ALLSCRIPTS HEALTHCARE SOLUTIONS, INC.
Form 10-K
February 22, 2019

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, 2018

or

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
Commission File Number 001-35547

ALLSCRIPTS HEALTHCARE SOLUTIONS, INC.

(Exact name of registrant as specified in its charter)

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

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

(Address of principal executive offices and zip code)

(800) 334-8534

(Registrant’s telephone number, including area code)

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

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

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

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

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

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

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

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

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

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

Indicate by check mark whether the registrant 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 29, 2018, the last business day of the registrant's most recently completed second fiscal quarter, was $2,055,742,140. 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 20, 2019, there were 171,331,796 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 2019 annual meeting of stockholders (the "2019 Proxy Statement") are incorporated by reference into Part III of this Annual Report on Form 10-K where indicated. The 2019 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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ANNUAL REPORT ON FORM 10-K

FOR THE FISCAL YEAR ENDED DECEMBER 31, 2018

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

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

PART I

Item 1. Business

We deliver information technology (“IT”) solutions and services to help healthcare organizations 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, helps clients advance the quality and efficiency of healthcare by providing electronic health records (“EHR”), financial management, population health management, precision medicine and consumer solutions. Built on an open integrated platform, our solutions enable users to streamline workflows, leverage functionality from other software vendors and exchange data. The Allscripts Developer Program focuses on nurturing partnerships with other developers to help clients optimize the value of their Allscripts investment.

We completed the acquisition of Practice Fusion, Inc., a Delaware corporation (“Practice Fusion”) in February 2018. Practice Fusion offers an affordable certified cloud-based EHR for traditionally hard-to-reach small, independent physician practices. This acquisition is now a part of Veradigm™, our newly launched payer and life sciences business unit. An integrated data systems and services provider, Veradigm combines data-driven clinical insights with actionable tools for clinical workflow, research, analytics and media.

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In February 2018, Allscripts also announced its new EHR, Avenel™. Mobile-first and cloud-based, Avenel creates a communitywide, shared patient record, using machine learning to reduce time for clinical documentation, all while designed to work like an app instead of traditional software.

In March and April 2018, we closed the sales of our Strategic Sourcing and OneContent businesses, respectively. Allscripts acquired these businesses in late 2017 through the acquisition of McKesson Corporations Enterprise Information Solutions ("EIS") portfolio (the "EIS Business").

In May 2018, we acquired all the capital stock of Health Grid Holding Company, a Delaware corporation ("Health Grid"). Health Grid is a patient engagement solutions provider that helps independent providers, hospitals and health systems improve patient interactions and satisfaction. We are integrating the capabilities of Health Grid into our FollowMyHealth® platform to help organizations address consumerism trends while enabling them to reach 100% of their patient populations without requiring their patients to sign into a portal. The new functionality will use existing patients' contact information and grow the use of FollowMyHealth® to connect providers with patients and create opportunities to reach new heights of patient outreach and engagement.

We established a partnership with Lyft, Inc. ("Lyft") in May 2018. Lyft is the fastest growing rideshare company in the United States and will enable non-emergency transportation options to appear directly in the physician's workflow. Leveraging Lyft's proprietary application programming interface ("API") and Allscripts Open platform, Allscripts and Lyft will integrate this functionality into Sunrise™ EHR, to enable clinicians to order the Lyft service for patients.

On December 31, 2018, we sold our investment in Netsmart LLC ("Netsmart") in exchange for $566.6 million in cash, resulting in a pre-tax gain of $500 million. Prior to the sale, Netsmart comprised a separate reportable segment, which due to its significance to our historical consolidated financial statements and results of operations, is reported as a discontinued operation as a result of the sale.

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 drive smarter care across connected communities of health. Across care settings, our solutions enable clinical, financial and operational efficiencies while helping patients deepen their engagement in their own care. Our principal solutions consist of the following:

Electronic Health Records

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

Sunrise™ is a comprehensive EHR platform for larger hospital facilities with a combination of services lines. Sunrise supports health systems on a single platform for both inpatient and outpatient care and provides decision guidance, including computerized provider order entry, note and flowsheet documentation, clinical summary views and other key workflows necessary for driving quality care. Administrative and operational modules are likewise available. Functionality is also offered on mobile devices. Offerings include:

- Sunrise™ Acute Care
- Sunrise™ Ambulatory Care
- Sunrise™ Mobile
- Sunrise™ Surgical Care
- Sunrise™ Rehabilitation
- iPro Anesthesia
- Sunrise™ Wound Care powered by TRUE-see™
- Sunrise™ Emergency Care
- Sunrise™ Access Manager
- Sunrise™ Pharmacy
- Allscripts® Infusion Logic
- Allscripts® Census Logic
- Allscripts® Surgical Logic
- Allscripts Patient Flow™
- Sunrise™ Oncology
- Allscripts® Clinical Performance Management
- Sunrise™ Financial Manager
- Sunrise™ Health Information Management
- Sunrise™ Radiology
- Sunrise™ Patient Administration System (international)
- Sunrise™ Abstracting
- Sunrise™ Charge Logic

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

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

Allscripts Professional EHR™ is an EHR solution for small- to mid-size physician practices. Allscripts Professional EHR works in accountable care organizations ("ACOs"), patient-centered medical homes and Federally Qualified Health Centers, and enables practices to adhere to government initiatives like Meaningful Use and the Medicare Access and CHIP Reauthorization Act or Merit based Incentive Payment System ("MIPS"). The solution's mobile offering, Allscripts Professional EHR™ Mobile, provides on-the-go access to Allscripts Professional EHR, driving greater efficiency and improved patient care.

Payer and Life Sciences

Veradigm™ is the newly branded Allscripts payer and life science business unit. An integrated data systems and services business, it combines data-driven clinical insights with actionable tools for clinical workflow, research, analytics and media. Its solutions help key healthcare stakeholders improve the quality, efficiency and value of healthcare delivery—from biopharma to health plans, healthcare providers, health technology partners, and most importantly, the patients they serve.

Consumer Solutions

FollowMyHealth® is a comprehensive patient engagement platform with options for telehealth and remote patient monitoring. This patient engagement platform, enhanced by the addition of powerful Health Grid functionality, also serves as the foundation for emerging consumer health initiatives, including automated secure messaging.

Financial Management

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

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

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 solutions include Allscripts® Care Director, CarePort Care Management, dbMotion™ Care Coordination Agent, Allscripts® Referral Management and chronic care management services.
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Our connectivity and data aggregation solutions include the dbMotion™ Solution, dbMotion™ Community powered by OnePartner and Allscripts Fusion™.

- Allscripts Population Health Analytics™ enables healthcare organizations to measure performance and outcomes, analyze utilization, manage risk, reduce cost and improve quality across the continuum of care.

Precision Medicine

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™ seeks 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. We provide the following services and more:

- Allscripts® Architecture Advisory Service
- Allscripts® Proactive Application Monitoring Service
- Allscripts® Clinical Quality Program
- Allscripts® FollowMyHealth Engagement and Optimization
- Allscripts® Premier Support
- Allscripts® Revenue Cycle Consulting Services

Our Strategy

Our strategy is built upon our vision of enabling smarter care at virtually every point of the healthcare continuum. Given the breadth of our portfolio and global client base, we believe we are well positioned to connect providers to patients and payers across all healthcare settings. Smarter care is a strategic imperative for healthcare organizations globally and requires a balance between managing costs while maintaining the highest quality of care. We believe our solutions are positioned to facilitate such transformation in healthcare delivery by connecting communities, driving interoperability, providing data analytics and delivering 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.

- Connecting communities – Our care coordination solutions improve safety and quality as a patient transitions from one care setting to another. To do so, care coordination solutions help build assessments, monitor results, track outcomes and make modifications in a patient's care plan. Healthcare is a group effort, and having full visibility into a patient's care plan is critical. Access to comprehensive patient information is key, and our community solutions help create an organized, longitudinal patient record spanning all points of care.
- Interoperability – We provide clients a wide array of interoperability tools to support their need and desire to connect to numerous stakeholders in the industry, including other healthcare providers, labs, imaging facilities, public health entities and patients, as well as other third-party technology providers. Allscripts Open platform is proven, scalable and user-friendly, and connects both clinical and financial data across every setting. We also offer APIs based on the Fast Healthcare Interoperability Resources. With this platform, clients can connect to any certified application or device, which saves time and money and gives clients full access to a variety of innovative solutions.
- Data analytics – Allscripts understands that healthcare organizations need to analyze dependencies, trends and patterns so that they can develop business and clinical intelligence. Our analytics offerings help organizations better manage their patient populations by using clean data for better decisions at the point of care. Insights and analytics serve as the foundation for informed analysis and effective planning.
- Consumer engagement – Our patient engagement software helps healthcare organizations achieve better outcomes, reduce emergency room visits and decrease hospitalizations. Our solutions also integrates with health IT offerings across an organization, regardless of a provider's chosen vendor. With a patient engagement platform, individuals and their families have the opportunity to become active members of their care team, which improves results.
- Payer and life sciences – Through Veradigm™, we are positioned to help clients manage the evolution toward value-based care, facilitate patient medication access and affordability and provide new, efficient operating models for generating the real-world evidence necessary to accelerate the development of new therapies and to enhance the value of existing ones.

Healthcare IT Industry

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

- Provider Reimbursement: In recent years, there have been significant changes to provider payment models by the United States federal government to move more towards a value-based care model that have been followed by commercial payers and state governments. This has lead to increasing pressure on healthcare organizations to reduce costs and increase quality, replacing fee-for-service models in part by expanding advanced payment models. Such changes to provider payment models could further encourage the adoption of healthcare IT as a means of improving quality of patient care through increased efficiency, care coordination, and improving access to complete medical documentation.
  - The passage of 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 are being adjusted in part by HHS under the Trump Administration, significant levels of reimbursements will still require providers to capture, communicate, measure and share outcomes through technology solutions such as ours, given that those requirements are set out in federal statute.
- HITECH: In 2009, the United States federal government enacted HITECH, which authorized the EHR Incentive program (the "Meaningful Use" program). This law provided significant incentive funding by the Medicare and Medicaid programs to physicians and hospitals that can prove they have adopted and are appropriately using technology such as our EHR solutions. CMS establishes and oversees the criteria that healthcare providers must meet to receive HITECH stimulus funding, while the Office of the National Coordinator for Health Information Technology ("ONC") establishes and oversees the functionality that EHR products must meet. In order for our customers to qualify for funding under HITECH, our technology must meet various requirements for product certification under the regulations, and must enable our customers to achieve "Meaningful Use" as defined under CMS regulations. CMS regulations provide for a phase approach to implementation of the "Meaningful Use" standards. For each stage, a final rule is implemented by the ONC to adopt an initial set of standards, implementation specifications and certification criteria to enhance the use of health information technology and support its "Meaningful Use". For providers to receive "Meaningful Use" incentive funds, they must use EHRs that are certified according to regulations put forth by the ONC. Currently, ONC recognizes a variety of Authorized Testing and Certification Bodies ("ATCBs") eligible to test for and designate that EHRs are certified for "Meaningful Use" quality reporting. These ONC-ATCBs are the only organizations capable of designating that an EHR is certified for "Meaningful Use" incentive capture. Effective on January 1, 2017, the MIPS, established by the Medicare Access and CHIP Reauthorization Act of 2015 ("MACRA"), came into effect. Its goal was to transform the healthcare industry from a fee for service payment to a value-based payment. MIPS combined three existing quality and value reporting programs (PQRS, VBM and Meaningful Use) into a single points-based program. MIPSs and Meaningful Use Stage 3 operated simultaneously in 2017 and 2018 but in 2019 only certain Medicaid reporters are eligible for the Meaningful Use Stage 3

incentives. Eligible clinicians, who report under MIPS, will earn a performance-based payment adjustment for their Medicare payments starting in 2019.

- HIPAA: HIPAA and its implementing regulations contain substantial restrictions and requirements with respect to the use and disclosure of individuals' protected health information. HIPAA applies to "Covered Entities," such as certain healthcare providers, health plans, and healthcare clearinghouses, as well as business associates that performed functions on behalf of or provide services to Covered Entities. We consider ourselves a Covered Entity because we act as a "healthcare clearinghouse" through our provision of Allscripts Payerpath, which has the ability to file electronic healthcare claims on behalf of healthcare providers that are subject to HIPAA and HITECH. In addition, as a result of our dealings with certain clients and others in the healthcare industry, which may be considered Covered Entities under or otherwise subject to the requirements of HIPAA, we are, in some circumstances, considered a business associate under HIPAA. As a business associate, we are subject to the HIPAA requirements relating to the privacy and security of protected health information. Among other things, HIPAA requires business associates to (i) maintain physical, technical and administrative safeguards to prevent protected health information from misuse, (ii) report security incidents and other inappropriate uses

or disclosures of the information, including to individuals and governmental authorities and (iii) assist Covered Entities from which we obtain health information with certain of their duties under HIPAA. We have policies and safeguards in place intended to protect health information as required by HIPAA and have processes in place to assist us in complying with applicable laws and regulations regarding the protection of this data and responding to any security incidents. The Office of Civil Rights is currently considering updates and changes to HIPAA-related regulations, and we will adjust our processes and procedures as necessary, should any new rules be promulgated.

- ANSI-5010/ICD-10: Under 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 is 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.
- Federal Anti-Kickback Statute: The federal Anti-Kickback Statute prohibits any person or entity from offering, paying, soliciting or receiving anything of value, directly or indirectly, for the referral of patients covered by Medicare, Medicaid and other federal healthcare programs or the leasing, purchasing, ordering or arranging for or recommending the lease, purchase or order of any item, good, facility or services covered by these programs. Courts have interpreted the law to provide that a financial arrangement may violate this law if any one of the purposes of an arrangement is to encourage patient referrals or other federal healthcare program business, regardless of whether there are other legitimate purposes for the arrangement. There are several limited exclusions known as safe harbors that may protect some arrangements from enforcement penalties. Penalties for federal Anti-Kickback Statute violations can be severe, and include imprisonment, criminal fines, civil money penalties with triple damages (when the False Claims Act is implicated) and exclusion from participation in federal healthcare programs. The PPACA broadened the reach of the fraud and abuse laws by, among other things, amending the intent requirement of the federal Anti-Kickback Statute and the applicable criminal healthcare fraud statutes. Pursuant to the statutory amendment, a person or entity no longer needs to have actual knowledge of this statute or specific intent to violate it in order to have committed a violation. In addition, PPACA provides that the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the civil False Claims Act or the civil monetary penalties statute. Many states have adopted laws similar to the federal Anti-Kickback Statute, some of which apply to the referral of patients for healthcare items or services reimbursed by any source, not only the Medicare and Medicaid programs.
- False Claims Act: The federal False Claims Act prohibits anyone from, among other things, knowingly presenting, or causing to be presented, for payment to federal programs (including Medicare and Medicaid) claims for items or services that are false or fraudulent. Although we would not submit claims directly to payors, Allscripts could be held liable under the False Claims Act if we are deemed to "cause" the submission of false or fraudulent claims by, for example, providing inaccurate billing or coding information to customers through our revenue cycle/claims management services, or if our EHR products are found to have caused providers to have inaccurately attested to Meaningful Use or MIPS criteria.
- PPACA: PPACA, which was signed into law in 2010, has impacted us and our clients. Since taking office, President Trump has continued to support the repeal of all or portions of the PPACA. While such repeal is unlikely, given the divided Congress following the 2018 midterm election, the Administration may continue to take steps through regulation and executive order to break down components of the PPACA previously implemented. 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 remain in effect, however. Certain provisions of PPACA, such as those mandating reductions in reimbursement for certain types of providers or decreasing the number of covered lives in the United States or the depth of insurance coverage available to patients, may have a negative effect by reducing the resources available to our current and prospective clients to purchase our products. Further, some ambiguity remains for the industry as a whole regarding the future of programs initially authorized by the PPACA, which may continue to 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. The Administration continues to apply pressure through a variety of levers to increase interoperability in the industry across a variety of stakeholders, including implementing regulations that increasingly require robust, sophisticated health technology. For example, although many large physician groups have already purchased EHR technology, we expect those groups may choose to replace their older EHR technology to comply with future Quality Payment Program 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 Act 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 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 2018, in an effort to further streamline and align our operating structure around our key acute and population health management solutions, we made several changes to our organizational and reporting structure. Refer to Note 17, “Business Segments,” to our consolidated financial statements included in Part II, Item 8, “Financial Statements and Supplementary Data” of this Form 10-K for detailed discussion about these changes. As a result of these changes, as of December 31, 2018, we had eight operating segments. These segments, with exception of the 2Precise operating segment, are aggregated into two reportable segments, as follows:

- The Clinical and Financial Solutions reportable segment includes the Hospitals and Health Systems, Ambulatory, Veradigm, and EIS-Classics 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 EHR-related software, connectivity and coordinated care solutions, 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: Careport, FollowMyHealth® and EPSi™. This reportable segment derives its revenue from the sale of health management, financial management and patient engagement solutions, which are mainly targeted at hospitals, health systems, other care facilities and Accountable Care Organizations (“ACOs”).

The results of operations related to two of the product offerings acquired with the EIS Business (Horizon Clinicals and Series2000 Revenue Cycle) are presented throughout these financial statements as discontinued operations and are included in the Clinical and Financial Solutions reportable segment, except for acquisition-related deferred revenue adjustments, which are included in “Unallocated Amounts”. Refer to Note 16, “Discontinued Operations” to our consolidated financial statements included in Part II, Item 8, “Financial Statements and Supplementary Data” of this Form 10-K.

Clients

Our clients include physician practices, hospitals and coordinated community care organizations, which include some of the most prestigious medical groups and hospitals in the United States and often serve as reference sources for prospective clients that are interested in purchasing our solutions. No single client accounted for more than 10% of our revenue in the years ended December 31, 2018, 2017 and 2016.

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.

Competition

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

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

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

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

Backlog

We had a contract backlog of $3.9 billion and $4.2 billion as of December 31, 2018 and 2017, respectively, a decrease of 7%. Contract backlog represents the value of bookings and support and maintenance contracts that have not yet been recognized as revenue. Total contract backlog can fluctuate between periods based on the level of revenue and bookings as well as the timing and mix of renewal activity and periodic revalidations. We estimate that approximately 38% of our aggregate contract backlog as of December 31, 2018 will be recognized as revenue during 2019.

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.

Employees

As of December 31, 2018, we had approximately 9,500 employees worldwide. None of our employees are covered by a collective bargaining agreement or are represented by a labor union.

Executive Officers

The following sets forth certain information regarding our executive officers as of February 22, 2019, based on information furnished by each of them:

Name	Age	Position
Paul Black	60	Chief Executive Officer
Brian Farley	49	Executive Vice President, General Counsel and Chief Administrative Officer
Lisa Khorey	52	Executive Vice President, Chief Client Delivery Officer
Dennis Olis	56	Chief Financial Officer
Richard Poulton	53	President

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 Executive Vice President, General Counsel and Chief Administrative Officer since August 2017 and prior to that 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.

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

Dennis Olis has served as our Chief Financial Officer since January 2018 and prior to that served as our interim Chief Financial Officer since May 2017. From November 2016 to May 2017, Mr. Olis served as Senior Vice President, Strategic Initiatives and, 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.

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 SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC (http://www.sec.gov).

Item 1A. Risk Factors

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

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

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

Risks Related to Our Industry

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

The markets for our products and services are intensely competitive and are characterized by rapidly evolving technology, solution standards and user needs and the frequent introduction of new products and services. 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 increase. These industry participants may try to use their market power to negotiate price reductions for our products and services. Further, consolidation of management and billing services through integrated delivery systems may decrease demand for our products. Such consolidation may also lead integrated delivery systems to require newly acquired physician practices to replace their current Allscripts HER 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 comply with laws and regulations while using our solutions could affect the marketability of our products or our compliance with our client contracts, or even expose us to direct liability under the theory that we had assisted our clients in a violation of healthcare laws or regulations. Because our business relationships with physicians, hospitals and other provider clients are unique and the healthcare IT industry as a whole is relatively young, the application of many state and federal regulations to our business operations and to our clients is uncertain. 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, 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. 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 because we act as a "healthcare clearinghouse" through our provision of Allscripts Payerpath which has the ability to file 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. The 2013 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 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 implemented the Medicare Access and CHIP Reauthorization Act ("MACRA"); for ambulatory clinicians further reducing the impact of MIPPA. Effective on January 1, 2017, the Merit based Incentive Payment System ("MIPS"), established by MACRA, came into effect. Its goal was to transform the healthcare industry from a fee for service payment to a value-based payment. MIPS combined three existing quality and value reporting programs (PQRS, VBM and Meaningful Use) into a single points-based program. MIPSs and Meaningful Use Stage 3 operated simultaneously in 2017 and 2018 but in 2019 only certain Medicaid reporters are eligible for the Meaningful Use Stage 3 incentives. Eligible clinicians, who report under MIPS, will earn a performance-based payment adjustment for their Medicare payments starting in 2019.

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 may also be 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.

On October 6, 2015, CMS published its final rule on Stage 3 of the Meaningful Use Requirements for the Electronic Health Record Incentive Program. Stage 3 objectives were focused on improving the interoperability of EHR systems in different practices and are intended to bring about advancements in care delivery by requiring more advanced EHR functionality and standards for structuring data, increasing thresholds compared to Stage 1 and 2 measures, and requiring more coordinated care and patient engagement. New, complex regulatory requirements related to Stage 3

“Meaningful Use” certification and voluntary regulations were released within the 2015 Edition criteria. All providers were required to meet the Stage 3 objectives in 2018 for the entire calendar year in order to attest to Meaningful Use. Effective on January 1, 2017, the MIPS, established by MACRA, came into effect. Its goal was to transform the healthcare industry from a fee for service payment to a value-based payment. MIPS combined three existing quality and value reporting programs (PQRS, VBM and Meaningful Use) into a single points-based program. MIPSs and Meaningful Use Stage 3 operated simultaneously in 2017 and 2018 but in 2019 only certain Medicaid reporters are eligible for the Meaningful Use Stage 3 incentives. Eligible clinicians, who report under MIPS, will earn a performance-based payment adjustment for their Medicare payments starting in 2019.

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 Act, passed in December 2016, clarified 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 policies—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 Patient Protection and Affordable Care Act ("PPACA"), 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 presidential Administration, increased enforcement activity targeting healthcare fraud and abuse, which could adversely impact our business, either directly or indirectly. This decision could be reversed by the current Administration, but is likely to remain in effect. To the extent that our clients, most of whom 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.

We have recently made investments in, or acquisitions of, businesses, joint ventures, new services and technologies, and other intellectual property rights, including our acquisitions of the EIS Business, the provider and patient engagement solutions business of NantHealth, Practice Fusion and Health Grid. We expect that we will continue to make such investments and acquisitions in the future.

Our investments and acquisitions involve numerous risks, including:

- the potential failure to achieve the expected benefits of the investment or acquisition, including the inability to generate sufficient revenue to offset acquisition or investment costs, or the inability to achieve expected synergies or cost savings;
- unanticipated expenses related to acquired businesses or technologies;
- the diversion of financial, managerial and other resources from existing operations;
- the risks of entering into new markets in which we have little or no experience or where competitors may have stronger positions;
- unanticipated regulatory and other compliance risks related to acquired companies or technologies;
- potential write-offs or amortization of acquired assets or investments;
- the potential loss of key employees, clients or partners of an acquired business;
- delays in client purchases due to uncertainty related to any acquisition;
- potential unknown liabilities associated with an investment or acquisition; and
- the tax effects of any such acquisitions.

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

Additionally, prior to their acquisition by us, Practice Fusion received a request for documents and information from the U.S. Attorney's Office for the District of Vermont pursuant to a CID. Subsequent to our acquisition by us, Practice Fusion received additional requests for documents and information pursuant to additional CIDs and HIPAA subpoenas. These requests relate to the certification of Practice Fusion's software under the U.S. Department of Health and Human Services' Electronic Health Record Incentive Program, compliance with the Anti-Kickback Statute, and related business practices. Practice Fusion produced documents responsive to these requests in a cooperative, thorough and timely manner. If any of these requests lead to a claim or legal proceeding against Practice Fusion that results in the imposition of damages, non-monetary relief, significant compliance, litigation or settlement costs, or any other losses, such damages, relief, costs or losses could materially and adversely impact our business, financial condition and operating results.

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

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

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

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;
- misreporting by clients of eCOMs and other measures.

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.

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

Legal standards relating to the validity, enforceability and scope of protection of intellectual property rights are uncertain and 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 the CIDs and other requests related to Practice Fusion and the EIS Business and those discussed under Note 20, “Contingencies,” to our consolidated financial statements included in Part II, Item 8, “Financial Statements and Supplementary Data” of this Form 10-K, and additional claims may arise in the future. For example, companies in our industry, including many of

our competitors, have been subject to litigation based on allegations of patent infringement or other violations of intellectual property rights. In particular, patent holding companies often engage in litigation seeking to monetize patents that they have purchased or otherwise obtained. As the number of competitors, patents and patent holding companies in our industry increases, the functionality of our products and services expands, and 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 independent content and service providers may fail to perform adequately or comply with laws, regulations or contractual covenants.

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

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

We may be liable for use of content we provide.

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

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. In 2018, we were subject to a ransomware attack that impacted two of our data centers, resulting in outages that left certain of our solutions offline for our clients. Any future denial-of-service, ransomware or other Internet-based attacks may range from mere vandalism of our electronic systems to systematic theft of sensitive information and intellectual property. We believe that companies in our industry may continue to be targeted by such events with increasing frequency 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.

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

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

We may be subject to pricing pressures with respect to our future sales arising from various sources, including practices of managed care organizations, group purchasing arrangements made through government programs such as the Regional Extension Centers, and government action affecting reimbursement levels related to physicians, hospitals, home health professionals or any combination thereof under Medicare, Medicaid and other government

health programs. Our clients and the other entities with which we have a business relationship are affected by changes in statutes, regulations and limitations in governmental spending for Medicare, Medicaid and other programs. Recent government actions and future legislative and administrative changes could limit government spending for the Medicare and Medicaid programs, limit payments to hospitals and other providers, increase emphasis on competition, impose price controls, initiate new and expanded value-based reimbursement programs and create other programs that potentially could have an adverse effect on our clients and the other entities with which we have a business relationship. If our pricing experiences significant downward pressure, our business will be less profitable and our financial condition and operating results could be materially and adversely affected.

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

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

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

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 Canada, India, Israel, the UK and Australia, and we are further expanding our global sales efforts. This subjects our business to risks and challenges associated with operating globally, which include:

- changes in local political, economic, social and labor conditions;
- natural disasters, acts of war, terrorism, pandemics or security breaches;
- different employee/employer relationships, existence of workers' councils and labor unions, and other challenges caused by distance, language and cultural differences;
- restrictions on foreign ownership and investments, and stringent foreign exchange controls that may prevent us from repatriating, or make it cost-prohibitive for us to repatriate, cash earned in countries outside of the United States;
- import and export requirements, tariffs, trade disputes and barriers;
- longer payment cycles in some countries, increased credit risk and higher levels of payment fraud;
- uncertainty regarding liability for our products and services, including uncertainty as a result of local laws and lack of legal precedent;
- different or lesser protection of our intellectual property;
- different legal and regulatory requirements that may apply to our products and/or how we operate; 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 also be affected by changes in the mix of our earnings in countries with differing statutory tax rates, changes in the valuation of our deferred tax assets and liabilities, or changes in tax laws or their interpretation, including changes in tax laws affecting our products and services and the healthcare industry more generally. We are also subject to the examination of our tax returns and other documentation by the Internal Revenue Service and other tax authorities. We regularly assess the likelihood of an adverse outcome resulting from these examinations to determine the adequacy of our provision for taxes. There can be no assurance as to the outcome of these examinations or that our assessments of the likelihood of an adverse outcome will be correct. If our effective tax rates were to increase, particularly in the United States, or if the ultimate determination of our taxes owed is for an amount in excess of amounts previously accrued, then this could materially and adversely impact our financial condition and operating results.

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

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

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

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

We maintain internal financial and accounting controls and procedures that are designed to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of our financial statements in

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

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

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

We could suffer losses due to asset impairment charges.

We are required under GAAP to test our goodwill and indefinite-lived intangible assets for impairment on an annual basis, as well as on an interim basis if indicators for potential impairment, such as a decline in our stock price, exist. 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.

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

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

Finally, our certificate of incorporation includes an election to be governed by Section 203 of the Delaware General Corporation Law, which prohibits us from engaging in any business combination with an interested stockholder for a period of three years from the date the person became an interested stockholder, unless certain conditions are met. This provision could discourage, delay or prevent a change of control of our company by making it more difficult for stockholders or potential acquirers to effect such a change of control without negotiation, and may apply even if some of our stockholders consider the acquisition beneficial to them. This provision could also adversely affect our stock price.

Our stock price is subject to volatility.

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

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

Our quarterly operating results may vary.

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

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

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

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

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

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 Second Amended Credit Agreement, and the lenders under the Second Amended Credit Agreement could proceed against such collateral if we were unable to timely repay these amounts.

The 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 8, “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 8, “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, 2018, 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 20, “Contingencies,” to our consolidated financial statements included in Part II, Item 8, “Financial Statements and Supplementary Data” of this Form 10-K.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

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

Market Information for Common Stock

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

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

On August 2, 2018, we announced that our Board approved a new stock purchase program (the "2018 Program") under which we may repurchase up to $250 million of our common stock through December 31, 2020. We repurchased 3.6 million shares of our common stock under the 2018 Program for a total of $37.0 million during the fourth quarter of 2018. Any future stock repurchase transactions may be made through open market transactions, block trades, privately negotiated transactions (including accelerated share repurchase transactions) or other means, subject to our working capital needs, cash requirements for investments, debt repayment obligations, economic and market conditions at the time, including the price of our common stock, and other factors that we consider relevant. Our stock repurchase program may be accelerated, suspended, delayed or discontinued at any time.

(In thousands, except per share amounts)

Period (Based on Trade Date)	Total Number Of Shares Purchased	Average Price Paid Per Share	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
10/01/18—10/31/18	0	$ 0.00	0	$ 250,000
11/01/18—11/30/18	2,235,225	$ 10.20	2,235,225	$ 227,193
12/01/18—12/31/18	1,396,941	$ 10.12	1,396,941	$ 213,050
	3,632,166	$ 10.17	3,632,166	

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 8, "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 20, 2019, there were 369 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, 2013 through December 31, 2018, 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.

	2013	2014	2015	2016	2017	2018
Allscripts Healthcare Solutions, Inc.	100.00	82.60	99.48	66.04	94.11	62.35
Nasdaq Composite	100.00	114.62	122.81	133.19	172.11	165.84
Nasdaq Health Services	100.00	123.14	134.70	110.22	131.32	155.16

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, 2018, 2017 and 2016 and the balance sheet data as of December 31, 2018 and 2017 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, 2015 and 2014 and the balance sheet data as of December 31, 2016, 2015 and 2014 are derived from audited consolidated financial statements that are not included in this Form 10-K. The historical results are not necessarily indicative of results to be expected for any future period.

	Year Ended December 31,				
(In thousands, except per share amounts)	2018[1]	2017[2]	2016[3]	2015[4]	2014
Consolidated Statements of Operations Data:					
Revenue	$1,749,962	$1,497,708	$1,386,069	$1,386,393	$1,377,873
Cost of revenue	1,025,419	864,909	784,770	805,828	831,889
Gross profit	724,543	632,799	601,299	580,565	545,984
Selling, general and administrative expenses	450,967	400,688	334,521	339,175	358,681
Research and development	268,409	202,282	178,534	184,791	192,821
Asset impairment charges	58,166	0	4,650	1,544	2,390
Goodwill impairment charge	13,466	0	0	0	0
Amortization of intangible and acquisition-related assets	26,587	17,345	15,884	23,172	31,280
Income (loss) from operations	(93,052)	12,484	67,710	31,883	(39,188)
Interest expense	(50,914)	(37,540)	(29,478)	(31,396)	(29,297)
Other income (loss), net	74	(512)	829	2,183	766
Gain on sale of businesses, net	172,258	0	0	0	0
Impairment of and losses on long-term investments	(15,487)	(165,290)	0	0	0
Equity in net income (loss) of unconsolidated investments	259	821	(7,501)	(2,100)	(398)
Income (loss) from continuing operations before income taxes	13,138	(190,037)	31,560	570	(68,117)
Income tax (provision) benefit	(469)	5,514	(309)	(2,626)	1,664
Income (loss) from continuing operations, net of tax	12,669	(184,523)	31,251	(2,056)	(66,453)
Loss from discontinued operations	(72,836)	(11,915)	(46,344)	0	0
Gain on sale of Netsmart	500,471	0	0	0	0
Income tax effect on discontinued operations	(32,497)	42,263	18,123	0	0
Income (loss) from discontinued operations, net of tax	395,138	30,348	(28,221)	0	0
Net income (loss)	407,807	(154,175)	3,030	(2,056)	(66,453)
Less: Net loss (income) attributable to non-controlling	4,527	1,566	(146)	(170)	0

interest					
Less: Accretion of redemption preference on redeemable convertible non-controlling interest - discontinued operations	(48,594)	(43,850)	(28,536)	0	0
Net income (loss) attributable to Allscripts Healthcare Solutions, Inc. stockholders	$363,740	$(196,459)	$(25,652)	$(2,226)	$(66,453)
Net income (loss) attributable to Allscripts Healthcare Solutions, Inc. stockholders per share:					
Basic:					
Continuing operations	$0.10	$(1.02)	$0.17	$(0.01)	$(0.37)
Discontinued operations	$1.97	$(0.07)	$(0.31)	$0.00	$0.00
Net income (loss) attributable to Allscripts Healthcare Solutions, Inc. stockholders per share	$2.07	$(1.09)	$(0.14)	$(0.01)	$(0.37)
Diluted:					
Continuing operations	$0.10	$(1.02)	$0.17	$(0.01)	$(0.37)
Discontinued operations	$1.94	$(0.07)	$(0.31)	$0.00	$0.00
Net income (loss) attributable to Allscripts Healthcare Solutions, Inc. stockholders per share	$2.04	$(1.09)	$(0.14)	$(0.01)	$(0.37)

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

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

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

(4) 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.

	As of December 31,				
(In thousands)	2018	2017	2016	2015	2014[1]
Consolidated Balance Sheet Data:					
Cash, cash equivalents and restricted cash	$184,795	$130,994	$71,545	$116,873	$54,478
Working capital (deficit)	61,235	(32,515)	(62,610)	25,389	(34,183)
Goodwill and intangible assets, net	1,804,825	1,728,320	1,584,542	1,570,247	1,604,108
Total assets	3,181,484	4,230,150	3,832,159	2,681,948	2,464,330
Long-term debt	647,539	906,725	717,853	612,405	539,193
Total stockholders' equity	1,580,427	1,160,072	1,273,201	1,419,073	1,284,220

(1) The balance sheet data as of December 31, 2014 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 Overview and Regulatory Environment

We deliver information technology ("IT") solutions and services to help healthcare organizations achieve optimal clinical, financial and operational results. We sell our solutions to physicians, hospitals, governments, health systems, health plans, life-sciences companies, retail clinics, retail pharmacies, pharmacy benefit managers, insurance companies, employer wellness clinics, and post-acute organizations, such as home health and hospice agencies. We help our clients improve the quality and efficiency of health care with solutions that include electronic health records ("EHRs"), connectivity, private cloud hosting, outsourcing, analytics, patient engagement, clinical decision support and population health management.

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

Globally, healthcare providers face an aging population and the challenge of caring for an increasing number of patients with chronic diseases. At the same time, practitioners worldwide are also under growing pressure to demonstrate the delivery of high-quality care at lower costs. Population health management, analytics, connectivity based on open Application Programming Interfaces ("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 Quality Payment Program ("QPP"), launched by the Centers for Medicare & Medicaid Services ("CMS") in response to the passage of the Medicare Access and CHIP Reauthorization Act ("MACRA"). As healthcare providers and payers 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. Additionally, there is a small but growing portion of the market interested in payment models not reliant on insurance, such as the direct primary care model, with doctors and other healthcare professionals interested in the clinical value of the interoperable EHR separate and apart from payment mechanisms established by public or commercial payers or associated reporting requirements.

We believe our solutions are delivering value to our clients by providing them with powerful connectivity, as well increasingly robust patient engagement and care coordination tools, enabling users to successfully participate in alternative payment models that reward high value care delivery. Population health management is commonly viewed as one of the critical next frontiers in healthcare delivery, and we expect this 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 alternative payment models that reward high value care delivery) have been rapidly moving health care toward a time where EHRs are as common as practice management or other financial systems in all provider offices. As a result, we believe that legislation, such as the aforementioned MACRA, as well as other government-driven initiatives (including at the state level), will continue to affect healthcare IT adoption and expansion, including products and solutions like ours. We also believe that we are well-positioned in the market to take advantage of the ongoing opportunity presented by these changes.

Given that CMS has proposed further regulations which require EHRs and other health information technology, including the QPP and payment rules for upcoming years, even as we comply with previously published rules, 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, the changing strategies related to 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 successfully completed the testing process and are 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.

Use of the Medicare Sustainable Growth Rate reimbursement model ceased in 2015 with the passage of the MACRA. The MACRA further encouraged the adoption of health IT necessary to satisfy new requirements more closely associating the report of quality measurements to Medicare payments. Following the finalization of the rule for the QPP in 2017, providers accepting payment from Medicare were given an opportunity to select one of two payment models: the Merit-based Incentive Payment System ("MIPS") or an Advanced Alternative Payment Model ("APM"). Both of these programs require substantive reporting on quality measures; additionally, the MIPS consolidated several preexisting incentive programs, including Meaningful Use and Physician Quality Reporting System, under one umbrella, as required by statute. The implementation of this new law is likely driving additional interest in our products among providers who were not eligible for or chose not to participate in the Health Information Technology for Economic and Clinical Health Act ("HITECH") incentive program but now see a new reason to adopt EHRs and other health information technologies or by those needing to purchase more robust systems to help comply with more complex MACRA requirements. Additional regulations continue to be released annually clarifying requirements related to reporting and quality measures, which will enable physician populations and healthcare organizations to make strategic decisions about the purchase of analytic software or other solutions important to comply with the new law and associated regulations.

HITECH resulted in additional related new orders for our EHR products, and we believe that the MACRA could drive purchases of not only EHRs but additional technologies necessary in advanced payment models. Large physician groups will continue to purchase and enhance their use of EHR technology; while the number of very large practices with over 100 physicians that have not yet acquired such technology is insignificant, those considering replacement purchases are increasing. Such practices may choose to replace older EHR technology in the future as regulatory requirements (such as those related to Advanced APMs) and business realities dictate the need for updates and upgrades, as well as additional features and functionality. As incentive payment strategies shift in policies under the current Presidential Administration in the United States, the role of commercial payers and their continued expansion of alternative payment models and interest in attaining larger volumes of clinical data, as well as the anticipated growth in Medicaid payment models, are expected to provide additional incentives for purchase and expansion.

We also continue to see activity in local community-based buying, whereby individual hospitals, health systems and integrated delivery networks subsidize the purchase of EHR licenses or related services for local, affiliated physicians and physicians across their employed physician base in order to leverage buying power and help those practices take advantage of payment reform opportunities. This activity has also resulted in a pull-through effect where smaller practices affiliated with a community hospital are motivated to participate in a variety of incentive programs, while the subsidizing health system expands connectivity within the local provider community. We believe that the 2013 extension of exceptions to the Stark Law and Anti-Kickback Statute, which allowed hospitals and other organizations to subsidize the purchase of EHRs, will continue to contribute to the growth of this market dynamic, and we await announced regulatory revisions from HHS that are expected to further support value-based payment models and their associated purchasing arrangements between hospitals and physician practices. We also believe that new orders driven by the MACRA legislation and related to EHR and community-based activity may continue to come in as physicians in those small- and medium-sized practices seek to avoid payment adjustments stemming from the QPP or programs implemented by commercial payers. The associated challenge we face is to successfully position, sell, implement and support our products to hospitals, health systems or integrated delivery networks that subsidize their affiliated physicians. We believe the community programs we have in place will help us penetrate these markets.

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

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Additionally, other public laws to reform the United States healthcare system contain various provisions which may impact us and our clients. Continued efforts by the current Presidential Administration and Congress to alter aspects of the Patient Protection and Affordable Care Act (as amended, the "PPACA") create uncertainty for us and for our clients, particularly as it relates to funding of the cost sharing subsidies. Some laws currently in place may have a positive impact by requiring the expanded use of EHRs, quality measurement, prescription drug monitoring and analytics tools to participate in certain federal, state or private sector programs. Others, such as adjustments made to the PPACA by the current presidential Administration and Congress, laws or regulations mandating reductions in reimbursement for certain types of providers, decreasing insurance coverage of patients, state level requests for waivers from CMS related to Medicaid modeling, or increasing regulatory oversight of our products or our business practices, may have a negative impact by reducing the resources available to purchase our products. Increases in fraud and abuse enforcement and payment adjustments for non-participation in certain programs or overpayment of certain incentive payments may also adversely affect participants in the healthcare sector, including us. Generally, Congressional oversight of EHRs and health information technology increased in recent years, including a specific focus on perceived interoperability failures and physician frustration with user burden, as well as any contributing factors to such dissatisfaction, which could impact our clients and our business. The passage of the 21st Century Cures Act in December 2016 assuaged some concerns about interoperability and possible FDA oversight of EHRs, but we will be paying close attention to the regulations on data blocking that are expected shortly from HHS. Congressional focus on addressing the opioid epidemic in part through technological applications and reducing clinician burden are likely to continue, as well. The Administration is also taking action in some areas that may or directly or indirectly affect Allscripts and our clients, including efforts to increase health-related price transparency in order to support patients in applying market-based pressures to the nation's challenge of cost containment. Further, CMS has proposed changes to the Evaluation & Management coding structure that ties closely to our clients' requirements to document the care they are delivering prior to payment. We expect these changes may have a positive effect on clinician satisfaction with our EHRs, if implemented as proposed, though the fundamentals of payment will remain in transition to value-based payment models.

New payment and delivery system reform programs, including those related to the Medicare program, are increasingly being rolled out at the state level through Medicaid administrators, as well as through the private sector, presenting additional opportunities for us to provide software and services to our clients who participate.

We 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.

Summary of Results

During 2018, we continued to make incremental progress 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 the Company for sustainable long-term growth both domestically and globally. In that regard, we had success across the below key areas:

- U.S. Core Solutions and Services: We expanded the breadth of our solutions through both internal innovation and acquisitions. During 2018, completed the acquisitions of Practice Fusion, Inc. and Health Grid Holding Company. Practice Fusion offers affordable certified cloud-based electronic health record for traditionally hard-to-reach small, independent physician practices. Health Grid is a patient engagement solutions provider that helps independent providers, hospitals and health systems improve patient interactions and satisfaction. We also announced a new mobile and cloud-based EHR - Avenel™.
- Value-based Care: During 2018, as the healthcare industry continues its transition toward value-based care model, we launched our new integrated data systems and services payer and life sciences business and brand Veradigm™,

which combines data-driven clinical insights with actionable tools for clinical workflow, research, analytics and media.

- Capital Deployment and Operational Efficiency: During 2018, we completed the integration of the Enterprise Information Solutions Business (the "EIS Business") systems and solutions into our operations and solutions offerings. This integration included the divestitures of the Strategic Sourcing business and of the OneContent business. We also sold our investment in Netsmart. These divestitures generated cash proceeds of over $800 million, which we partly used for share repurchases and to pay-off balances outstanding under our senior secured credit facility.

Total revenue for the year ended December 31, 2018 was $1.7 billion, an increase of 17% compared with the year ended December 31, 2017. For the year ended December 31, 2018, software delivery, support and maintenance revenue totaled $1.1 billion, an increase of 18%, and client services revenue totaled $622 million, an increase of 15%, respectively, as compared with the year ended December 31, 2017.

Gross profit increased during 2018 compared to 2017, primarily due to improved profitability from our recurring subscription-based software sales and recurring managed services solutions as we continue to expand our customer base for these services, including through recent acquisitions. Gross margin declined by 0.9% to 41.4% compared with prior year period gross margin of 42.3% primarily due to lower sales of higher margin perpetual software licenses and higher amortization of software development and acquisition-related assets driven by additional amortization expense associated with intangible assets acquired as part of recent acquisitions.

Our contract backlog as of December 31, 2018 was $3.9 billion, a decrease of 7% compared with our contract backlog as of December 31, 2017.

On December 31, 2018, we sold all of the Class A Common Units of Netsmart LLC (“Netsmart”) held by the Company for aggregate consideration of $566 million in cash, plus a final settlement as determined following the closing. Netsmart was originally acquired in April 2016 and we realized a gain on sale of $500.5 million. Prior to the sale, Netsmart comprised a separate reportable segment, which due to its significance to our historical consolidated financial statements and results of operations, is now reported as a discontinued operation as a result of the sale for all periods presented.

Revenues and Expenses

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

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

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

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

Asset and goodwill impairment charges consist primarily of non-cash charges related to our decision to discontinue several software development projects and the impairment of several intangible assets and goodwill related to our acquisition of the patient/provider engagement solutions business from NantHealth in 2017.

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

Interest expense consists primarily of interest on the 1.25% Notes and on the outstanding debt under our senior secured credit facility, including the amortization of debt discounts and debt issuance costs.

Gain on sale of businesses, net consists of net gains from the divestitures during 2018 of the OneContent and Strategic Sourcing businesses, both of which were acquired as part of the EIS Business acquisition during the fourth quarter of 2017.

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

Equity in net income (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.

Income from discontinued operations includes the results of operations of Netsmart, including the gain from the sale of Netsmart, and of two solutions acquired with the EIS Business, which were sunset in 2018.

Critical Accounting Policies and Estimates

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

Revenue Recognition

We adopted Financial Accounting Standards Board (“FASB”) Accounting Standards Update 2014-09, Revenue from Contracts with Customers: Topic 606 (“ASU 2014-09”) effective on January 1, 2018 using the modified retrospective method. ASU 2014-09 superseded nearly all previously existing revenue recognition guidance under GAAP. Refer to Note 2, “Revenue from Contracts with Customers” to our consolidated financial statements included in Part II, Item 8, “Financial Statements and Supplementary Data” of this Form 10-K for detailed discussion about our revenue recognition accounting policies.

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, an impairment loss equal to the excess will be recorded not to exceed the carrying amount of goodwill assigned to the reporting unit. The recoverability of indefinite-lived intangible assets is assessed by comparison of the carrying value of an asset to its estimated fair value. If we determine that the carrying value of an asset exceeds its estimated fair value, an impairment loss equal to the excess will be recorded.

The determination of the fair value of our reporting units is based on a combination of a market approach, 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 expectations of future performance and the expected economic environment, which are partly based on our historical experience. Our estimates are subject to change given the inherent uncertainty in predicting future results. Additionally, the discount rate and the terminal growth rate are based on our judgment of the rates that would be utilized by a hypothetical market participant. As part of the goodwill impairment testing, we also consider our market capitalization in assessing the reasonableness of the fair values estimated for our reporting units.

During 2018, we made several organizational changes that affected our Clinical and Financial Solutions and Population Health reportable segments. Refer to Note 17, "Business Segments" to our consolidated financial statements included in Part II, Item 8, "Financial Statements and Supplementary Data" of this Form 10-K for detailed discussion about these changes. During 2018, as a result of these organizational changes, we performed interim goodwill

impairment tests as of January 1, 2018 and July 1, 2018. While there was no impairment indicated as a result of both these interim tests, the estimated fair value of our Hospitals and Health Systems reporting unit exceeded the unit's carrying value by 10%. The fair values of all other reporting units substantially exceeded their carrying values.

We performed our annual goodwill impairment test as of October 1, 2018. As a result of this test, we concluded that the carrying value of the NantHealth reporting unit exceeded its fair value. Our latest available financial forecasts at the time of the annual goodwill impairment test reflected that projected future operating costs exceeded projected revenues resulting in negative operating margins for the NantHealth reporting unit. As a result, we recognized a goodwill impairment charge of $13.5 million, representing the entire goodwill balance assigned to the NantHealth reporting unit. In addition, the results of the annual goodwill impairment test indicated that the estimated fair value of our Hospitals and Health Systems reporting unit exceeded the unit's carrying value by less than 10%. The fair values of all other reporting units substantially exceeded their carrying values. As of October 1, 2018, the goodwill allocated to the Hospitals and Health Systems reporting unit was $516.8 million.

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

Software Development Costs

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

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

Income Taxes

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

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

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

the income tax (provision) benefit line of our consolidated statements of operations.

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

Fair Value Measurements

Fair value measurements are based upon observable and unobservable inputs. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect our view of market participant assumptions in the absence of observable market information. We utilize valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs. The fair values of assets and liabilities required to be measured at fair value are categorized based upon the level of judgment associated with the inputs used to measure their value in one of three categories (Levels 1 to 3). The values of assets and liabilities assigned to Level 3 require the most judgement and are based unobservable inputs or prices for which little or no market data exists. Therefore, Level 3 values can be susceptible to significant fluctuations, both positive and negative, from changes in the underlying assumption used by management. Refer to Note 4, “Fair Value Measurements” to our consolidated financial statements included in Part II, Item 8, “Financial Statements and Supplementary Data” of this Form 10-K for detailed information about financial assets and liabilities measured at fair value on a recurring basis.

Recent Accounting Pronouncements

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

Overview of Consolidated Results

(In thousands)	Year Ended December 31,			2018 % Change from	2017 % Change from
	2018	2017	2016	2017	2016
Revenue:					
Software delivery, support and maintenance	$1,128,263	$958,187	$899,299	17.7 %	6.5 %
Client services	621,699	539,521	486,770	15.2 %	10.8 %
Total revenue	1,749,962	1,497,708	1,386,069	16.8 %	8.1 %
Cost of revenue:					
Software delivery, support and maintenance	357,039	295,593	276,401	20.8 %	6.9 %
Client services	565,504	484,591	437,154	16.7 %	10.9 %
Amortization of software development and acquisition-related assets	102,876	84,725	71,215	21.4 %	19.0 %
Total cost of revenue	1,025,419	864,909	784,770	18.6 %	10.2 %
Gross profit	724,543	632,799	601,299	14.5 %	5.2 %
Gross margin %	41.4 %	42.3 %	43.4 %		
Selling, general and administrative expenses	450,967	400,688	334,521	12.5 %	19.8 %
Research and development	268,409	202,282	178,534	32.7 %	13.3 %
Asset impairment charges	58,166	0	4,650	NM	100.0 %
Goodwill impairment charge	13,466	0	0	NM	NM
Amortization of intangible and acquisition-related assets	26,587	17,345	15,884	53.3 %	9.2 %
(Loss) income from operations	(93,052)	12,484	67,710	NM	(81.6 %)
Interest expense	(50,914)	(37,540)	(29,478)	35.6 %	27.3 %
Other income (loss), net	74	(512)	829	114.5 %	(161.8 %)
Gain on sale of businesses, net	172,258	0	0	NM	NM
Impairment of long-term investments	(15,487)	(165,290)	0	(90.6 %)	NM
Equity in net income (loss) of unconsolidated investments	259	821	(7,501)	(68.5 %)	110.9 %
Income (loss) from continuing operations before income taxes	13,138	(190,037)	31,560	106.9 %	NM
Income tax (provision) benefit	(469)	5,514	(309)	(108.5 %)	NM

Effective tax rate	3.6	%	2.9	%	1.0	%		
Income (loss) from continuing operations, net of tax	12,669		(184,523)		31,251		(106.9%)	NM
Loss from discontinued operations	(72,836)		(11,915)		(46,344)		NM	74.3%
Gain on sale of Netsmart	500,471		0		0		NM	NM
Income tax effect on discontinued operations	(32,497)		42,263		18,123		(176.9%)	133.2%
Income (loss) from discontinued operations, net of tax	395,138		30,348		(28,221)		NM	NM
Net (loss) income	407,807		(154,175)		3,030		NM	NM
Less: Net loss (income) attributable to non-controlling interest	4,527		1,566		(146)		189.1%	NM
Less: Accretion of redemption preference on redeemable convertible non-controlling interest - discontinued operations	(48,594)		(43,850)		(28,536)		10.8%	53.7%
Net loss attributable to Allscripts Healthcare Solutions, Inc. stockholders	$363,740		$(196,459)		$(25,652)		NM	NM

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

Revenue

(In thousands)	Year Ended December 31,			2018 % Change from 2017	2017 % Change from 2016
	2018	2017	2016		
Revenue:					
Software delivery, support and maintenance					
Recurring revenue	$967,990	$802,080	$752,084	20.7 %	6.6 %
Non-recurring revenue	160,273	156,107	147,215	2.7 %	6.0 %
Total software delivery, support and maintenance	1,128,263	958,187	899,299	17.7 %	6.5 %
Client services					
Recurring revenue	443,752	374,640	324,635	18.4 %	15.4 %
Non-recurring revenue	177,947	164,881	162,135	7.9 %	1.7 %
Total client services	621,699	539,521	486,770	15.2 %	10.8 %
Total revenue	$1,749,962	$1,497,708	$1,386,069	16.8 %	8.1 %

Year Ended December 31, 2018 Compared with the Year Ended December 31, 2017

The increase in revenue for the year ended December 31, 2018 compared with the year ended December 31, 2017 was primarily driven by incremental revenue from the acquisitions of the EIS Business in the fourth quarter of 2017 and Practice Fusion in the first quarter of 2018. Total revenue includes the amortization of acquisition-related deferred revenue adjustments, which totaled $24 million and $29 million during the years ended December 31, 2018 and 2017, respectively.

Software delivery, support and maintenance revenue consists of recurring subscription-based software sales, support and maintenance revenue, recurring transactions revenue, as well as non-recurring perpetual software licenses sales, hardware resale and non-recurring transactions revenue. 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 both recurring and non-recurring software delivery, support and maintenance and client services revenue for the year ended December 31, 2018 compared with the prior year was also largely driven by incremental revenue from the above-mentioned two acquisitions.

The percentage of recurring and non-recurring revenue of our total revenue was 81% and 19%, respectively, during the year ended December 31, 2018, compared with 79% and 21%, respectively, during the year ended December 31, 2017.

Year Ended December 31, 2017 Compared with the Year Ended December 31, 2016

The increase in revenue for the year ended December 31, 2017 compared with the year ended December 31, 2016 was primarily driven by incremental revenue from the acquisitions of the EIS Business and the patient/provider engagement solutions business from NantHealth, which contributed $112 million of revenue in the fourth quarter of 2017. Revenue from perpetual software license sales of our acute solutions and transaction-based services was also higher compared with the prior year. These increases were partly offset by higher amortization of acquisition-related deferred revenue adjustments during the year ended December 31, 2017 as compared with the prior year, which totaled $29 million and $1 million, respectively.

The growth in both recurring and non-recurring software delivery, support and maintenance and client services revenue for the year ended December 31, 2017 compared with the prior year was also largely driven by incremental revenue from the EIS Business and NantHealth acquisitions. Higher revenues associated with the sale of Allscripts

integrated clinical software applications and health management and coordinated care solutions, including associated client services to implement these solutions, and private cloud hosting client services also contributed to these increases.

The percentage of recurring and non-recurring revenue of our total revenue was 79% and 21%, respectively, during the year ended December 31, 2017, representing a slight shift compared with 78% and 22%, respectively, during the year ended December 31, 2016.

Gross Profit

(In thousands)	Year Ended December 31,			2018 % Change from	2017 % Change from
	2018	2017	2016	2017	2016
Total cost of revenue	$1,025,419	$864,909	$784,770	18.6 %	10.2 %
Gross profit	$724,543	$632,799	$601,299	14.5 %	5.2 %
Gross margin %	41.4 %	42.3 %	43.4 %		

Year Ended December 31, 2018 Compared with the Year Ended December 31, 2017

Gross profit increased during the year ended December 31, 2018 compared with the year ended December 31, 2016 primarily due to the above-mentioned recent acquisitions. From a revenue mix perspective, gross profit associated with our recurring revenue streams, which include the delivery of recurring subscription-based software sales, support and maintenance, and recurring client services improved as we continued to expand our customer base for these services, particularly those related to outsourcing and revenue cycle management. Gross profit associated with our non-recurring software delivery, support and maintenance revenue stream decreased primarily due to fewer perpetual software license sales of our acute and population health management solutions. Gross profit associated with our non-recurring client services revenue stream, which includes non-recurring project-based client services, decreased primarily driven by higher internal personnel costs, including those related to incremental resources from recent acquisitions. Gross margin decreased primarily due to lower sales of higher margin perpetual software licenses and higher amortization of software development and acquisition-related assets driven by additional amortization expense associated with intangible assets acquired as part of recent acquisitions.

Year Ended December 31, 2017 Compared with the Year Ended December 31, 2016

Gross profit increased during the year ended December 31, 2017 compared with the year ended December 31, 2016 primarily due to the acquisition of the EIS Business in the fourth quarter of 2017. From a revenue mix perspective, gross profit associated with our recurring revenue streams, which include the delivery of recurring subscription-based software sales, support and maintenance, and recurring client services, particularly private cloud hosting, improved as we continued to expand our customer base for these services. Gross profit associated with our non-recurring software delivery, support and maintenance revenue stream, which includes perpetual software licenses sales, hardware resale and non-recurring transactions revenue, also increased primarily driven by higher gross profit from sales of our population health management and acute solutions. These increases were partly offset by higher amortization of software development and acquisition-related assets compared with the prior year, including $4 million of additional amortization expense associated with intangible assets acquired as part of the EIS Business acquisition.

Gross margin decreased by approximately 1% primarily due to higher amortization of software development and acquisition-related assets.

Selling, General and Administrative Expenses

(In thousands)	Year Ended December 31,			2018 % Change from 2017	2017 % Change from 2016
	2018	2017	2016		
Selling, general and administrative expenses	$450,967	$400,688	$334,521	12.5 %	19.8 %

Year Ended December 31, 2018 Compared with the Year Ended December 31, 2017

Selling, general and administrative expenses increased during the year ended December 31, 2018 compared with the prior year, primarily due to higher incentive-based compensation and incremental expenses from the acquisitions of the EIS Business, Practice Fusion and Health Grid, including associated transaction-related, severance and legal expenses as a result of these acquisitions.

Year Ended December 31, 2017 Compared with the Year Ended December 31, 2016

Selling, general and administrative expenses increased during the year ended December 31, 2017 compared with the year ended December 31, 2016, primarily due to higher transaction-related, severance and legal expenses mostly

related to the acquisition of the EIS Business.

Research and Development

(In thousands)	Year Ended December 31,			2018 % Change from 2017	2017 % Change from 2016
	2018	2017	2016		
Research and development	$268,409	$202,282	$178,534	32.7 %	13.3 %

Year Ended December 31, 2018 Compared with the Year Ended December 31, 2017

Research and development expenses increased during the year ended December 31, 2018 compared with the prior year, primarily due to higher overall personnel costs, including higher incentive-based compensation and severance, and additional expenses from the acquisition of the EIS Business, Practice Fusion and Health Grid, which were partly offset by an increase in the amount of capitalized software costs. The increase in capitalized software development costs was primarily driven by our continued investment in expanding the capabilities and functionality of our traditional ambulatory, acute and post-acute platforms as well as incremental investments in the emerging areas of precision medicine and cloud-based solution delivery. In addition, we incurred costs to integrate the solutions acquired through the above noted acquisitions. 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, 2017 Compared with the Year Ended December 31, 2016

Research and development expenses increased by 13% during the year ended December 31, 2017 compared with the prior year, primarily due to higher overall personnel costs and additional expenses from the acquisition of the EIS Business, and lower amount of capitalized software costs in 2017 compared with 2016. The increase in research and development expenses during the year ended December 31, 2017 was partially mitigated by our continued efforts to streamline our operations and improve operational efficiency, including headcount actions taken during the second half of 2017. 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.

Asset Impairment Charges

(In thousands)	Year Ended December 31,			2018 % Change from 2017	2017 % Change from 2016
	2018	2017	2016		
Asset impairment charges	$58,166	$ 0	$4,650	NM	(100.0 %)

Year Ended December 31, 2018 Compared with the Year Ended December 31, 2017

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

Year Ended December 31, 2017 Compared with the Year Ended December 31, 2016

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.

Goodwill Impairment Charge

	Year Ended December 31,			2018 % Change	2017 % Change
(In thousands)	2018	2017	2016	from 2017	from 2016
Goodwill impairment charge	$13,466	$ 0	$ 0	NM	NM

Year Ended December 31, 2018 Compared with the Year Ended December 31, 2017

During the year ended December 31, 2018, we impaired all of the goodwill previously recognized as part of the acquisition of NantHealth's patient/provider engagement solutions business following the completion of our annual goodwill impairment. Refer to Note 6, "Goodwill and Intangible Assets" to our consolidated financial statements included in Part II, Item 8, "Financial Statements and Supplementary Data" of this Form 10-K for further information regarding this impairment.

Amortization of Intangible and Acquisition-Related Assets

(In thousands)	Year Ended December 31,			2018 % Change from 2017	2017 % Change from 2016
	2018	2017	2016		
Amortization of intangible and acquisition-related assets	$26,587	$17,345	$15,884	53.3 %	9.2 %

Year Ended December 31, 2018 Compared with the Year Ended December 31, 2017

The increase in amortization expense for the year ended December 31, 2018 compared with the prior year was primarily due to incremental amortization expense associated with intangible assets acquired as part of business acquisitions completed during the fourth quarter of 2017 and the first half of 2018, the largest being the acquisitions of the EIS Business and Practice Fusion. Refer to Note 3, “Business Combinations” 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 business acquisitions.

Year Ended December 31, 2017 Compared with the Year Ended December 31, 2016

The increase in amortization expense for the year ended December 31, 2017 compared with the year ended December 31, 2016 was primarily due to a full year of amortization expense associated with the value of intangible assets recognized in connection with the acquisitions of controlling interests in several third parties during the fourth quarter of 2016 as well as amortization expense associated with intangible assets acquired as part of the EIS Business acquisition in the fourth quarter of 2017.

Interest Expense

(In thousands)	Year Ended December 31,			2018 % Change from 2017	2017 % Change from 2016
	2018	2017	2016		
Interest expense	$50,914	$37,540	$29,478	35.6 %	27.3 %

Year Ended December 31, 2018 Compared with the Year Ended December 31, 2017

Interest expense during the year ended December 31, 2018 increased compared with the prior year primarily due to the combination of higher average outstanding borrowings under Allscripts’ senior secured credit facility and higher interest rates. The higher average outstanding borrowings were largely due to additional borrowings to finance the acquisition of the EIS Business during the fourth quarter of 2017 and the acquisitions of Practice Fusion and Health Grid during 2018.

Year Ended December 31, 2017 Compared with the Year Ended December 31, 2016

Interest expense during the year ended December 31, 2017 was higher compared with the year ended December 31, 2016 primarily due to higher outstanding borrowings under Allscripts’ senior secured credit facility, partly due to additional borrowings of $170 million to finance the acquisition of the EIS Business during the fourth quarter of 2017. In addition, the interest rates on Allscripts’ senior secured credit facility were higher during 2017 as compared with 2016.

Gain on Sale of Businesses, Net

(In thousands)	Year Ended December 31, 2018	2017	2016	2018 % Change from 2017	2017 % Change from 2016
Gain on sale of businesses, net	$172,258	$ 0	$ 0	NM	NM

Year Ended December 31, 2018 Compared with the Year Ended December 31, 2017

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

Impairment of Long-term investments

(In thousands)	Year Ended December 31, 2018	2017	2016	2018 % Change from 2017	2017 % Change from 2016
Impairment of long-term investments	$15,487	$165,290	$ 0	(90.6 %)	NM

Year Ended December 31, 2018 Compared with the Year Ended December 31, 2017

During the year ended December 31, 2018, we recognized non-cash charges related to two of our cost-method equity investments and a related note receivable. These charges equaled the cost bases of the investments and the related note receivable prior to the impairment.

Year Ended December 31, 2017 Compared with the Year Ended December 31, 2016

During the year ended December 31, 2017, we recorded non-cash impairment charges of $165.3 million associated with two of the Company's long-term investments. The majority of the impairment charges relate to our previous investment in NantHealth common stock which we fully disposed of in connection with our acquisition of certain assets related to NantHealth's patient/provider engagement solutions business during the third quarter 2017.

Equity in Net Income (Loss) of Unconsolidated Investments

(In thousands)	Year Ended December 31,			2018 % Change from 2017	2017 % Change from 2016
	2018	2017	2016		
Equity in net income (loss) of unconsolidated investments	$259	$821	$(7,501)	(68.5 %)	110.9 %

Year Ended December 31, 2018 Compared with the Years Ended December 31, 2017 and 2016

Equity in net income (loss) of unconsolidated investments represents our share of the equity earnings (losses) of our investments in third parties accounted for under the equity method of accounting based on one quarter lag. The majority of the amount recognized during the year ended December 31, 2016 represents our share of the net losses incurred by NantHealth prior to NantHealth's initial public offering ("IPO") in June 2016, including the amortization of cost basis adjustments. Our investment in NantHealth common stock was accounted for as an available-for-sale marketable security after the IPO until the full disposition of the NantHealth common stock in the third quarter of 2017 in connection with our acquisition of certain assets related to NantHealth's patient/provider engagement solutions business.

Income Tax (Provision) Benefit

(In thousands)	Year Ended December 31,			2018 % Change from 2017	2017 % Change from 2016
	2018	2017	2016		
Income tax (provision) benefit	$(469)	$5,514	$(309)	(108.5 %)	NM
Effective tax rate	3.6 %	2.9 %	1.0 %		

Year Ended December 31, 2018 Compared with the Year Ended December 31, 2017

The United States Tax Cuts and Jobs Act (the "Tax Act") was enacted on December 22, 2017 and introduced significant changes to the income tax law in the United States. Effective in 2018, the Tax Act reduces the United States statutory tax rate from 35% to 21% and creates new taxes on certain foreign-sourced earnings and certain related-party payments, which are referred to as the Global Intangible Low-taxed Income ("GILTI") tax and Base Erosion and

Anti-Abuse Tax ("BEAT") rules, respectively. In addition, in 2017 we were subject to a one-time transition tax on accumulated foreign subsidiary earnings not previously subject to income tax in the United States.

Due to the timing of the enactment and the complexity involved in applying the provisions of the Tax Act, we made reasonable estimates of the effects and recorded provisional expense of $15.3 million in our financial statements for the year ended December 31, 2017 in accordance with guidance in Staff Accounting Bulletin No. 118 ("SAB 118"), which allowed a measurement period of up to one year after the enactment date of the Tax Act to finalize the recording of the related tax impacts. This provisional benefit included $10.1 million expense for remeasurement of deferred tax balances to reflect the lower federal rate and expense of $5.2 million for the one-time transition tax on accumulated foreign subsidiary earnings not previously subject to income tax in the United States. Adjustments to these provisional amounts that we recorded in 2018 did not have a significant impact on our consolidated financial statements. Our accounting for the effects of the enactment of United States Tax Reform is now complete. Due to our divestiture of our investment in Netsmart, the amounts noted above do not include the provisional amounts recorded by Netsmart in 2017.

Our provision for income taxes differs from the tax computed at the U.S. federal statutory income tax rate due primarily to valuation allowance, permanent differences, income attributable to foreign jurisdictions taxed at rates different from the United States federal statutory income tax rate, state taxes, tax credits and certain discrete items. Our effective tax rate for the year ended December 31, 2018, compared with the prior year, primarily due to the effects of the stricter executive compensation deduction provisions of the Tax Act recorded in 2018, offset by the United States federal rate reduction of 21% versus 35% in 2017.

In evaluating our ability to recover our deferred tax assets within the jurisdictions from which they arise, we consider all available evidence, including scheduled reversals of deferred tax liabilities, tax-planning strategies, and results of recent operations. In evaluating the objective evidence that historical results provide, we consider three years of cumulative operating income (loss). In the year ended December 31, 2018, we released $64.8 million of valuation allowance, mostly due to the utilization of capital loss carryforward against capital gain incurred during the year ended December 31, 2018 and he utilization of federal credit carryforwards.

Year Ended December 31, 2017 Compared with the Year Ended December 31, 2016

The Tax Act enacted on December 22, 2017, introduced significant changes to the income tax law in the United States that became effective in 2018. Due to the timing of the enactment and the complexity involved in applying the provisions of the Tax Act, we made reasonable estimates of the effects and recorded provisional amounts in our financial statements as of December 31, 2017. SAB 118 provided guidance for companies that had not completed their accounting for the income tax effects of the Tax Act in the period of enactment, allowing for a measurement period of up to one year after the enactment date of the Tax Act to finalize the recording of the related tax impacts. As of December 31, 2017, we had not completed our accounting for these tax effects, however, we made a reasonable estimate of the effects on our deferred tax balances and in relation to the transition tax. The remeasurement of our deferred tax balances to reflect the reduced federal rate resulted in net tax benefit of $26.0 million. In addition, we estimated and recorded tax expense of $5.2 million in our tax provision for the year ended December 31, 2017.

During the year ended December 31, 2017, we recorded $42.7 million in valuation allowance for federal capital loss carryforwards not expected to be realized before expiration. In addition, we recorded $5.3 million valuation allowance for federal credit carryforwards, and foreign and state net operating loss (“NOL”) carryforwards. 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 2017 taxable income. Using all available evidence, as of December 31, 2017, 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, 2017 as compared with the prior year, primarily due to the recording of valuation allowance of $48 million in 2017, while release of valuation allowance of $17.5 million was recorded in the prior year.

Discontinued Operations

(In thousands)	Year Ended December 31,			2018 % Change from 2017	2017 % Change from 2016
	2018	2017	2016		
Loss from discontinued operations	$(72,836)	$(11,915)	$(46,344)	NM	(74.3 %)
Gain on sale of Netsmart	500,471	$0	$0	NM	NM
Income tax effect on discontinued operations	(32,497)	42,263	18,123	(176.9 %)	133.2 %
Income (loss) from discontinued operations, net of tax	$395,138	$30,348	$(28,221)	NM	NM

Year Ended December 31, 2018 Compared with the Years Ended December 31, 2017 and 2016

On December 31, 2018, we sold all of the Class A Common Units of Netsmart owned by the Company. Prior to the sale, Netsmart comprised a separate reportable segment, which due to its significance to our historical consolidated financial statements and results of operations, is now reported as a discontinued operation as a result of the sale for all periods presented. The loss from discontinued operations represents the net of losses incurred by Netsmart for the years ended December 31, 2018, 2017 and 2016 partly offset by earnings attributable to two solutions acquired during

the fourth quarter of 2017 as part of the EIS Business that we no longer support effective as of March 31, 2018. Refer to Note 16, “Discontinued Operations” to our consolidated financial statements included in Part II, Item 8, “Financial Statements and Supplementary Data” of this Form 10-K for additional information regarding discontinued operations.

Non-Controlling Interests

(In thousands)	Year Ended December 31,			2018 % Change from 2017	2017 % Change from 2016
	2018	2017	2016		
Net loss (income) attributable to non-controlling interest	$4,527	$1,566	$(146)	189.1 %	NM
Less: Accretion of redemption preference on redeemable convertible non-controlling interest - discontinued operations	$(48,594)	$(43,850)	$(28,536)	10.8 %	53.7 %

Year Ended December 31, 2018 Compared with the Years Ended December 31, 2017 and 2016

The net loss (income) attributable to non-controlling interest represents the share of earnings of consolidated affiliates that is attributable to the affiliates' common stock that is not owned by us for each of the periods presented. The 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 prior to the sale of our investment in Netsmart on December 31, 2018.

Segment Operations

Overview of Segment Results

(In thousands)	Year Ended December 31,			2018 % Change from	2017 % Change from
	2018	2017	2016	2017	2016
Revenue:					
Clinical and Financial Solutions	$1,565,987	$1,337,030	$1,183,196	17.1 %	13.0 %
Population Health	190,706	173,809	177,394	9.7 %	(2.0 %)
Unallocated Amounts	(6,731)	(13,131)	25,479	(48.7 %)	(151.5 %)
Total revenue	$1,749,962	$1,497,708	$1,386,069	16.8 %	8.1 %
Gross Profit:					
Clinical and Financial Solutions	$663,005	$574,386	$496,595	15.4 %	15.7 %
Population Health	146,614	142,514	149,338	2.9 %	(4.6 %)
Unallocated Amounts	(85,076)	(84,101)	(44,634)	1.2 %	88.4 %
Total gross profit	$724,543	$632,799	$601,299	14.5 %	5.2 %
Income from operations:					
Clinical and Financial Solutions	$344,568	$335,005	$287,077	2.9 %	16.7 %
Population Health	100,118	112,577	123,685	(11.1 %)	(9.0 %)
Unallocated Amounts	(537,738)	(435,098)	(343,052)	23.6 %	26.8 %
Total (loss) income from operations	$(93,052)	$12,484	$67,710	NM	(81.6 %)

The results for the years ended December 31, 2017 and 2016 have been recast to conform to the current year presentation, which reflects several changes made to our organizational and reporting structure during the year ended December 31, 2018. Refer to Note 17, "Business Segments" to our consolidated financial statements included in Part II, Item 8, "Financial Statements and Supplementary Data" of this Form 10-K for detailed discussion about these changes to our segments.

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, connectivity and coordinated care solutions, 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,			2018 % Change	2017 % Change
	2018	2017	2016		

							from 2017		from 2016	
Revenue	$1,565,987		$1,337,030		$1,183,196		17.1	%	13.0	%
Gross profit	$663,005		$574,386		$496,595		15.4	%	15.7	%
Gross margin %	42.3	%	43.0	%	42.0	%				
Income from operations	$344,568		$335,005		$287,077		2.9	%	16.7	%
Operating margin %	22.0	%	25.1	%	24.3	%				

Year Ended December 31, 2018 Compared with the Year Ended December 31, 2017

Clinical and Financial Solutions revenue, gross profit and income from operations increased during the year ended December 31, 2018 compared with the year ended December 31, 2017, as higher revenue from recurring software delivery, support and maintenance, and recurring and non-recurring client services was partly offset by lower non-recurring software delivery, support and maintenance revenue. The increase in overall segment revenue was primarily as a result of the acquisitions of the EIS Business during the fourth quarter of 2017 and Practice Fusion during the first quarter of 2018. The decrease in non-recurring software delivery, support and maintenance revenue was primarily driven by fewer perpetual software license sales of our acute and coordinated care solutions as the prior year included several large transactions which did not recur in the current year.

Gross margin decreased during the year ended December 31, 2018 compared with the prior year primarily due to lower sales of higher margin perpetual software licenses, higher internal personnel costs related to incremental resources from recent acquisitions and to support anticipated new hosting client go-lives, and higher amortization of capitalized software development and acquired technology-related intangible assets.

Operating margin declined during the year ended December 31, 2018 compared with the prior year due to increases in selling, general and administrative, and research and development expenses, mostly driven by recent acquisitions, partly offset by higher capitalization of internal software development expenses.

Year Ended December 31, 2017 Compared with the Year Ended December 31, 2016

Clinical and Financial Solutions revenue increased during the year ended December 31, 2017 compared with the prior year, driven by higher revenue across all of our primary revenue streams which include both recurring and non-recurring software delivery, support and maintenance and client services revenue. This increase was primarily driven by incremental revenue from the acquisitions of the EIS Business and patient/provider engagement solutions business from NantHealth, which contributed $112 million of revenue. The remainder of the increase was driven by recurring revenue from higher subscription-based, revenue cycle management and other transaction-based services revenue, and higher recurring private cloud hosting client services revenue. The increase in revenue cycle management and other transaction-based services revenue was due to the activation of several new accounts, which more than offset certain other projects that ended in 2016. Revenue related to private cloud hosting increased primarily due to several new large client go-lives. Non-recurring revenue increased compared with the year ended December 31, 2016, as higher software license sales of our acute solutions and related professional services revenue, driven by a higher number of larger acute client expansions, was partly offset by lower non-recurring revenue associated with our ambulatory solutions attributable to fewer large implementations of our ambulatory solutions as certain large service projects were mostly completed in 2016.

Gross profit and gross margin increased during the year ended December 31, 2017 compared with the prior primarily due to gross profit from the EIS Businesses, which also had higher average margins compared with our existing businesses included within the Clinical and Financial Solutions segment. During 2017, we also recognized certain credits related to our hosting partners which did not occur during the prior year. These increases were partially offset by a greater reliance on third-party products and services, higher internal costs related to anticipated new outsourcing clients go-lives and higher amortization of capitalized software development and acquired technology-related intangible assets associated with our existing businesses.

Income from operations also increased primarily driven by the same factors as above. The operating margin increased slightly as higher operating margin associated with the EIS Business was offset by an increase in selling, general and administrative expenses, primarily due to higher marketing and professional services expenses.

Population Health

Our Population Health segment derives its revenue from the sale of health management, financial management and patient engagement solutions, which are mainly targeted at hospitals, health systems, other care facilities and ACOs. These solutions enable clients to transition and analyze care across the entire care community.

(In thousands)	Year Ended December 31,			2018 % Change from 2017	2017 % Change from 2016
	2018	2017	2016		
Revenue	$190,706	$173,809	$177,394	9.7 %	(2.0 %)

Gross profit	$146,614		$142,514		$149,338		2.9	%	(4.6	%)
Gross margin %	76.9	%	82.0	%	84.2	%				
Income from operations	$100,118		$112,577		$123,685		(11.1	%)	(9.0	%)
Operating margin %	52.5	%	64.8	%	69.7	%				

Year Ended December 31, 2018 Compared with the Year Ended December 31, 2017

Population Health revenue increased during the year ended December 31, 2018 compared with the year ended December 31, 2017, primarily due to increased sales of our financial management and subscription-based patient engagement solutions, including associated client services to implement and support these solutions. Gross profit increased slightly as the growth in revenue was mostly offset by higher internal personnel costs, including incremental resources from the Health Grid acquisition. Gross margin decreased during the year ended December 31, 2018 compared with the prior year, primarily due to the increase in internal personnel costs.

Income from operations and the operating margin decreased during the year ended December 31, 2018 compared with the prior year, primarily due to higher selling, general and administrative expenses and research and development investments incurred to support business growth in this segment.

Year Ended December 31, 2017 Compared with the Year Ended December 31, 2016

Population Health revenue and gross profit declined during the year ended December 31, 2017 compared with the year ended December 31, 2016 primarily due to lower software delivery, support and maintenance revenue associated with the sale of our transition of care solutions and higher amortization of capitalized software development and acquired technology-related intangible assets. Income from operations also declined as a result of an increase in selling, general and administrative expenses, which was partly offset by higher capitalization of internal software development expenses. Gross margin and operating margin decreased due the same factors that impacted the overall profitability of the segment.

Unallocated Amounts

In determining revenue, gross profit and income from operations for our segments, 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. 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 the “Unallocated Amounts” category. The “Unallocated Amounts” category also includes (i) corporate general and administrative expenses (including marketing expenses) and certain research and development expenses related to common solutions and resources that benefit all of our business units, all of which are centrally managed, (ii) revenue and the associated cost from the resale of certain ancillary products, primarily hardware and (iii) the results of the 2bPrecise operating segment.

(In thousands)	Year Ended December 31,			2018 % Change from 2017	2017 % Change from 2016
	2018	2017	2016		
Revenue	$(6,731)	$(13,131)	$25,479	(48.7)%	(151.5)%
Gross profit	$(85,076)	$(84,101)	$(44,634)	1.2 %	88.4 %
Gross margin %	NM	NM	(175.2)%		
Loss from operations	$(537,738)	$(435,098)	$(343,052)	23.6 %	26.8 %
Operating margin %	NM	NM	NM		

Year Ended December 31, 2018 Compared with the Year Ended December 31, 2017

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, 2018 compared with the prior year improved primarily due to lower recognition of amortization of acquisition-related deferred revenue adjustments, which reflect the fair value adjustments to deferred revenues acquired in the EIS Business, Practice Fusion, Health Grid and NantHealth provider/patient engagement acquisitions. Such adjustments totaled $24 million for the year ended December 31, 2018 compared with $29 million for the year ended December 31, 2017.

Gross unallocated expenses, which represent the unallocated loss from operations excluding the impact of revenue, totaled $531 million for the year ended December 31, 2018 compared with $422 million for the prior year. The increase in the year ended December 31, 2018 compared with prior year was primarily driven by higher transaction-related, severance and legal expenses, primarily related to the acquisitions of the EIS Business, Practice Fusion and Health Grid, which included higher (i) asset impairment charges of $58 million, (ii) goodwill impairment charges of $14 million, (iii) higher transaction-related, severance and legal expenses of $30 million, and (iii) higher

amortization of intangible and acquisition-related asset of $9 million. The increase in amortization expense was primarily due to additional amortization expense associated with intangible assets acquired as part of business acquisitions completed since the third quarter of 2017.

Year Ended December 31, 2017 Compared with the Year Ended December 31, 2016

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, 2017 compared with the prior year decreased primarily due to the recognition of $29 million of amortization of acquisition-related deferred revenue adjustments, which reflect the fair value adjustments to deferred revenues acquired in the EIS Business and NantHealth provider/patient engagement acquisitions. Additionally, the year ended December 31, 2016 includes approximately $8 million of revenue related to our Homecare™ business prior to its sale to Netsmart in April 2016, while the year ended December 31, 2017 does not include any activity related to the Homecare™ business. Hardware revenue for the year ended December 31, 2017 was slightly lower compared with the prior year.

Gross unallocated expenses, which represent the unallocated loss from operations excluding the impact of revenue, totaled $422 million for the year ended December 31, 2017 compared to $369 million for the year ended December 31, 2016. This increase was primarily driven by increases in selling, general and administrative expenses of $52 million and research and development expenses of $4 million, partially offset by a decrease in asset impairment charges of $5 million. The increases selling, general and administrative expenses and research and development expenses were primarily due to higher transaction-related, severance and legal expenses, and additional expenses mostly related to the acquisition of the EIS Business during the fourth quarter of 2017.

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, 2018	2017	% Change
Software delivery, support and maintenance	$2,507	$2,533	(1.0 %)
Client services	1,350	1,624	(16.9 %)
Total contract backlog	$3,857	$4,157	(7.2 %)

Total contract backlog as of December 31, 2018 decreased compared with December 31, 2017. Backlog excludes amounts attributable to Netsmart. Total contract backlog can fluctuate between periods based on the level of revenue and bookings as well as the timing and mix of renewal activity and periodic revalidations.

We estimate that the aggregate contract backlog as of December 31, 2018 will be recognized as revenue in future years as follows:

Year Ended December 31,	(Percentage of Total Backlog)
2019	39 %
2020	22 %
2021	15 %
2022	9 %
2023	5 %
Thereafter	10 %
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, 2018, our principal sources of liquidity consisted of cash and cash equivalents of $185 million and available borrowing capacity of $899 million under our revolving credit 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, 2018	2017	2016	2018 $ Change from 2017	2017 $ Change from 2016
Net income (loss)	$407,807	$(154,175)	$3,030	$561,982	$(157,205)

Less: Income (loss) from discontinued operations	395,138	30,348	(28,221)	364,790	58,569
(Loss) Income from continuing operations	12,669	(184,523)	31,251	197,192	(215,774)
Non-cash adjustments to net income (loss)	136,651	351,835	184,578	(215,184)	167,257
Cash impact of changes in operating assets and liabilities	(60,086)	57,746	18,519	(117,832)	39,227
Net cash provided by operating activities - continuing operations	89,234	225,058	234,348	(135,824)	(9,290)
Net cash provided by operating activities - discontinued operations	(21,343)	54,357	34,656	(75,700)	19,701
Net cash provided by operating activities	$67,891	$279,415	$269,004	$(211,524)	$10,411

Year Ended December 31, 2018 Compared with the Year Ended December 31, 2017

Net cash provided by operating activities – continuing operations decreased during the year ended December 31, 2018 compared with the prior year primarily due to working capital changes and higher costs during the year ended December 31, 2018 compared with the prior year, which primarily included higher interest expense, transaction-related and legal expenses, and incentive-based compensation payments. The decrease in non-cash adjustments to net loss was primarily driven by lower other-than-temporary non-cash impairment charges associated with long-term investments, intangibles and goodwill during the year ended December 31, 2018 compared with the prior year.

Net cash provided by operating activities – discontinued operations decreased during the year ended December 31, 2018 compared with the prior year primarily driven by the additional tax provision relating to the gain from the sale of our investment in Netsmart on December 31, 2018. Netsmart generated cash from operations during both 2018 and 2017. During 2018, Netsmart's cash provided by operations decreased by approximately $16 million primarily driven by higher interest expenses paid attributable to Netsmart's credit facilities.

Year Ended December 31, 2017 Compared with the Year Ended December 31, 2016

Net cash provided by operating activities – continuing operations decreased during the year ended December 31, 2017 compared with the year ended December 31, 2016 primarily due to higher transaction-related and legal expenses, including legal settlements during 2017, and higher interest expenses. These increases were partly offset by improved working capital. The increase in non-cash adjustments to net loss was primarily driven by other-than-temporary impairment charges associated with long-term investments.

Net cash provided by operating activities – discontinued operations increased during the year ended December 31, 2017 compared with the year ended December 31, 2016 primarily due to a full year of results being included in 2017 as compared with a partial year in 2016. In addition, during the year ended December 31, 2017, Netsmart had higher earnings compared with the prior year. These increases were partly offset by higher interest expenses paid attributable to Netsmart's debt.

Investing Cash Flow Activities

	Year Ended December 31,			2018 $ Change	2017 $ Change from
(In thousands)	2018	2017	2016	from 2017	2016
Capital expenditures	$(31,309)	$(38,759)	$(32,107)	$7,450	$(6,652)
Capitalized software	(113,308)	(118,241)	(92,179)	4,933	(26,062)
Cash paid for business acquisitions, net of cash acquired	(177,233)	(169,823)	(99,837)	(7,410)	(69,986)
Cash received from sale of businesses, net	807,764	0	0	807,764	0
Purchases of equity securities, other investments and related intangible assets	(16,934)	(5,606)	(21,185)	(11,328)	15,579
Other proceeds from investing activities	54	215	37	(161)	178
Net cash provided by (used in) investing activities - continuing operations	469,034	(332,214)	(245,271)	801,248	(86,943)
Net cash used in investing activities - discontinued operations	(221,021)	(80,758)	(908,735)	(140,263)	827,977
Net cash provided by (used in) investing activities	$248,013	$(412,972)	$(1,154,006)	$660,985	$741,034

Year Ended December 31, 2018 Compared with the Year Ended December 31, 2017

We had cash inflows from investing activities – continuing operations during the year ended December 31, 2018 compared with cash outflows from investing activities – continuing operations during the year ended December 31, 2017, which was primarily driven by cash proceeds of $567 million from the sale of our investment in Netsmart and $241 million of net cash proceeds from the divestiture of the OneContent business during 2018. In addition, during 2018 we made additional investments in business acquisitions, which were mostly offset by lower overall capital

expenditures.

Net cash used in investing activities – discontinued operations increased during the year ended December 31, 2018 compared with the prior year, primarily due to larger business acquisitions completed by Netsmart during 2018.

Year Ended December 31, 2017 Compared with the Year Ended December 31, 2016

Net cash used in investing activities – continuing operations increased during the year ended December 31, 2017 compared with the year ended December 31, 2016. This increase was primarily driven by cash used for the acquisitions of the EIS Business from McKesson Corporation in 2017 and higher overall capital expenditures.

Net cash used in investing activities – discontinued operations decreased during the year ended December 31, 2017 compared with the year ended December 31, 2016. During 2016, we completed the acquisition of Netsmart for $937 million, which in turn also invested in business acquisitions. In comparison, cash used for business acquisition transactions by Netsmart during 2017 was significantly lower.

Financing Cash Flow Activities

(In thousands)	Year Ended December 31, 2018	2017	2016	2018 $ Change from 2017	2017 $ Change from 2016
Proceeds from sale or issuance of common stock	$1,283	$1,568	$84	$(285)	$1,484
Excess tax benefits from stock-based compensation	0	0	1,014	0	(1,014)
Taxes paid related to net share settlement of equity awards	(9,466)	(7,269)	(8,204)	(2,197)	935
Payments of capital lease obligations	(553)	(1,283)	(370)	730	(913)
Credit facility payments	(713,751)	(138,139)	(155,170)	(575,612)	17,031
Credit facility borrowings, net of issuance costs	430,843	325,001	250,000	105,842	75,001
Repurchase of common stock	(138,928)	(12,077)	(121,241)	(126,851)	109,164
Payment of acquisition financing obligations	(4,645)	0	0	(4,645)	0
Purchases of subsidiary shares owned by non-controlling interest	(7,198)	0	0	(7,198)	0
Net cash (used in) provided by financing activities - continuing operations	(442,415)	167,801	(33,887)	(610,216)	201,688
Net cash provided by financing activities - discontinued operations	149,432	30,784	899,158	118,648	(868,374)
Net cash (used in) provided by financing activities	$(292,983)	$198,585	$865,271	$(491,568)	$(666,686)

Year Ended December 31, 2018 Compared with the Year Ended December 31, 2017

We used cash in financing activities – continuing operations during the year ended December 31, 2018 compared with cash inflows from financing activities – continuing operations during the year ended December 31, 2017, which was primarily driven by higher repayments of borrowings outstanding under our senior secured credit facility and higher common stock repurchases. At the end of 2018, we used a portion of the proceeds from the sale of our investment in Netsmart to repay balances outstanding under our senior secured credit facilities. Earlier in 2018, we borrowed funds to complete the acquisitions of Health Grid and Practice Fusion, and acquire the outstanding minority interest in a third party in which we initially acquired a controlling interest in April 2015.

Net cash provided by financing activities – discontinued operations increased during the year ended December 31, 2018 compared with the prior year primarily due to higher borrowings by Netsmart used to finance business acquisitions.

Year Ended December 31, 2017 Compared with the Year Ended December 31, 2016

Net cash provided by financing activities – continuing operations increased during the year ended December 31, 2017 compared with the year ended December 31, 2016, primarily due to smaller amount of common stock repurchases and higher senior secured credit facility net borrowings. During 2017, we borrowed $170 million under our revolving credit facility to finance the acquisition of the EIS Business.

Net cash provided by financing activities – discontinued operations decreased during the year ended December 31, 2017 compared with the year ended December 31, 2016, primarily due lower credit facility net borrowings. During 2017, Netsmart borrowed $51 million under its senior secured term loan to finance business acquisitions. In

comparison, during 2016, borrowings totaled $824 million and were primarily used to complete the Netsmart acquisition.

Future Capital Requirements

The following table summarizes future payments under our 1.25% Notes and Senior Secured Credit Facility as of December 31, 2018:

(In thousands)	Total	2019	2020	2021	2022	2023
Principal payments:						
1.25% Cash Convertible Senior Notes [1]	$345,000	$0	$345,000	$0	$0	$0
Senior Secured Credit Facility [2]	350,000	20,000	27,500	30,000	37,500	235,000
Total principal payments	695,000	20,000	372,500	30,000	37,500	235,000
Interest payments:						
1.25% Cash Convertible Senior Notes [1]	8,626	4,313	4,313	0	0	0
Senior Secured Credit Facility [2] [3]	45,474	11,786	11,235	10,494	9,690	2,269
Total interest payments	54,100	16,099	15,548	10,494	9,690	2,269
Total future debt payments	$749,100	$36,099	$388,048	$40,494	$47,190	$237,269

[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, 2018 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, 2018, which was 4.52%.

Revolving Credit Facilities

We have a $900 million senior secured revolving facility (the "Revolving Facility") that expires on February 15, 2023. A total of up to $50 million of the Revolving Facility is available for the issuance of letters of credit, up to $10 million of the Revolving Facility is available for swingline loans, and up to $100 million of the Revolving Facility could be borrowed under certain foreign currencies. We had no borrowings and $0.8 million of letters of credit outstanding under the Revolving Facility as of December 31, 2018. We had $899 million available, net of outstanding letters of credit, under the Revolving Facility as of December 31, 2018. There can be no assurance that we will be able to draw on the full available balance of the Revolving Facility if the financial institutions that have extended such credit commitments become unwilling or unable to fund such borrowings. Refer to Note 8, "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

During 2017, we completed renegotiations with Atos and our other largest hosting partners to improve the operating cost structure of our private cloud hosting operations. As a result of these renegotiations, we signed a new amended and restated agreement with Atos and, therefore, starting in 2018, we began to transition substantially all of our hosting services to Atos. The increased scale of the relationship is expected to result in future reductions in the base fees and volume fee rates. The new amended and restated agreement extends the term to 2023 with annual auto-renewal periods for an additional two years thereafter. The new agreement also provides for the payment of initial annual base fees of $30 million per year (decreasing to $25 million by the end of the agreement) plus charges for volume-based services currently projected using volumes estimated based on historical actuals and forecasted projections. During the year ended December 31, 2018, we incurred $56 million of expenses under our agreement with Atos, which are included in cost of revenue in our consolidated statements of operations.

Our total investment in research and development efforts during 2018 increased compared with 2017. The increase in capitalized software development costs was primarily driven by our continued investment in expanding the capabilities and functionality of our traditional ambulatory, acute and post-acute platforms as well as incremental investments in the emerging areas of precision medicine and cloud-based solution delivery. In addition, we incurred costs to integrate the solutions acquired through recent acquisitions. Our total spending consists of research and development costs directly recorded to expense which are offset by the capitalization of eligible development costs.

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.

	Year Ended December 31,		
(In thousands)	2018	2017	2016
Research and development costs directly recorded to expense	$268,409	$202,282	$178,534
Capitalized software development costs per consolidated statement of cash flows (1)	113,308	118,241	92,179
Total non-GAAP R&D-related spending	$381,717	$320,523	$270,713
Total revenue	$1,749,962	$1,497,708	$1,386,069
Total non-GAAP R&D-related spending as a % of total	22 %	21 %	20 %

revenue

(1) Amount for the years ended December 31, 2018 and 2017 include $0 million and $24 million, respectively, of third-party software purchases to supplement our internal software development efforts.

We believe that our cash and cash equivalents of $185 million as of December 31, 2018, our future cash flows, and our borrowing capacity under our Revolving Facility, taken together, provide adequate resources to fund our 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 repurchase of our common stock under our stock repurchase program, each of which might impact our liquidity requirements or cause us to borrow under our 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 and Commitments

We enter into obligations with third parties in the ordinary course of business. The following table summarizes our significant contractual obligations as of December 31, 2018 and the effect such obligations are expected to have on our liquidity and cash in future periods, assuming all obligations reach maturity. We do not believe that our cash flow requirements can be assessed based upon this analysis of these obligations as the funding of these future cash obligations will be from future cash flows from the sale of our products and services that are not reflected in the following table.

		Payments due by period					
(In thousands)	Total	2019	2020	2021	2022	2023	Thereafter
Balance sheet obligations: [1]							
Debt:							
Principal payments	$695,000	$20,000	$372,500	$30,000	$37,500	$235,000	$0
Interest payments	54,100	16,099	15,548	10,494	9,690	2,269	0
Capital leases	1,833	1,351	422	46	14	0	0
Other obligations: [2]							
Non-cancelable operating leases	132,281	26,330	22,394	18,824	17,493	15,582	31,658
Purchase obligations [3]	120,369	57,525	35,097	16,734	11,013	0	0
Agreement with Atos	535,228	96,010	91,355	84,989	80,318	74,567	107,989
Letters of Credit	821	821	0	0	0	0	0
Total contractual obligations	$1,539,632	$218,136	$537,316	$161,087	$156,028	$327,418	$139,647

[1] Our liability for uncertain tax positions was $20 million as of December 31, 2018. 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 $53 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, 2018. Additionally, we have obligations to pay contingent consideration associated with acquisitions of $25.8 million as of December 31, 2018 2018. Such contingent consideration obligations are excluded from the above table since their payment is based on future financial objectives, the achievement of which we cannot predict.

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

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

We are exposed to interest rate risk, primarily changes in United States interest rates and changes in LIBOR, and primarily due to our borrowing under the Senior Secured Credit Facility. Based on the principal balance of $350 million of debt outstanding under the Senior Secured Credit Facility as of December 31, 2018, an increase in interest rates of 1.0% will cause a corresponding increase in annual interest expense of approximately $3.5 million.

We have global operations; therefore, we are exposed to risks related to foreign currency fluctuations. Foreign currency fluctuations through December 31, 2018 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 and shared services center in India and our local operations in Israel, where we are required to make payments in local currency but which we fund in United States dollars. We have entered into non-deliverable forward foreign currency exchange contracts with reputable banking counterparties in order to hedge a portion of our forecasted future Indian Rupee-denominated ("INR") expenses against foreign currency fluctuations between the United States dollar and the INR. As of December 31, 2018, there were 12 forward contracts outstanding that were staggered to mature monthly starting in January 2019 and ending in December 2019. 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 December 2019. As of December 31, 2018, the total notional amount of each outstanding forward contract was 160 million INR, or the equivalent of $2.3 million, based on the exchange rate between the United States dollar and the INR in effect as of December 31, 2018. These amounts also approximate the forecasted future INR expenses we target to hedge in any one month in the future. The forward contracts resulted in net gains of $0.5 million and $2.7 million during the years ended December 31, 2018 and 2017, respectively.

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

Item 8. Financial Statements and Supplementary Data

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Board of Directors and Shareholders

Allscripts Healthcare Solutions, Inc.

Opinion on the financial statements

We have audited the accompanying consolidated balance sheets of Allscripts Healthcare Solutions, Inc., a Delaware corporation, and subsidiaries (the "Company") as of December 31, 2018 and 2017, the related consolidated statements of operations and comprehensive (loss) income, changes in shareholders' equity, and cash flows for each of the three years in the period ended December 31, 2018, and the related notes and financial statement schedules included under Item 15(a) (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018, in conformity with accounting principles generally accepted in the United States of America.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the Company's internal control over financial reporting as of December 31, 2018, 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 22, 2019 expressed an unqualified opinion.

Change in Accounting Principle

As discussed in Note 2 to the consolidated financial statements, the Company has changed its method of accounting for revenue recognition in 2018 due to the adoption of FASB Accounting Standards Codification (Topic 606), Revenue from Contracts with Customers.

Basis for opinion

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

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

/s/ GRANT THORNTON LLP

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

Raleigh, North Carolina

February 22, 2019

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Board of Directors and Shareholders

Allscripts Healthcare Solutions, Inc.

Opinion on internal control over financial reporting

We have audited the internal control over financial reporting of Allscripts Healthcare Solutions, Inc., a Delaware corporation, and subsidiaries (the "Company") as of December 31, 2018, based on criteria established in the 2013 Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on criteria established in the 2013 Internal Control—Integrated Framework issued by COSO.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the consolidated financial statements of the Company as of and for the year ended December 31, 2018, and our report dated February 22, 2019 expressed an unqualified opinion on those financial statements.

Basis for opinion

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

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

Definition and limitations of internal control over financial reporting

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

a material effect on the financial statements.

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

/s/ GRANT THORNTON LLP

Raleigh, North Carolina

February 22, 2019

ALLSCRIPTS HEALTHCARE SOLUTIONS, INC.

CONSOLIDATED BALANCE SHEETS

(In thousands, except per share amounts)	December 31, 2018	December 31, 2017
ASSETS		
Current assets:		
Cash and cash equivalents	$174,243	$119,470
Restricted cash	10,552	11,524
Accounts receivable, net of allowance of $50,406 and $31,386 as of December 31, 2018 and December 31, 2017, respectively	465,264	492,560
Contract assets	66,451	0
Prepaid expenses and other current assets	142,455	106,455
Current assets attributable to discontinued operations	0	127,101
Total current assets	858,965	857,110
Fixed assets, net	121,913	135,417
Software development costs, net	209,660	194,845
Intangible assets, net	431,081	435,573
Goodwill	1,373,744	1,292,747
Deferred taxes, net	5,036	4,574
Contract assets - long-term	71,879	0
Other assets	109,206	146,851
Long-term assets attributable to discontinued operations	0	1,163,033
Total assets	$3,181,484	$4,230,150

ALLSCRIPTS HEALTHCARE SOLUTIONS, INC.

CONSOLIDATED BALANCE SHEETS (CONTINUED)

(In thousands, except per share amounts)	December 31, 2018	December 31, 2017
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$73,166	$85,749
Accrued expenses	106,072	77,800
Accrued compensation and benefits	100,076	83,072
Income tax payable	29,644	0
Deferred revenue	466,797	478,574
Current maturities of long-term debt	20,059	27,687
Current maturities of capital lease obligations	996	1,102
Current liabilities attributable to discontinued operations	920	135,641
Total current liabilities	797,730	889,625
Long-term debt	647,539	906,725
Long-term capital lease obligations	768	2,347
Deferred revenue	15,984	19,208
Deferred taxes, net	58,470	23,258
Other liabilities	80,566	89,864
Long-term liabilities attributable to discontinued operations	0	707,516
Total liabilities	1,601,057	2,638,543
Redeemable convertible non-controlling interest attributable to discontinued operations	0	431,535
Commitments and contingencies		
Stockholders’ equity:		
Preferred stock: $0.01 par value, 1,000 shares authorized, no shares issued and outstanding as of December 31, 2018 and December 31, 2017	0	0
Common stock: $0.01 par value, 349,000 shares authorized as of December 31, 2018 and December 31, 2017; 270,955 and 171,224 shares issued and outstanding as of December 31, 2018, respectively; 269,335 and 180,832 shares issued and outstanding as of December 31, 2017, respectively	2,709	2,693
Treasury stock: at cost, 99,731 and 88,504 shares as of December 31, 2018 and December 31, 2017, respectively	(460,543)	(322,735)
Additional paid-in capital	1,881,494	1,781,059
Retained earnings (accumulated deficit)	132,842	(338,150)
Accumulated other comprehensive loss	(5,389)	(1,985)
Total Allscripts Healthcare Solutions, Inc.'s stockholders' equity	1,551,113	1,120,882
Non-controlling interest	29,314	39,190
Total stockholders’ equity	1,580,427	1,160,072
Total liabilities and stockholders’ equity	$3,181,484	$4,230,150

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

ALLSCRIPTS HEALTHCARE SOLUTIONS, INC.

CONSOLIDATED STATEMENTS OF OPERATIONS

	Year Ended December 31,		
(In thousands, except per share amounts)	2018	2017	2016
Revenue:			
Software delivery, support and maintenance	$1,128,263	$958,187	$899,299
Client services	621,699	539,521	486,770
Total revenue	1,749,962	1,497,708	1,386,069
Cost of revenue:			
Software delivery, support and maintenance	357,039	295,593	276,401
Client services	565,504	484,591	437,154
Amortization of software development and acquisition-related assets	102,876	84,725	71,215
Total cost of revenue	1,025,419	864,909	784,770
Gross profit	724,543	632,799	601,299
Selling, general and administrative expenses	450,967	400,688	334,521
Research and development	268,409	202,282	178,534
Asset impairment charges	58,166	0	4,650
Goodwill impairment charge	13,466	0	0
Amortization of intangible and acquisition-related assets	26,587	17,345	15,884
(Loss) income from operations	(93,052)	12,484	67,710
Interest expense	(50,914)	(37,540)	(29,478)
Other income (loss), net	74	(512)	829
Gain on sale of businesses, net	172,258	0	0
Impairment of long-term investments	(15,487)	(165,290)	0
Equity in net income (loss) of unconsolidated investments	259	821	(7,501)
Income (loss) from continuing operations before income taxes	13,138	(190,037)	31,560
Income tax (provision) benefit	(469)	5,514	(309)
Income (loss) from continuing operations, net of tax	12,669	(184,523)	31,251
Loss from discontinued operations	(72,836)	(11,915)	(46,344)
Gain on sale of Netsmart	500,471	0	0
Income tax effect on discontinued operations	(32,497)	42,263	18,123
Income (loss) from discontinued operations, net of tax	395,138	30,348	(28,221)
Net income (loss)	407,807	(154,175)	3,030
Less: Net loss (income) attributable to non-controlling interests	4,527	1,566	(146)
Less: Accretion of redemption preference on redeemable convertible non-controlling interest - discontinued operations	(48,594)	(43,850)	(28,536)
Net income (loss) attributable to Allscripts Healthcare Solutions, Inc. stockholders	$363,740	$(196,459)	$(25,652)
Net income (loss) attributable to Allscripts Healthcare Solutions, Inc. stockholders per share:			
Basic			

Continuing operations	$0.10	$(1.02)	$0.17
Discontinued operations	1.97	(0.07)	(0.31)
Net income (loss) attributable to Allscripts Healthcare Solutions, Inc. stockholders per share	$2.07	$(1.09)	$(0.14)
Diluted			
Continuing operations	$0.10	$(1.02)	$0.17
Discontinued operations	1.94	(0.07)	(0.31)
Net income (loss) attributable to Allscripts Healthcare Solutions, Inc. stockholders per share	$2.04	$(1.09)	$(0.14)

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

ALLSCRIPTS HEALTHCARE SOLUTIONS, INC.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

	Year Ended December 31,		
(In thousands)	2018	2017	2016
Net income (loss)	$407,807	$(154,175)	$3,030
Other comprehensive (loss) income:			
Foreign currency translation adjustments	(2,908)	3,352	(1,528)
Change in unrealized gain (loss) on available for sale securities	0	56,359	(56,359)
Change in fair value of derivatives qualifying as cash flow hedges	(873)	114	597
Other comprehensive (loss) income before income tax (provision) benefit	(3,781)	59,825	(57,290)
Income tax benefit (provision) related to items in other comprehensive income (loss)	377	19	(297)
Total other comprehensive (loss) income	(3,404)	59,844	(57,587)
Comprehensive income (loss)	404,403	(94,331)	(54,557)
Less: Comprehensive loss (income) attributable to non-controlling interests	4,527	1,566	(146)
Comprehensive income (loss), net	$408,930	$(92,765)	$(54,703)

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

ALLSCRIPTS HEALTHCARE SOLUTIONS, INC.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

	Year Ended December 31,		
(In thousands)	2018	2017	2016
Number of Common Shares Issued			
Balance at beginning of year	269,335	267,997	266,545
Common stock issued under stock compensation plans, net of shares withheld for employee taxes	1,620	1,338	1,452
Balance at end of year	270,955	269,335	267,997
Common Stock			
Balance at beginning of year	$2,693	$2,680	$2,665
Common stock issued under stock compensation plans, net of shares withheld for employee taxes	16	13	15
Balance at end of year	$2,709	$2,693	$2,680
Number of Treasury Stock Shares Purchased			
Balance at beginning of year	(88,504)	(87,487)	(77,237)
Issuance of treasury stock	76	22	0
Purchase of treasury stock	(11,303)	(1,039)	(10,250)
Balance at end of year	(99,731)	(88,504)	(87,487)
Treasury Stock			
Balance at beginning of year	$(322,735)	$(310,993)	$(189,753)
Issuance of treasury stock	1,121	335	0
Purchase of treasury stock	(138,929)	(12,077)	(121,240)
Balance at end of year	$(460,543)	$(322,735)	$(310,993)
Additional Paid-In Capital			
Balance at beginning of year	$1,781,059	$1,789,959	$1,789,449
Stock-based compensation	34,638	35,337	34,544
Common stock issued under stock compensation plans, net of shares withheld for employee taxes	(8,197)	(5,767)	(8,133)
Tax deficiency realized upon exercise of stock-based awards	0	0	(1,280)
Accretion of redemption preference on redeemable convertible non-controlling interest - discontinued operations	72,386	(43,850)	(28,536)
Subsidiary issuance of common stock	0	1,473	
Issuance of treasury stock	(61)	(76)	0
Warrants issued	2,729	3,983	3,915
Acquisition of non-controlling interest	(1,060)	0	0
Balance at end of year	$1,881,494	$1,781,059	$1,789,959
Accumulated Deficit			
Balance at beginning of year	$(338,150)	$(187,351)	$(190,235)
Net (loss) income less net income attributable to non-controlling interests	412,334	(152,609)	2,884
Recognition of previously unrecognized excess tax benefits	0	1,810	0
ASC 606 implementation adjustments	58,658	0	0
Balance at end of year	$132,842	$(338,150)	$(187,351)

Accumulated Other Comprehensive Loss			
Balance at beginning of year	$(1,985)	$(61,829)	$(4,242)
Foreign currency translation adjustments, net	(2,908)	3,352	(1,528)
Unrecognized gain on derivatives qualifying as cash flow hedges, net of tax	(496)	72	361
Unrecognized gain (loss) on available for sale securities, net of tax	0	56,420	(56,420)
Balance at end of year	$(5,389)	$(1,985)	$(61,829)
Non-controlling interest			
Balance at beginning of year	$39,190	$40,735	$11,189
Acquisition of non-controlling interest	(5,349)	21	29,400
Net (loss) income attributable to non-controlling interests	(4,527)	(1,566)	146
Balance at end of year	$29,314	$39,190	$40,735
Total Stockholders' Equity at beginning of year	$1,160,072	$1,273,201	$1,419,073
Total Stockholders' Equity at end of year	$1,580,427	$1,160,072	$1,273,201

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

ALLSCRIPTS HEALTHCARE SOLUTIONS, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year Ended December 31,		
(In thousands)	2018	2017	2016
Cash flows from operating activities:			
Net income (loss)	$407,807	$(154,175)	$3,030
Less: Income (loss) from discontinued operations	395,138	30,348	(28,221)
Income (loss) from continuing operations	12,669	(184,523)	31,251
Adjustments to reconcile net loss to net cash provided by operating activities:			
Depreciation and amortization	192,346	157,328	136,328
Stock-based compensation expense	34,638	36,540	37,093
Deferred taxes	4,144	(10,228)	(4,520)
Asset impairment charges	58,166	0	4,650
Goodwill impairment charge	13,466	0	0
Impairment of long-term investments	15,487	165,290	0
Equity in net income of unconsolidated investments	(259)	(821)	7,501
Gain on sale of businesses, net	(172,258)	0	0
Other (losses) income, net	(9,079)	3,726	3,526
Changes in operating assets and liabilities (net of businesses acquired):			
Accounts receivable and contract assets, net	(109,134)	(95,189)	(8,918)
Prepaid expenses and other assets	(55,818)	13,219	4,454
Accounts payable	(19,159)	(19,785)	45,524
Accrued expenses	40,484	10,131	(2,774)
Accrued compensation and benefits	13,440	18,717	(10,514)
Deferred revenue	58,010	112,684	(11,418)
Other liabilities	12,091	17,969	2,165
Net cash provided by operating activities - continuing operations	89,234	225,058	234,348
Net cash (used in) provided by operating activities - discontinued operations	(21,343)	54,357	34,656
Net cash provided by operating activities	67,891	279,415	269,004
Cash flows from investing activities:			
Capital expenditures	(31,309)	(38,759)	(32,107)
Capitalized software	(113,308)	(118,241)	(92,179)
Cash paid for business acquisitions, net of cash acquired	(177,233)	(169,823)	(99,837)
Cash received from sale of businesses, net	807,764	0	0
Purchases of equity securities, other investments and related intangible assets	(16,934)	(5,606)	(21,185)
Other proceeds from investing activities	54	215	37
Net cash provided by (used in) investing activities - continuing operations	469,034	(332,214)	(245,271)
Net cash used in investing activities - discontinued operations	(221,021)	(80,758)	(908,735)
Net cash provided by (used in) investing activities	248,013	(412,972)	(1,154,006)
Cash flows from financing activities:			
Proceeds from sale or issuance of common stock	1,283	1,568	84
Excess tax benefits from stock-based compensation	0	0	1,014
Taxes paid related to net share settlement of equity awards	(9,466)	(7,269)	(8,204)

Payments of capital lease obligations	(553)	(1,283)	(370)
Credit facility payments	(713,751)	(138,139)	(155,170)
Credit facility borrowings, net of issuance costs	430,843	325,001	250,000
Repurchase of common stock	(138,928)	(12,077)	(121,241)
Payment of acquisition financing obligations	(4,645)	0	0
Purchases of subsidiary shares owned by non-controlling interest	(7,198)	0	0
Net cash (used in) provided by financing activities - continuing operations	(442,415)	167,801	(33,887)
Net cash provided by financing activities - discontinued operations	149,432	30,784	899,158
Net cash (used in) provided by financing activities	(292,983)	198,585	865,271
Effect of exchange rate changes on cash and cash equivalents	(624)	860	(532)
Net increase (decrease) in cash and cash equivalents	22,297	65,888	(20,263)
Cash, cash equivalents and restricted cash, beginning of period	162,498	96,610	116,873
Cash, cash equivalents and restricted cash, end of period	184,795	162,498	96,610
Less: Cash and cash equivalents included in current assets attributable to discontinued operations	0	(31,504)	(25,064)
Cash, cash equivalents and restricted cash, end of period, excluding discontinued operations	$184,795	$130,994	$71,546

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 subsidiaries and controlled affiliates, unless otherwise stated.

Use of Estimates

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

Change in Presentation

During 2018, we changed the presentation of certain bundled revenue streams and the associated cost of revenue which were previously included as part of software delivery, support and maintenance revenue. Under the new presentation, these amounts are included as part of client services revenue and cost of revenue, respectively. We have recast previously reported revenue and cost of revenue amounts to conform with the new presentation. This change in presentation had no impact on previously reported gross profit, net income (loss) or earnings (loss) per share.

The following table illustrates the recast of cost of revenue and gross profit for the quarterly periods and the year ended December 31, 2018. Quarterly revenue previously reported during fiscal 2018 already reflected this change in presentation.

	Quarter ended				Year ended
(In thousands)	March 31, 2018	June 30, 2018	September 30, 2018	December 31, 2018	December 31, 2018
Cost of revenue reclassification:					
Software delivery, support and maintenance	$(4,033)	$(7,202)	$ (6,394)	$ (6,400)	$(24,029)
Client services	4,033	7,202	6,394	6,400	24,029
Amortization of software development and acquisition-related assets	0	0	0	0	0

Total cost of revenue:	0	0	0	0	0
Gross profit impact:					
Software delivery, support and maintenance	(4,033)	(7,202)	(6,394)	(6,400)	(24,029)
Client services	4,033	7,202	6,394	6,400	24,029
Total gross profit	$0	$0	$ 0	$ 0	$0

The following table illustrates the recast for revenue and associated cost of revenue for the quarterly periods and the year ended December 31, 2017:

(In thousands)	Quarter ended March 31, 2017	June 30, 2017	September 30, 2017	December 31, 2017	Year ended December 31, 2017
Revenue reclassification:					
Software delivery, support and maintenance	$(4,270)	$(4,239)	$ (5,119)	$ (4,703)	$(18,331)
Client services	4,270	4,239	5,119	4,703	18,331
Total revenue	0	0	0	0	0
Cost of revenue reclassification:					
Software delivery, support and maintenance	(5,056)	(5,556)	(5,454)	(5,454)	(21,520)
Client services	5,056	5,556	5,454	5,454	21,520
Amortization of software development and acquisition-related assets	0	0	0	0	0
Total cost of revenue:	0	0	0	0	0
Gross profit impact:					
Software delivery, support and maintenance	786	1,317	335	751	3,189
Client services	(786)	(1,317)	(335)	(751)	(3,189)
Total gross profit	$0	$0	$ 0	$ 0	$0

The following table illustrates the recast of revenue and associated cost of revenue for the year ended December 31, 2016:

(In thousands)	Year ended December 31, 2016
Revenue reclassification:	
Software delivery, support and maintenance	$(8,734)
Client services	8,734
Total revenue	0
Cost of revenue reclassification:	
Software delivery, support and maintenance	(17,831)

Client services	17,831
Amortization of software development and acquisition-related assets	0
Total cost of revenue:	0
Gross profit impact:	
Software delivery, support and maintenance	9,097
Client services	(9,097)
Total gross profit	$0

Revenue Recognition

We adopted Financial Accounting Standards Board ("FASB") Accounting Standards Update 2014-09, Revenue from Contracts with Customers: Topic 606 ("ASU 2014-09") effective on January 1, 2018 using the modified retrospective method. ASU 2014-09 superseded nearly all previously existing revenue recognition guidance under GAAP. Refer to Note 2, "Revenue from Contracts with Customers" for detailed discussion about our revenue recognition accounting policies.

Cash and Cash Equivalents

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

Other Financial Assets and Liabilities

Investments classified as available for sale securities included certain equity instruments which have a readily determinable market value. Changes in market value for these instruments, excluding other-than-temporary impairments, are reflected in other comprehensive income. Realized gains and losses are recorded using the specific identification method. We recognized other-than-temporary impairment charges of $142.2 million relating to these equity instrument during the second quarter of 2017. During the third quarter of 2017, we recognized an additional $20.7 million loss upon the final disposition of these instruments in connection with the NantHealth patient/provider engagement solutions business acquisition (refer to Note 3, “Business Combinations and Other Investments”). There were no other-than-temporary impairments related to our available for sale securities for the years ended December 31, 2018 and 2016.

We also have investments in other equity investments for which it is not practicable to estimate fair value primarily because of their illiquidity and restricted marketability. Such investments are accounted under the cost and equity methods of accounting. Refer to Note 3, “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 (as defined in Note 8, “Debt”), with carrying values that approximate fair value since the variable interest rates approximate current market rates. In addition, as of December 31, 2018, the fair value of the 1.25% Notes (as defined in Note 8, “Debt”) was approximately equal to the 1.25% Notes’ principal balance (or par). We utilized the 1.25% Notes’ market trading prices near December 31, 2018 in making this fair value assessment. See Note 8, “Debt” for further information regarding our long-term financial liabilities.

Derivative Financial Instruments

Derivative instruments are recognized as either assets or liabilities and are measured at fair value. The accounting for changes in the fair value of a derivative depends on the intended use of the derivative and the resulting designation.

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 14, “Derivative Financial Instruments” for information regarding gains and losses from derivative instruments during the years ended December 31, 2018, 2017 and 2016.

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

Business Combinations

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

Goodwill and Intangible Assets

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

The determination of the fair value of our reporting units is based on a combination of a market approach, 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 expectations of future performance and the expected future economic environment, which are partly based upon our historical experience. Our estimates are subject to change given the inherent uncertainty in predicting future results. Additionally, the discount rate and the terminal growth rate are based on our judgment of the rates that would be utilized by a hypothetical market participant. As part of the goodwill impairment testing, we also consider our market capitalization in assessing the reasonableness of the combined fair values estimated for our reporting units.

In accordance with GAAP, definite-lived intangible assets are required to be amortized over their respective estimated useful lives and reviewed for impairment whenever events or changes in circumstances indicate that their carrying amounts may not be recoverable. We estimate the useful lives of our intangible assets and ratably amortize their value over the estimated useful lives of those assets. If the estimates of the useful lives should change, we will amortize the

remaining book value over the remaining useful lives or, if an asset is deemed to be impaired, a write-down of the value of the asset may be required at such time.

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

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

Software Development Costs

We capitalize purchased software upon acquisition if it is accounted for as internal-use software or if it meets the future alternative use criteria. 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 that the value of the capitalized software could not be recovered, a write-down of the value of the capitalized software to its recoverable value is recorded as a charge to earnings.

The unamortized balances of capitalized software were as follows:

	December 31,	
(In thousands)	2018	2017
Software development costs	$317,637	$280,146
Less: accumulated amortization	(107,977)	(85,301)
Software development costs, net	$209,660	$194,845

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 and paid during 2017.

	Year Ended December 31,		
(In thousands)	2018	2017	2016
Capitalized software development costs	$113,308	$94,740	$115,710
Write-offs and divestitures of capitalized software development costs	$34,083	$0	$4,625
Amortization of capitalized software development costs	$64,409	$51,589	$40,764

Income Taxes

We account for income taxes using the liability method, which requires the recognition of deferred tax assets or liabilities for the tax-effected temporary differences between the financial reporting and tax bases of our assets and liabilities and for net operating loss and tax credit carryforwards. The objectives of accounting for income taxes are to recognize the amount of taxes payable or refundable for the current year and deferred tax liabilities and assets for the

future tax consequences of events that have been recognized in an entity's financial statements or tax returns. Judgment is required in addressing the future tax consequences of events that have been recognized in our consolidated financial statements or tax returns. The deferred tax assets are recorded net of a valuation allowance when, based on the weight of available evidence, we believe it is more likely than not that some portion or all of the recorded deferred tax assets will not be realized in future periods. We consider many factors when assessing the likelihood of future realization of our deferred tax assets, including recent cumulative earnings experience, expectations of future taxable income, the ability to carryback losses and other relevant factors.

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

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

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

Stock-Based Compensation

We account for stock-based compensation in accordance with GAAP, which requires the measurement and recognition of compensation expense for all share-based payment awards made to employees and non-employee directors based on their estimated fair value. We measure stock-based compensation cost at the grant date based on the fair value of the award and recogniz