result in a breach of any provision of any agreement to which Executive is a party.

7.3 **Applicable Law.** This Agreement shall be construed in accordance with the laws of the State of Illinois, without reference to Illinois' choice of law statutes or decisions.

7.4 **Severability.** The provisions of this Agreement shall be deemed severable, and the invalidity or unenforceability of any one or more of the provisions hereof shall not affect the validity or enforceability of any other provision. In the event any clause of this Agreement is deemed to be invalid, the parties shall endeavor to modify that clause in a manner which carries out the intent of the parties in executing this Agreement.

7.5 **No Waiver.** The waiver of a breach of any provision of this Agreement by any party shall not be deemed or held to be a continuing waiver of such breach or a waiver of any subsequent breach of any provision of this Agreement or as nullifying the effectiveness of such provision, unless agreed to in writing by the parties.

7.6 **Notices.** All demands, notices, requests, consents and other communications required or permitted under this Agreement shall be in writing and shall be personally delivered or sent by facsimile machine (with a confirmation copy sent by one of the other methods authorized in this Section), or by commercial overnight delivery service, to the parties at the addresses set forth below:

To Company: Allscripts Healthcare Solutions, Inc.
222 Merchandise Mart Plaza
Suite 2024
Chicago, IL 60654
Attention: Chief Executive Officer

To Executive: At the address and/or fax number most recently
contained in Company's records

Notices shall be deemed given upon the earliest to occur of (i) receipt by the party to whom such notice is directed, if hand delivered; (ii) if sent by facsimile machine, on the day (other than a Saturday, Sunday or legal holiday in the jurisdiction to which such notice is directed) such notice is sent if sent (as evidenced by the facsimile confirmed receipt) prior to 5:00 p.m. Central Time and, if sent after 5:00 p.m. Central Time, on the day (other than a Saturday, Sunday or legal holiday in the jurisdiction to which such notice is directed) after which such notice is sent; or (iii) on the first business day (other than a Saturday, Sunday or legal holiday in the jurisdiction to which such notice is directed) following the day the same is deposited with the commercial carrier if sent by commercial overnight delivery service. Each party, by notice duly given in accordance therewith, may specify a different address for the giving of any notice hereunder.

7.7 **Assignment of Agreement.** This Agreement shall be binding upon and inure to the benefit of Executive and Company, their respective successors and permitted assigns and Executive's heirs and personal representatives. Neither party may assign any rights or obligations hereunder to any person or entity without the prior written consent of the other party; provided,

however, that Company may assign its rights or obligations hereunder to a wholly owned subsidiary of Company without the prior consent of Executive and further provided that, in the event of such assignment, the Company hereby unconditionally and irrevocably guarantees to the Executive, by way of its own independent obligation, the full and prompt fulfillment of the Company's obligations to Executive under this Agreement. This Agreement shall be personal to Executive for all purposes.

7.8 **Entire Agreement; Amendments.** Except as otherwise provided herein, this Agreement contains the entire understanding between the parties, and there are no other agreements or understandings between the parties with respect to Executive's employment by Company and Executive's obligations thereto. Executive acknowledges that Executive is not relying upon any representations or warranties concerning Executive's employment by Company except as expressly set forth herein. No amendment or modification to the Agreement shall be valid except by a subsequent written instrument executed by the parties hereto.

7.9 **Dispute Resolution and Arbitration.** The following procedures shall be used in the resolution of disputes:

7.9.1 **Dispute.** In the event of any dispute or disagreement between the parties under this Agreement (excluding an action for injunctive or declaratory relief as provided in Section 5.11), the disputing party shall provide written notice to the other party that such dispute exists. The parties will then make a good faith effort to resolve the dispute or disagreement. If the dispute is not resolved upon the expiration of fifteen (15) days from the date a party receives such notice of dispute, the entire matter shall then be submitted to arbitration as set forth in Section 7.9.2.

7.9.2 **Arbitration.** If the dispute or disagreement between the parties has not been resolved in accordance with the provisions of Section 7.9.1 above, then any such controversy or claim arising out of or relating to this Agreement, or the breach thereof, shall be settled by arbitration to be held in Chicago, Illinois, in accordance with the rules of the American Arbitration Association then in effect. Any decision rendered herein shall be final and binding on each of the parties and judgment may be entered thereon in the appropriate state or federal court. The arbitrators shall be bound to strict interpretation and observation of the terms of this Agreement. Company shall pay the costs of arbitration.

7.10 **Survival.** For avoidance of doubt, the provisions of Sections 4.5, 5, 6 and 7 of this Agreement shall survive the expiration or earlier termination of the Employment Period.

7.11 **Headings.** Section headings used in this Agreement are for convenience of reference only and shall not be used to construe the meaning of any provision of this Agreement.

7.12 **Counterparts.** This Agreement may be executed in counterparts, each of which shall be deemed an original, but both of which together shall constitute one and the same instrument. Signatures delivered via facsimile or electronic file shall be the same as original signatures.

7.13 **Taxes.** Executive shall be solely responsible for taxes imposed on Executive by reason of any compensation and benefits provided under this Agreement and all such compensation and benefits shall be subject to applicable withholding.

7.14 **Internal Revenue Code Section 409A.**

7.14.1 It is intended that this Agreement will comply with Internal Revenue Code Section 409A and any regulations and guidelines issued thereunder (collectively "**Section 409A**") to the extent this Agreement is subject thereto. This Agreement shall be interpreted on a basis consistent with such intent.

7.14.2 If any payments or benefits provided to Executive by Company, either per this Agreement or otherwise, are non-qualified deferred compensation subject to, and not exempt from, Section 409A ("**Subject Payments**"), the following provisions shall apply to such payments and/or benefits:

- (i)** For payments and benefits triggered by termination of employment, reference to Executive's "termination of employment" (and corollary terms) with Company shall be construed to refer to Executive's "separation from service" from Company (with such phrase determined under Treas. Reg. Section 1.409A-1(h), as uniformly applied by Company) in tandem with Executive's termination of employment with Company.
- (ii)** If Executive is deemed on the date of Executive's "separation from service" to be a "specified employee" (within the meaning of Treas. Reg. Section 1.409A-1(i)), then with regard to any payment that is required to be delayed pursuant to Code Section 409A(a)(2)(B) (the "**Delayed Payments**"), such payment shall not be made prior to the earlier of (i) the expiration of the six (6)-month period measured from the date of Executive's "separation from service" and (ii) the date of Executive's death. Any payments other than the Delayed Payments shall be paid in accordance with the normal payment dates specified herein. In no case will the delay of any of the Delayed Payments by Company constitute a breach of Company's obligations to Executive.
- (iii)** If the sixty (60)-day period following a "separation from service" begins in one calendar year and ends in a second calendar year (a "**Crossover 60-Day Period**") and if there are any Subject Payments due Executive that are: (i) conditioned on Executive signing and not revoking a release of claims and (ii) otherwise due to be paid during the portion of the Crossover 60-Day Period that falls within the first year, then such payments will be delayed and paid in a lump sum during the portion of the Crossover 60-Day Period that falls within the second year.
- (iv)** Lump-sum severance payments shall be made, and installment severance payments initiated, within sixty (60) days following Executive's "separation from service".

- (v) The Executive's right to receive installment payments pursuant to this Agreement shall be treated as a right to receive a series of separate and distinct payments.
- (vi) Whenever a payment under this Agreement specifies a payment period with reference to a number of days, the actual date of payment within the specified period shall be within the sole discretion of Company.
- (vii) Notwithstanding any other provision of this Agreement to the contrary, in no event shall any Subject Payment be subject to offset by any other amount unless otherwise permitted by Section 409A.
- (viii) Notwithstanding anything herein to the contrary, in regard to Subject Payments, the definition of Change in Control set forth herein shall not be broader than the definition of "change in control event" as set forth under Section 409A, and if a transaction or event does not otherwise fall within such definition of change of control event, it shall not be deemed a Change in Control.
- (ix) To the extent that any reimbursement or in-kind benefits are Subject Payments: (x) the amount eligible for reimbursement or in-kind benefit in one calendar year may not affect the amount eligible for reimbursement or in-kind benefit in any other calendar year (except that a plan providing medical or health benefits may impose a generally applicable limit on the amount that may be reimbursed or paid), (y) the right to reimbursement or an in-kind benefit is not subject to liquidation or exchange for another benefit, and (z) subject to any shorter time periods provided herein, any such reimbursement of an expense or in-kind benefit must be made on or before the last day of the calendar year following the calendar year in which the expense was incurred.

7.14.3 If an amendment of this Agreement is necessary in order for it to comply with Section 409A, the parties hereto will negotiate in good faith to amend this Agreement in a manner that preserves the original intent of the parties to the extent reasonably possible. No action or failure by Company in good faith to act, pursuant to this Section 7.14, shall subject Company to any claim, liability, or expense, and Company shall not have any obligation to indemnify or otherwise protect Executive from the obligation to pay any taxes pursuant to Section 409A.

7.15 **Payment by Subsidiaries.** Executive acknowledges and agrees that Company may satisfy its obligations to make payments to Executive under this Agreement by causing one or more of its subsidiaries to make such payments to Executive. Executive agrees that any such payment made by any such subsidiary shall fully satisfy and discharge Company's obligation to make such payment to Executive hereunder (but only to the extent of such payment).

Signature page follows.

[Signature page to Employment Agreement]

IN WITNESS WHEREOF, the parties have executed this Agreement as of the Signing Date.

EXECUTIVE

/s/ LISA KHOREY

Lisa Khorey

ALLSCRIPTS HEALTHCARE SOLUTIONS, INC.

/s/ BRIAN FARLEY

By: Brian Farley

Title: SVP, General Counsel & Secretary

RATIO OF EARNINGS TO FIXED CHARGES

(In thousands)	Year Ended December 31,				
	2016	2015	2014	2013	2012
Income (loss) before income taxes	\$ (14,784)	\$ 570	\$ (68,117)	\$ (148,346)	\$ (17,460)
Plus fixed charges:					
Interest expense	46,376	16,284	16,020	14,703	11,121
Amortization of discounts and debt issuance costs	16,541	13,679	13,277	9,451	5,066
Write off of unamortized deferred debt issuance costs	5,224	1,433	0	3,901	0
Portion of rents representative of an appropriate interest factor	8,240	6,049	5,414	5,682	6,175
Total fixed charges (1)	\$ 76,381	\$ 37,445	\$ 34,711	\$ 33,737	\$ 22,362
Adjusted earnings (2)	\$ 61,597	\$ 38,015	\$ (33,406)	\$ (114,609)	\$ 4,902
Ratio (2 divided by 1)	0.8	1.0	(1.0)	(3.4)	0.2
Fixed charges deficiency	\$ 14,784	\$ 0	\$ 68,117	\$ 148,346	\$ 17,460

**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
Allscripts Analytics, LLC	Delaware
Allscripts Next, LLC	Delaware
2bPrecise, LLC (f/k/a Precision Med, LLC)	Delaware
Allscripts Canada Corporation	Canada
Allscripts Healthcare International Holdings, LLC	Delaware
Allscripts (Mauritius) Limited	Mauritius
Allscripts (India) 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
dbMotion, Ltd.	Israel
dbMotion, Inc.	Delaware
Oasis Medical Solutions Limited	United Kingdom
Allscripts IHC, LLC	Delaware
Careport Health, LLC	North Carolina
Allscripts C.V.	The Netherlands
Allscripts B.V.	The Netherlands
Allscripts Healthcare IT (Mauritius) Limited	Mauritius
Core Medical Solutions Holdings PTY LTD.	Australia
Core Medical Solutions PTY LTD.	Australia

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We have issued our reports dated February 24, 2017, 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, 2016. 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. 333-59212, File No. 333-135282, File No. 333-141600, File No. 333-154775, File No. 333-167846, File No. 333-175053, File No. 333-175819, File No. 333-188902, and File No. 333-196415) and on Form S-3 (File No. 333-188901).

/s/ GRANT THORNTON LLP

Raleigh, North Carolina
February 24, 2017

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 24, 2017

/s/ Paul M. Black
Chief Executive Officer

CERTIFICATION

I, Melinda Whittington, 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 24, 2017

/s/ Melinda Whittington
Chief Financial Officer

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, 2016, 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, 2016, fairly presents, in all material respects, the financial condition and results of operations of Allscripts Healthcare Solutions, Inc.

Date: February 24, 2017

/S/ PAUL M. BLACK

Paul M. Black
Chief Executive Officer

/S/ MELINDA WHITTINGTON

Melinda Whittington
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.

