

ATHENAHEALTH INC  
Form 10-K  
February 01, 2018  
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UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

Form 10-K  
(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
For the fiscal year ended December 31, 2017

or

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

For the transition period from \_\_\_\_\_ to \_\_\_\_\_  
Commission File Number 001-33689  
athenahealth, Inc.

(Exact name of registrant as specified in its charter)  
Delaware 04-3387530  
(State or other jurisdiction of (I.R.S. Employer  
incorporation or organization) Identification No.)

311 Arsenal Street, 02472  
Watertown, Massachusetts  
(Address of principal executive offices) (Zip Code)  
617-402-1000

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, \$0.01 par value	The NASDAQ Stock 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 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 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes  No

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

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) 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

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filer,” “smaller reporting company,” and “emerging growth company” in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Accelerated filer

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

Smaller reporting company

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 Act). Yes  No

The aggregate market value of the common stock held by non-affiliates of the registrant was approximately \$5,432,184,695 based on the closing price on the NASDAQ Global Select Market on June 30, 2017.

At January 30, 2018, the registrant had 40,097,805 shares of common stock, par value \$0.01 per share, outstanding.

**DOCUMENTS INCORPORATED BY REFERENCE**

Part III of this Form 10-K incorporates information by reference from the registrant’s definitive proxy statement to be filed with the Securities and Exchange Commission within 120 days after the close of the fiscal year ended December 31, 2017.

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PART I

SPECIAL NOTE REGARDING

FORWARD-LOOKING STATEMENTS AND INDUSTRY DATA

This Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. All statements other than statements of historical fact contained in this Annual Report on Form 10-K are forward-looking statements, including statements regarding management's expectations for future financial and operational performance and operating expenditures, expected growth, and business outlook; statements regarding the implementation, timing, and impact of the Plan (as defined below); the benefits of and demand for our service offerings; the impact of new accounting pronouncements; seasonality and changes in seasonality of our business; increased automation; changes in expenses related to operations, selling and marketing, research and development, general and administrative matters, depreciation and amortization, interest, and income taxes; statements regarding competition; statements regarding the impact of new legislation, including new tax legislation; the impact of litigation; the impact of foreign currency fluctuations; the impact of acquisitions and associated measurements of fair value; and liquidity matters. Forward-looking statements may be identified with words such as “will,” “may,” “expect,” “plan,” “anticipate,” “upcoming,” “believe,” “estimates,” or similar terminology, and the negative of these terms.

Forward-looking statements are not promises or guarantees of future performance, and are subject to a variety of risks and uncertainties, many of which are beyond our control, and which could cause actual results to differ materially from those contemplated in these forward-looking statements. These factors include those listed under “Risk Factors” in Item 1A of Part I of this Annual Report on Form 10-K and elsewhere in this Annual Report on Form 10-K.

Forward-looking statements speak only as of the date hereof and, except as required by law, we undertake no obligation to update or revise these forward-looking statements.

Unless otherwise indicated, information contained in this Annual Report on Form 10-K concerning our industry and the markets in which we operate, including our general expectations and market position, market opportunity, and market share, is based on information from independent industry analysts and third-party sources (including industry publications, surveys, and forecasts), our internal research, and management estimates, which are derived from publicly available information released by independent industry analysts and third-party sources, as well as data from our internal research, and are based on assumptions made by us based on such data and our knowledge of such industry and markets, which we believe to be reasonable. None of the sources cited in this Annual Report on Form 10-K has consented to the inclusion of any data from its reports, and we have not sought the consent of any source. Our internal research has not been verified by any independent source, and we have not independently verified any third-party information. While we believe the market position, market opportunity, and market share information included in this Annual Report on Form 10-K is generally reliable, such information is inherently imprecise. In addition, projections, assumptions, and estimates of our future performance and the future performance of the industries in which we operate are necessarily subject to a high degree of uncertainty and risk due to a variety of factors, including those described in “Risk Factors” and elsewhere in this Annual Report on Form 10-K. These and other factors could cause results to differ materially from those expressed in the estimates made by the independent parties and by us.

In this Annual Report on Form 10-K, the terms “athenahealth,” “we,” “us,” and “our” refer to athenahealth, Inc. and its subsidiaries, unless the context indicates otherwise.

Item 1. Business.

Overview

athenahealth, Inc. (which we refer to as athenahealth, the Company, we, or our) partners with hospital and ambulatory clients to drive clinical and financial results. We offer network-based medical record, revenue cycle, patient engagement, care coordination, and population health services, as well as Epocrates® and other point-of-care mobile applications. Our network provides clients better insight into their own organizations as well as the ability to learn from the experience of every other client on the network. Through our model, we infuse the knowledge clients need to thrive in a changing industry directly into their workflow, from clinical guidelines to payer rules. We take on

back-office work at scale so providers can focus on patients, not paperwork.

Our purpose is to unleash our collective potential to transform healthcare. We design our services to help minimize the hassles that healthcare providers and their staff face from complex billing rules, quality measurement and reporting, clinical documentation and data exchange, patient communication and referrals, and many related tasks that can take attention away from delivering care. We believe our services empower healthcare providers to achieve and sustain financial health while staying focused on quality patient care.

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We deliver the majority of our service offerings through a single instance of cloud-based software, which we refer to as athenaNet. By combining our commitment to opening up the network, multiplying our intelligence, and freeing people to do what matters, we help healthcare providers leverage technology to automate certain back-office tasks, assist at the point of care, and adapt to changes in government regulatory schemes or the billing requirements of payers. In most cases, we charge clients a percentage of payments collected by us on behalf of our clients, connecting our financial results directly to those of our clients and our ability to drive revenue to medical practices. In 2017, we generated revenue of \$1,220.3 million compared to \$1,082.9 million in 2016 and \$924.7 million in 2015.

We incorporated in Delaware in 1997. Our corporate headquarters are located at 311 Arsenal Street, Watertown, Massachusetts 02472, and our telephone number is (617) 402-1000.

### Market Overview

The healthcare industry is complex, disconnected, and fragmented, and is largely served by legacy software systems that may not be able to support the current needs for usability, flexibility, and interoperability. Medical groups and health systems face rising costs and complexity from a variety of factors, including legislative and regulatory reform efforts, changes in health benefit plan design, complicated reimbursement models, partners' demand for electronic data exchange, and continued changes to federally mandated transaction standards. In addition, medical groups and health systems face time-consuming administrative challenges, such as consolidating and reporting to government quality performance programs, processing and sorting a practice's incoming paper documents, identifying and managing payer rules, collecting payments from uninsured, underinsured, and high deductible health plan patients, having a live operator take patient phone calls after a practice closes for the day, and communicating physician orders and referrals to others.

We believe the traditional software model fails to address many of the challenges experienced by medical groups and health systems. The majority of the health information technology market operates on locally-installed, conventional software. We believe this delivery model does not allow for rapid innovation, timely upgrades, or intelligent evolution of system functionality to address client needs. Additionally, locally-installed software requires a sizable upfront investment in hardware and software plus the staff to manage and maintain these systems. With the traditional software model, the client is still responsible for all of the back-office work from managing claims to handling time-consuming clinical paperwork.

In contrast, we believe a cloud-based network is better positioned to solve a greater set of problems because it can quickly be updated and delivered to all clients – as a single, shared instance of a network-enabled platform – without expensive installations or upgrades. Our network-enabled platform also allows clients to receive the benefits and learnings of every other client on the network. Integrating our back-office services, as well as many other services, with our cloud-based network is the crux of our services model. Our cloud-based network is designed to deliver the right knowledge to the right person at the right time, while our back-office services execute work, at scale, that would otherwise fall upon the client. By allowing athenahealth to address these problems, healthcare providers can focus on delivering the highest quality of care and free their staff to spend time on higher-value tasks.

### Our Strategy

We are committed to building the most connected network in healthcare and to driving meaningful, measurable results for everyone on our network. The connectivity and system infrastructure we provide would normally be unattainable for small independent practices or hospitals, which make up a large portion of the healthcare market. However, because we automate processes and scale work across our entire network, we can efficiently deliver our services to medical practices of every size as well as small health systems. By giving small practices much of the same technical and service infrastructure available to large clients, we provide significant benefits not only to those practices, but also to their clinical exchange and trading partners with whom they share vital information. As practices continue to be acquired or divested by other entities, this strategic flexibility enhances our ability to compete, regardless of whether a

practice is independent or owned by a large enterprise. In addition, we price our services as a percentage of collections in most cases, a strategy that incentivizes us to improve performance and reduce costs through more efficient operations.

Key elements of our strategic priorities include:

Open up the network. We live in relentless pursuit of open healthcare and believe all will benefit from fluid exchange of information and unfettered access to innovation. We aim to create a dynamic, multi-sided market linking patients, providers, and entrepreneurs to a single clinical and financial record that integrates information for the user from any system on which information resides. The notion of an open ecosystem and marketplace is deeply rooted in our product DNA and the power of our network, which includes approximately 111,000 providers and 106 million patients. We continue to expand our service offerings organically and through acquisitions and strategic partnerships,

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including integration with our More Disruption Please, or MDP, partners' solutions, to provide solutions for new modalities across care settings.

Multiply our intelligence. We believe the best results come from the insight of all. We will bring together knowledge from every interaction, expand it exponentially, and concentrate it where and when it is needed. In a networked world, this picture changes rapidly as the traditional consumer becomes an active producer of information, adding knowledge and value to the system in a positive feedback loop. For years, we have leveraged our network insight to benchmark client performance and get our clients paid more, sooner. Now, we can add knowledge faster than ever before to continually improve provider and staff processes and insights to inform or prompt action. We look to realize the true promise of multiplied intelligence in the virtuous feedback loop that emerges as we learn from the network, then design our products based on that learning to drive improved outcomes.

Free people to do what matters. We strive to remove friction and frustration from the healthcare experience by freeing up providers, staff, healthcare leaders, and patients to focus their time and energies on the work that matters most, liberating us all to achieve our highest purpose. We have had a long-standing commitment to removing any provider work that we can do more efficiently at scale – from claims processing to quality program reporting to authorization management. As our platform evolves, we will continue to shift from cumbersome manual processing to automation of client tasks that churn out insights at exponentially greater speed and scale.

Our Network-Enabled Services

We deliver the majority of our service offerings through a single instance of cloud-based software, which we refer to as athenaNet. By combining our commitment to opening up the network, multiplying our intelligence, and freeing people to do what matters, we help medical groups and health systems leverage technology to automate certain back-office tasks, assist at the point of care, and adapt to changes in government regulatory schemes or the billing requirements of payers. We believe that including our clients on the same instance of software creates a network effect that enables each client to benefit from the collective experience of other clients. As our network grows, we believe these benefits expand and we can further multiply intelligence for all clients on the network. athenaNet acts as a conduit for the exchange of information among clients, payers, trading partners, and our own experienced team. It enables us to learn continuously, innovate with agility, and deliver near-instant updates that we believe rapidly improve performance for our clients. In addition, our clients benefit from back-office administrative work that we perform on their behalf. This work ranges from receiving, scanning, and delivering faxes to tracking claims with payers and managing denials. We automate this work whenever possible; when automation is not an option, we perform the work at massive scale with our internal team and in partnership with Access Healthcare Services USA, LLC and our other third-party providers. The knowledge we gain from doing work for our clients and discovering ways to improve their performance is culled, curated, and captured within athenaNet through mechanisms that include our proprietary billing rules engine and clinical quality management engine. Using this knowledge, we also proactively coach our clients on best practices to help improve their performance. As we work with clients, payers, and other industry trading partners, more knowledge and intelligence is infused into each service, which we believe makes athenaNet “smarter” and more powerful for our clients. This unique combination of opening up the network, multiplying our intelligence, and freeing people to do what matters is fundamental to our service model and value proposition to clients.

We have developed a number of network-enabled services to support healthcare providers across the continuum of care. We offer various combinations of our services to our clients, including athenaOne and athenaOne for Hospitals and Health Systems, depending on whether they are medical groups and practices or hospitals and larger health systems. As of December 31, 2017, our suite of network-enabled services are shown in the following table and also described below:



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	For practices & medical groups	For hospitals & health systems
athenaCollector®		
Medical billing and practice management		
athenaClinicals®		
Electronic health records (EHR)	athenaOne	athenaOne for
athenaCommunicator®		Hospitals & Health Systems
Patient engagement		
athenaCoordinator®		
Order transmission and care coordination		
Population Health	√	√
Population health management	√	√
Epocrates®	√	√
Clinical decision support		

Medical Billing and Practice Management

athenaCollector is our network-enabled billing and practice management solution that eliminates or reduces many time-consuming activities that typically burden our clients and their staff, allowing them to focus more on patient care and other business priorities. athenaCollector includes our intuitive, web-based practice management solution that helps clients improve practice management by simplifying workflows related to patient registration, scheduling, check-in, charge entry, referral management, checkout, follow-up, collections, accounting, and reporting. In addition, athenaCollector includes our proprietary billing rules engine, which represents the industry’s largest database of payer-specific reimbursement requirements. It delivers in-depth insight and knowledge to our clients that helps them get paid by health insurers. With athenaCollector, we also perform back-office services in partnership with our clients at all key steps of the billing process, including: generating and submitting electronic and paper claims, confirming receipt of claims and resubmitting lost claims, posting remittance advice received from payers, following up on unpaid and denied claims, updating our rules engine to help prevent denial recurrences, and reviewing key performance metrics.

Electronic Health Records

athenaClinicals, our network-enabled electronic health record, or EHR, service, organizes the moment of care to help providers maximize their clinical productivity and maintain focus on their patients. athenaClinicals combines a web-based EHR with a clinical cycle management solution and a back-office document management service to help manage patients’ clinical documentation. The web-based EHR application included in athenaClinicals addresses the core clinical workflows of a practice including: clinical chart, encounter documentation, order entry, results viewing, patient call tracking, clinical reminder tracking, and workflow task management. athenaClinicals includes a global library of content that is available for all clients and provides a starting point for certain specialty-specific content. athenaClinicals also acts as a virtual clinical back office for our clients. Our document services team takes on burdensome administrative work on behalf of our clients by processing incoming documents and routing them to the practice’s staff for review via document routing rules defined by the client.

Patient Engagement

athenaCommunicator is our network-enabled patient engagement and communication solution that provides an on-demand, automated, communication service between patients and provider practices for interactions outside the exam room. athenaCommunicator uses phone, e-mail, a patient portal, and our own team of operators to help improve financial and operational performance for our clients. athenaCommunicator enables clients to build a highly flexible set of communication rules with their patients. Our automated messaging platform delivers phone calls, text messages,

and e-mails to patients, including appointment reminders, past due balance alerts, disease management initiatives, secure test results, and other compliance-driven campaigns. Our patient portal enables patients to express communication preferences, view lab results, review appointment information, exchange secure messages with providers, update personal information, and pay bills. Additionally, we print and mail paper statements to patients on behalf of our clients to assist with patient payment collection. Collectively, these activities expand the availability of the medical practice to patients and help alleviate the burden of administrative communications, freeing staff to focus on higher-value and more critical tasks. In addition, by tracking patients' responses, we are able to optimize the effectiveness of these communications.

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### Order Transmission and Care Coordination

athenaCoordinator is our network-enabled order transmission and care coordination service. athenaCoordinator is focused on increasing efficiency for healthcare providers utilizing multiple information technology systems and helps to provide efficient care for patients. athenaCoordinator is founded on three core value drivers: more convenient access to patient data for referring providers, greater visibility into a patient's full care picture and ordering choices, and less work in managing the movement of patients and their data through the referral chain. This value is delivered through six core network service elements: order management and referral management, scheduling, registration, messaging, charts, and third-party integration. athenaCoordinator is not offered as a stand-alone solution but instead must be utilized with athenaCollector, athenaClinicals, and athenaCommunicator.

### Population Health Management

athenahealth Population Health is our population health solution that combines services with software and analytics. This comprehensive, cloud-based population health service identifies patients in need of care and analyzes the clinical and financial results of that care to drive improvements in outcomes and costs. After clients transfer data from payers, finance systems, laboratories, clinical repositories, and/or EHRs, athenahealth Population Health processes and integrates that data and provides a platform through which clients can gain insight into and manage the health of their patient population. The population health management functionality of athenahealth Population Health consists of data integration for payer feeds and EHRs, a virtual desktop, and a web portal to gain insight into and take action on that data.

### Clinical Decision Support

In addition to providing native decision support functionality into our suite of service offerings, athenahealth also offers other stand-alone applications to providers at the point of care. These services, provided through our Epocrates brand, center around a variety of clinical information and decision support offerings available through healthcare providers' mobile devices. Epocrates services include: drug and disease information, medical calculator and tools, clinical guidelines, and clinical messaging. The majority of healthcare professionals using our clinical information services access the free versions of our applications; premium subscriptions for some of these services are also available, and some services are sponsored by clients in the healthcare industry (e.g., pharmaceutical companies, managed care companies, and market research firms) that seek opportunities to engage with our network of members. The Epocrates network of members consists of over one million healthcare professionals, including approximately 50% of U.S. physicians. We believe the features available through our Epocrates and other point-of-care mobile applications allow healthcare professionals to leverage technology and clinical content to help inform prescribing decisions, improve workflow, and enhance patient safety.

### Additional Services

In addition to the services described above, we also offer the following services to certain clients:

- athenahealth Health Plan Data Exchange facilitates efficiencies in the exchange of data between providers and health plans for the healthcare operations of clients that also utilize athenaClinicals and athenaCollector.

- athenaOne Analytics is comprised of an analytics and dashboard application and provides visibility into the financial and operational health of an organization. This add-on service helps athenaCollector clients: (i) create alignment around organizational performance goals, (ii) monitor and track progress against internal targets and industry benchmarks; and (iii) monitor coding and compliance.

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Authorization Management includes both pre-certification processing and referral processing services. We review orders and referrals to determine whether a pre-certification or referral from a primary care physician, or PCP, is required under a patient's health plan and then compile the necessary clinical documentation to attain such pre-certifications or PCP referral.

#### Research and Development

Our research and development efforts focus on enhancing and expanding our service offerings in response to changes in the market and to better serve medical groups and health systems. All of our clients that utilize athenaNet services use the same version of athenaNet, with some rules designed to take effect locally for particular clients. We continually update our software and rules, and execute periodic releases of new software functionality for our clients. Our software development life cycle methodology is designed to ensure that each software release is properly designed, built, tested, and released. Our research and development teams are located in the United States and India. We complement our internal efforts with services from third-

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party technology providers. In addition to our core software development activities, we dedicate full-time staff to the ongoing development and maintenance of our rules database for the athenaCollector services. We also employ program management and product management and user experience personnel, who work continually on improvements to our research and development processes and our service design, respectively. In 2017, we incurred \$173.6 million in research and development expenses, compared to \$134.5 million in 2016 and \$111.0 million in 2015.

### Sales and Marketing

We have developed sales and marketing capabilities aimed at expanding our network of clients, including healthcare providers, medical groups, and health systems. We expect to expand our network by selling our complete suite of services to new clients and cross-selling additional services into our existing client base. We have a direct sales force, which we augment through our channel partners and marketing initiatives.

#### Direct Sales

In 2017, we organized our sales force into two segments for sales of athenahealth-branded services to better address our clients' needs and our markets: the enterprise team, which is dedicated to serving community hospitals, regional and national health systems, payers, and integrated healthcare enterprises; and the independent medical group team, which is dedicated to independent medical practices of all sizes. We also have a pharmaceutical sales teams dedicated to sales of our Epocrates-branded services for pharmaceutical and other institutional clients. Our sales force is supported by personnel in our marketing organization, who provide specialized support for promotional and selling efforts. Due to our ongoing service relationship with clients we conduct a consultative sales process for most of our offerings, which generally includes understanding the needs of prospective clients, developing service proposals, and negotiating contracts to enable the commencement of services.

#### Channel Partners

In addition to our direct sales force, we maintain business relationships with third parties that promote or support our sales or services within specific industries or geographic regions. We refer to these third parties as "channels" and the individuals and organizations involved as our "channel partners." In most cases, these relationships are agreements that compensate channel partners for their services. These channel partners typically do not make direct sales. Other channel relationships permit third parties to act as independent marketing representatives, purchasing agents (as in the case of group purchasing organizations), or in other joint marketing capacities. In some instances, the channel relationship involves endorsement or promotion of our services by these third parties.

#### Marketing and Corporate Brand Initiatives

Our marketing and sales objectives are designed to increase awareness of our company, establish the benefits of our service model, and build credibility with prospective clients so they accept our company as a trustworthy long-term service provider. To execute on this strategy, we have designed and implemented specific activities and programs aimed at converting leads to new clients. In addition, we use the Epocrates member network as a lead-generation platform for selling our athenahealth-branded services.

Our marketing and awareness initiatives are generally targeted toward specific segments of the healthcare market. These marketing programs may include:

- television, print, and digital advertising;
- sponsored pay-per-click search advertising and other internet-focused awareness-building efforts (such as social media, online videos, webinars, targeted messages to users through our services, and destination websites covering compliance and other issues of interest to medical practices);

public relations activities aimed at generating media coverage;  
thought leadership through blog posts, opinion pieces, and speaking engagements;  
participation in industry-focused trade shows;  
targeted mail, e-mail, and phone calls to health systems and medical groups;  
informational meetings (such as strategic retreats with targeted potential clients); and  
dinner seminars and roundtables.

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### Competition

We have experienced, and expect to continue to experience, intense competition in the marketplace, particularly given increased EHR adoption rates and consolidation within the industry. Our primary competitors use locally-installed software to manage the various clinical and financial workflow needs within the medical group or health system. Other nationwide competitors offer services they refer to as “on-demand” or “software-as-a-service” models, under which software is centrally hosted and services are provided from central locations. Companies that sell practice management, EHR, care coordination software and services, population health management services, and/or clinical health management tools include: AdvancedMD, Inc.; Allscripts Healthcare Solutions, Inc.; CareCloud Corporation; Cerner Corporation; eClinicalWorks, LLC; Epic Systems Corporation; Greenway Health, LLC; McKesson Corp.; Optum, Inc.; Practice Fusion, Inc.; Quality Systems, Inc. and its subsidiary NextGen Healthcare Information Systems, LLC; SCI Solutions, Inc.; Medscape; UpToDate, Inc.; Computer Programs and Systems, Inc., and Medical Information Technology, Inc.

The principal competitive factors in our industry include:

- ability to quickly adapt to the increasing complexity of the healthcare reimbursement system;
- size and scope of payer rules knowledge;
- ability to introduce only relevant rules into the workflow at the point of care;
- ease of use and rates of user adoption;
- ability to reduce work on behalf of clients;
- ability to generate a provable return on investment;
- product functionality and scope of services;
- scope of network connections to support electronic data interactions;
- performance, security, scalability, and reliability of service;
- sales and marketing capabilities of the vendor; and
- financial stability of the vendor.

We believe that we compete favorably with our competitors on the basis of these factors. However, some of our competitors have significantly greater financial, technological, and other resources and name recognition, as well as more established distribution networks and relationships with healthcare providers. As a result, these companies may be able to invest more resources than we can in research and development, strategic acquisitions, sales and marketing, and patent prosecution and litigation.

### Government Regulation

Although we generally do not contract with U.S. state or local government entities, the healthcare industry in which we operate is highly regulated and is subject to changing political, legislative, regulatory, and other influences. As a result, the services we provide are subject to a complex array of healthcare laws and regulations, including, among others, the Health Insurance Portability and Accountability Act of 1996, as amended, and the regulations that have been issued under it, which we refer to as HIPAA, the Health Information Technology for Economic and Clinical Health Act, which we refer to as the HITECH Act, regulations issued by the Centers for Medicare and Medicaid Services, or CMS, of the Department of Health and Human Services, or HHS, and a number of fraud and abuse laws, including the federal Anti-Kickback Statute and the Ethics in Patient Referrals Act. Our subsidiaries in India are subject to additional regulations by the Government of India, as well as its regional subdivisions. These and other regulations to which we are subject are more fully described in “Risk Factors – RISKS RELATED TO REGULATION” in Item 1A of Part I of this Annual Report on Form 10-K.

### Intellectual Property

We rely on a combination of intellectual property laws, as well as confidentiality procedures and contractual provisions, to protect our proprietary technology, databases, and our brand. We have filed U.S. and international patent applications covering certain of our proprietary technology. As of December 31, 2017, we held 16 U.S. patents

and 4 foreign patents, with a number of U.S. and foreign patent applications pending. Our issued U.S. patents are expected to expire between 2020 and 2034. We also rely on a combination of registered and unregistered trademarks and service marks to protect our brand. We will continue to file and prosecute applications for patents and trademarks when and where appropriate to protect our rights in proprietary technologies and our brand.

We have a policy of requiring employees and consultants to execute confidentiality agreements upon the commencement of an employment or consulting relationship with us. Our employee agreements also require relevant employees to assign to us all rights to any inventions made or conceived during their employment with us. In addition, we have a policy of requiring



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individuals and entities with which we discuss potential business relationships to sign non-disclosure agreements. Our agreements with clients include confidentiality and non-disclosure provisions.

### Seasonality

There is moderate seasonality in the activity level and service mix of healthcare providers. Typically, discretionary use of healthcare provider services declines during the holiday season, which leads to a decline in collections by our healthcare provider clients in mid-January. Our seasonality is further explained in “Risk Factors” in Item 1A of Part I of this Annual Report on Form 10-K.

### Employees

As of December 31, 2017, we had approximately 5,156 full-time employees, with approximately 2,711 in service operations, 615 in selling and marketing, 1,402 in research and development, and 428 in general and administrative functions. Of these full-time employees, approximately 4,263 were located in the U.S. and 893 were located in India. We believe that we have good relationships with our employees. None of our employees are subject to collective bargaining agreements or are represented by a union.

### Financial Information

The financial information required under this Item 1 is incorporated herein by reference to Item 8 of this Annual Report on Form 10-K.

### Where You Can Find More Information

Our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, including exhibits, proxy and information statements, and amendments to those reports filed or furnished pursuant to Section 13(a), 14, and 15(d) of the Securities Exchange Act of 1934, as amended, are available through the “Investors” portion of our website ([www.athenahealth.com](http://www.athenahealth.com)) free of charge as soon as reasonably practicable after we electronically file such material with, or furnish it to, the Securities and Exchange Commission, or SEC. Information on our website is not part of this Annual Report on Form 10-K or any of our other securities filings unless specifically incorporated herein by reference. The public may read and copy these materials at the SEC’s Public Reference Room at 100 F Street, NE, Washington, DC 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. In addition, our filings with the SEC may be accessed through the SEC’s Interactive Data Electronic Applications, or IDEA, system at [www.sec.gov](http://www.sec.gov). All statements made in any of our securities filings, including all forward-looking statements or information, are made as of the date of the document in which the statement is included, and we do not assume or undertake any obligation to update any of those statements or documents unless we are required to do so by law.

### Item 1A. Risk Factors.

Our operating results and financial condition have varied in the past and may vary significantly in the future depending on a number of factors. Except for the historical information in this report, the matters contained in this report include forward-looking statements that involve risks and uncertainties. The following factors, among others, could cause actual results to differ materially from those contained in forward-looking statements made in this report and presented elsewhere by management from time to time. Such factors, among others, may have a material adverse effect upon our business, results of operations, and financial condition.

#### RISKS RELATED TO OUR BUSINESS — GENERAL

We operate in a highly competitive industry, and if we are not able to compete effectively, our business and operating results will be harmed.

The provision by third parties of medical billing and practice management services to medical practices has historically been dominated by small service providers who offer highly individualized services and a high degree of specialized knowledge applicable in many cases to a limited medical specialty, a limited set of payers, or a limited geographical area. We anticipate that the software, statistical, and database tools that are available to such service providers will continue to become more sophisticated and effective and that demand for our services could be adversely affected.

Electronic health records, or EHR, and practice management software for medical groups and health systems has historically been dominated by large, well-financed, and technologically sophisticated entities that have focused on software solutions. Some of these entities are now offering “hosted” services or “software-as-a-service” models under

which software is centrally administered, and these vendors may also provide administrative and billing services. The size, financial strength, and

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breadth of offerings of the larger entities are increasing as a result of continued consolidation in both the information technology and healthcare industries. We expect large integrated technology companies to continue to become more active in our markets, both through acquisition and internal investment. As costs fall and technology improves, increased market saturation may change the competitive landscape in favor of competitors with greater scale than we possess. In addition, a few smaller companies have started providing single-instance, internet-based software using a model similar to ours; the offerings of these smaller companies may reduce the perceived competitive advantage of our services and impact our market share. Further, while the market for patient engagement, population health, and care coordination services is growing and is not as yet dominated by a small group of vendors with significant resources, our patient engagement, population health, and care coordination services face competition from a wide variety of market participants. For example, certain health systems have developed their own patient portals, population health, and care coordination systems. If we fail to distinguish our patient engagement, population health, and care coordination offerings from the other options available to healthcare providers, the demand for and market share of those offerings may decrease.

In regard to our Epocrates-branded services, we compete with other companies for users of the types of drug and clinical reference tools that we offer and for budget dollars from our pharmaceutical, managed care, and market research clients. We compete within a broad industry of healthcare content providers for the attention of healthcare professionals who can choose to use mobile, online, or print media to reference clinical information. Companies providing clinical content include Medscape, a division of WebMD, LLC, and UpToDate, Inc., a division of Wolters Kluwer Health. Competition from each of these sources of clinical reference content may lead to a loss of our existing network members and a reduction in the rate at which we attract new members for our clinical information. Our primary competition for the promotional spend available from our pharmaceutical clients in the area of interactive services is from companies, including WebMD, that help such companies market their products, programs, and services to healthcare professionals. Our market research business competes with numerous companies that recruit physicians to participate in surveys in a variety of formats, as well as the recruitment arms of market research companies that have assembled their own survey panels of healthcare professionals. To the extent competing channels are available to access healthcare professionals, including physicians, the value of our interactive services to our clients is reduced.

Some of our current large competitors, such as Allscripts Healthcare Solutions, Inc.; Cerner Corporation; Epic Systems Corporation; McKesson Corp.; and Quality Systems, Inc. and its subsidiary NextGen Healthcare Information Systems, LLC, have greater name recognition, longer operating histories, and/or significantly greater resources than we do. As a result, our competitors may be able to respond more quickly and effectively than we can to new or changing opportunities, technologies, standards, or client requirements. We expect to face new competitors as we continue to develop and offer services for the inpatient market. In addition, current and potential competitors have established, and may in the future establish, cooperative relationships with vendors of complementary products, technologies, or services to increase the availability of their products to the marketplace. Current or future competitors may consolidate to improve the breadth of their products, directly competing with our integrated offerings.

Accordingly, new competitors or alliances may emerge that have greater market share, larger client bases, greater breadth and volume of data, more widely adopted proprietary technologies, broader offerings, greater marketing expertise, greater financial resources, and larger sales forces than we have, which could put us at a competitive disadvantage. Further, in light of these advantages, even if our services are more effective than the product or service offerings of our competitors, current or potential clients might select competitive products and services in lieu of purchasing our services. Increased competition is likely to result in pricing pressures, which could negatively impact our sales, profitability, or market share. We face competition from new niche vendors, who offer stand-alone products and services, and from existing enterprise vendors, including those currently focused on software solutions, which have information systems in place with clients in our target markets. These existing enterprise vendors may now, or in the future, offer or promise products or services with less functionality than our services, but offer ease of integration with existing systems and that leverage existing vendor relationships.

The market for cloud-based services for healthcare information technology may not develop substantially further or may develop more slowly than we expect, harming the growth of our business.

The market for cloud-based services for healthcare information technology remains narrowly based, and it is uncertain whether these services will achieve and sustain the high levels of demand and market acceptance we anticipate. Our success will depend to a substantial extent on the willingness of enterprises, large and small, to increase their use of cloud-based services in general, and for their revenue, clinical, and patient cycles in particular. Many enterprises have invested substantial personnel and financial resources to integrate established enterprise software into their businesses and therefore may be reluctant or unwilling to switch to a cloud-based service. Furthermore, 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 significantly adversely affect our business, financial condition, or operating results.

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Changes in the healthcare industry could affect the demand for our services, cause our existing contracts to terminate, and negatively impact the process of negotiating future contracts.

As the healthcare industry evolves, changes in our member, client, and vendor bases may reduce the demand for our services, result in the termination of existing contracts or certain services provided under existing contracts, and make it more difficult to negotiate new contracts on terms that are acceptable to us. For example, the current trend toward consolidation of healthcare providers within hospital systems may cause our existing client contracts to terminate as independent practices are merged into hospital systems. Such larger healthcare organizations may also have their own practice management services and health IT systems, reducing demand for our services. Similarly, client and vendor consolidation results in fewer, larger entities with increased bargaining power and the ability to demand terms that are unfavorable to us. If these trends continue, we cannot assure you that we will be able to continue to maintain or expand our client base, negotiate contracts with acceptable terms, or maintain our current pricing structure, and our revenues may decrease.

General reductions in expenditures by healthcare companies, or reductions in such expenditures within market segments that we serve, could have similar impacts with regard to our interactive services. Such reductions may result from, among other things, reduced governmental funding for healthcare; a decrease in the number of, or the market exclusivity available to, new drugs coming to market; government regulation or private initiatives that affect the manner in which healthcare providers interact with patients, pharmaceutical companies, payers, or other healthcare industry participants (e.g., limitations on advertising to physicians or required disclosure of payments made to them); or adverse changes in business or economic conditions affecting healthcare payers or providers, the pharmaceutical industry, or other healthcare companies that purchase our interactive services (e.g., changes in the design of health plans). Any of these changes could reduce the purchase of our services by such interactive services clients, reducing our revenue and possibly requiring us to materially revise our offerings. In addition, our interactive services clients' expectations regarding pending or potential industry developments may also affect their budgeting processes and spending plans with respect to services of the types we provide.

We recently implemented a comprehensive plan, which we refer to as the Plan, designed to increase our strategic focus and improve operational efficiency; however, there can be no assurance that we will be successful in fully implementing the Plan, or that it will have the effects we intend. The Plan itself, or our failure to successfully implement the Plan, could have a material negative impact on our business.

In August 2017, we announced that our Board of Directors and management team had commenced a comprehensive review of our operations, cost structure, and capital allocation. The review included all parts of our business, including sales and marketing, research and development, general and administrative, service operations, product portfolio, and organizational structure. In October 2017, the Board approved and we announced the Plan, designed to increase our strategic focus and improve operational efficiency. In connection with the Plan, we took steps to reduce our workforce by approximately 9% and the Plan is expected to result in cumulative pre-tax charges related to these workforce reductions. We anticipate completing the majority of activities under the Plan in 2018. However, there can be no assurance that we will be successful in fully implementing the Plan in a timely manner or at all, or that the Plan will have the effects that we intend. If we fail to successfully implement the Plan, or implementation is materially delayed, it could materially adversely affect our financial results. In addition, the Plan itself, in particular the workforce reductions and other cost-cutting measures we have implemented and intend to continue to implement, could themselves have a material negative impact on our business.

If we do not continue to innovate and provide services that are useful to clients and users, we may not remain competitive, and our revenues and operating results could suffer.

The market for healthcare in the U.S. is in the early stages of structural change and is rapidly evolving toward a more value-based care model. Our success depends on our ability to keep pace with technological developments, satisfy increasingly sophisticated client and user requirements, and sustain market acceptance. Our future financial performance will depend in part on growth in this market and on our ability to adapt to emerging demands of this market, including adapting to the ways our clients or users access and use our services. Our competitors are constantly

developing products and services that may become more efficient or appealing to our clients or users. As a result, we must continue to invest significant resources in research and development in order to enhance our existing services and introduce new high-quality services that clients and users will want, while offering these services at competitive prices. If we are unable to predict user preferences or industry changes, or if we are unable to modify our services on a timely or cost-effective basis, we may lose clients and users. Our operating results would also suffer if our innovations are not responsive to the needs of our clients and users, are not appropriately timed with market opportunity, or are not effectively brought to market. As technology continues to develop, our competitors may be able to offer results that are, or that are perceived to be, substantially similar to or better than those generated by our services. This may force us to compete on additional service attributes and to expend significant resources in order to remain competitive.

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Failure to manage our growth effectively could increase our expenses, decrease our revenue, and prevent us from implementing our business strategy.

In the past, we have experienced periods of high and moderate growth. We believe that increasing awareness of our brand in a cost-effective manner is critical to achieving widespread adoption of our services. Promotional activities may not generate an increase in awareness or revenue, and even if they do, any increase in revenue may not offset the expenses we incur in building awareness. Besides awareness, we must continue to maintain, and may need to enhance, our information technology infrastructure and financial and accounting systems and controls, as well as manage expanded operations in geographically distributed locations. We also must attract, train, and/or retain a significant number of qualified sales and marketing personnel, professional services personnel, software engineers, technical personnel, service offering personnel, and management personnel. Failure to manage our growth effectively could lead us to over-invest or under-invest in technology and operations; result in weaknesses in our infrastructure, systems, or controls; give rise to operational mistakes, losses, or loss of productivity or business opportunities; reduce client or user satisfaction; limit our ability to respond to competitive pressures; and result in loss of employees and reduced productivity of remaining employees. Our growth could require significant capital expenditures and may divert financial resources and management attention from other projects, such as the development of new or enhanced services or the acquisition of suitable businesses or technologies. If our management is unable to effectively manage our growth, our expenses may increase more than expected, our revenue could decline or may grow more slowly than expected, and we may be unable to implement our business strategy.

If we are unable to retain existing members of our Epocrates network and attract new members, especially physician members with desired characteristics for our interactive services who actively participate in those services, our revenue will decline and some of our business will suffer.

Members of our Epocrates network who subscribe to our premium drug and clinical reference products usually do so for a term of one year and may elect to cancel the subscription for any renewal terms. Under certain circumstances, our members may cancel their subscriptions prior to expiration. Factors that may affect the retention rate of our existing members and the rate at which we attract new members for our drug and clinical reference tools include: Service Relevance. Unless we are able to provide current, relevant, and reliable healthcare content, drug and clinical reference tools, formulary hosting, and other services that meet and continue to meet the needs of healthcare professionals, including physicians, the value of those services to new and existing members will decrease. Our provision of such services depends on our ability to hire and retain qualified physician and pharmacist editors and authors, license accurate and relevant content from third parties, contract with health plans and insurers to host formulary information, monitor and respond to changes in member interest in specific topics, and develop new or enhanced services. If we cannot meet our staffing needs or develop or acquire needed content at a reasonable cost, if there are errors or omissions in such content, if our competitors obtain exclusive access to or develop content that healthcare professionals consider superior to ours, or if we cannot meet the needs of our members, the value of our content and services would diminish.

Brand Reputation. The reputation of our Epocrates brand is dependent in large part on the medical community's continued perception of us as independent from our healthcare industry clients, particularly pharmaceutical companies. If healthcare professionals believe that we are too closely associated with such clients as a result of the revenue we receive from their purchase or sponsorship of our interactive services, the credibility of our brand will diminish. We cannot assure you that the medical community will view our content as sufficiently unbiased. If the reputation of our brand is damaged, it will be difficult, expensive and time-consuming to restore the quality of our brand with healthcare professionals and our business could suffer.

Competitive Landscape. If the developers of mobile operating systems and mobile devices with which our products and services are compatible fail to remain competitive in the marketplace and to be adopted into medical practice and practice workflow, members will be less inclined to use our services. The availability, price, performance, and functionality of competing products and services, including mobile, web-based, and traditional products and services offered by competitors or through online resources and searches may affect our retention rate and the rate at which we attract new members for our drug and clinical reference tools. The availability of download sites such as the Apple App Store<sup>SM</sup> that offer numerous free or low-priced competing products at one location has also reduced the demand

for our paid subscription products. We expect the use of such sites to expand, reducing the number of paying members for our drug and clinical reference tools as a percentage of total members.

In addition to the loss of subscription revenue, our inability to attract or retain members, especially physician members with desired characteristics, such as specialty and prescribing habits, who update their mobile devices through our servers with sufficient frequency, may cause an even more significant decline in revenue from our interactive services. Our market research, payer, and pharmaceutical clients are attracted to our large, engaged member network for the delivery of their clinical



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messages, formularies, and other sponsored content, and, without sufficient active members who meet desired criteria, those clients may reduce their subscription for our interactive services, and our revenue may decline.

Even if the number of our members is not materially reduced, their participation in our services may decrease, which could impact our revenues. We have established limits on the number and the mix of sponsored and non-sponsored messages delivered to members in order to promote the quality of members' experience with our services. If an insufficient number of members update during a given service period, or the demand for promotional clinical messaging sponsorship exceeds the available supply, our healthcare clients could become dissatisfied with our service. As a result, we may be unable to grow our interactive services revenue beyond the bounds we have set, as changes to such limits could cause our members to be dissatisfied with our services and the response to our interactive services to decrease. Furthermore, if our members generally become less responsive to participating in our services, the value of these interactive services will likely decline. This could cause our revenue to remain flat or to decline.

Finally, if there is a reduction in the number of network members or their participation in our services, certain anticipated benefits of our acquisition of Epocrates, such as increased name recognition and reputation, cross-sell potential, and the market acceptance of joint services may not be fully realized, if at all.

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

Our success depends in part on our ability to enforce our intellectual property and other proprietary rights. We rely upon a combination of copyright, patent, trademark, trade secret, and unfair competition laws, as well as access and use restrictions and other contractual provisions, to protect these rights.

Our attempts to protect our intellectual property through copyright, patent, and trademark registration may be challenged by others or invalidated through administrative process or litigation. We have 16 issued U.S. patents, 4 issued foreign patents, and a number of U.S. and foreign patent applications pending as of December 31, 2017. The scope of our issued patents may be insufficient to prevent competitors from providing products and services similar to ours, our patents may be successfully challenged, and we may not be able to obtain additional meaningful patent protection in the future.

Our agreements with clients and users and with certain vendors and strategic partners limit their use of, and retain our rights in, our intellectual property and proprietary information and grant us ownership of or rights to license intellectual property created in the performance of those agreements to the extent that it relates to the provision of our services. In addition, we require certain of our employees and consultants to enter into confidentiality and assignment of inventions agreements and certain of our vendors and strategic partners to agree to contract provisions regarding confidentiality and non-competition. However, these agreements may be breached, and we may not have adequate remedies for any such breach. Further, no assurance can be given that these agreements will be effective in preventing the unauthorized access to, or use of, our proprietary information or the reverse engineering of our technology. In any event, these agreements do not prevent our competitors from independently developing technology or authoring clinical information that is substantially equivalent or superior to our technology or the information we distribute. Agreement terms that address non-competition are difficult to enforce in many jurisdictions and may not be enforceable in any particular case. After the expiration or due to the absence of certain restrictions in our agreements with vendors, including non-competition restrictions, vendors may partner with our competitors, which may adversely impact our business.

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. For example, some open source licenses require that those using the associated code disclose modifications made to that code and that such modifications be licensed to third parties at no cost, among other restrictions or obligations that could be detrimental to our business, operating results or financial condition. Some open source software licenses automatically terminate upon any violation of their terms. Accordingly, any failure to comply with the licenses applicable to open source software may require us to re-engineer portions of our technologies, discontinue use of such open source software, which could impact our ability to sell certain offerings that use that open source software, or result in infringement of third-party intellectual property, which could result in

litigation and liability for us. There can be no assurance that efforts we take to monitor the use of open source software to avoid uses in a manner that would require us to disclose or grant licenses under our proprietary source code, or avoid other detrimental restrictions or obligations imposed by certain open source licenses, will be successful, and such use could inadvertently occur.

To the extent that our intellectual property and other proprietary rights are not adequately protected, third parties might gain access to our proprietary information, develop and market products or services similar to ours, or use trademarks similar to ours, each of which could materially harm our business. Existing U.S. federal and state intellectual property laws offer only

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limited protection. Moreover, the laws of other countries in which we now or may in the future conduct operations or contract for services may afford little or no effective protection of our intellectual property. If we resort to legal proceedings to enforce our intellectual property rights or to determine the validity and scope of the intellectual property or other proprietary rights of others, the proceedings could be burdensome and expensive, even if we were to prevail. Any litigation that may be necessary in the future could result in substantial costs and diversion of resources and could have a material adverse effect on our business, operating results, or financial condition.

We may be sued by third parties for alleged infringement of their proprietary rights.

The software and internet industries are characterized by the existence of a large number of patents, trademarks, and copyrights and by frequent litigation based on allegations of infringement or other violations of intellectual property rights. Moreover, our business involves the systematic gathering and analysis of data about the requirements and behaviors of payers and other third parties, some or all of which may be claimed to be confidential or proprietary. We have received in the past, and may receive in the future, communications from third parties claiming that we have infringed on the intellectual property rights of others. Our technologies may not be able to withstand such third-party claims of rights against their use, and we could lose the right to use technologies that are the subject of such claims. Any intellectual property claims, with or without merit, could be time-consuming and expensive to resolve, divert management attention from executing our business plan, and require us to pay monetary damages or enter into royalty or licensing agreements. In addition, many of our contracts contain warranties with respect to intellectual property rights, and some require us to indemnify our clients, partners, and third-party service providers for third-party intellectual property infringement claims, which would increase the cost to us of an adverse ruling on such a claim. Indemnification obligations of our partners and third-party service providers may not be effective or adequate to protect us or the indemnifying party may be unable to uphold its contractual obligations.

Moreover, any settlement or adverse judgment resulting from such a claim could require us to pay substantial amounts of money or obtain a license to continue to use the technology or information that is the subject of the claim, or otherwise restrict or prohibit our use of the technology or information. There can be no assurance that we would be able to obtain a license on commercially reasonable terms, if at all, from third parties asserting an infringement claim; that we would be able to develop alternative technology on a timely basis, if at all; that we would be able to obtain a license to use a suitable alternative technology or information to permit us to continue offering, and our clients to continue using, our affected services; or that we would not need to change our product and design plans, which could require us to redesign affected products or services or delay new offerings. Accordingly, an adverse determination could prevent us from offering our services to others.

Current and future litigation against us could be costly and time-consuming to defend and could result in additional liabilities.

We may from time to time be subject to legal proceedings and claims that arise in the ordinary course of business, such as claims brought by our clients in connection with commercial disputes and employment claims made by our current or former employees. Claims may also be asserted by or on behalf of a variety of other parties, including government agencies, patients or vendors of our clients, or stockholders. For example, in May 2013 we purchased the property on which our corporate headquarters are located. This property is a former Superfund site, and our ownership of it, or any of our other properties, could expose us to liability under applicable environmental laws, as well as to liability as a landlord or as owner of property that may be used by members of the public. Any litigation involving us may result in substantial costs, operationally restrict our business, and may divert management's attention and resources, which may seriously harm our business, overall financial condition, and operating results. Insurance may not cover existing or future claims, be sufficient to fully compensate us for one or more of such claims, or continue to be available on terms acceptable to us. A claim brought against us that is uninsured or underinsured could result in unanticipated costs, thereby reducing our operating results and resulting in a reduction in the trading price of our stock.

**RISKS RELATED TO OUR BUSINESS — OPERATIONS**

We depend upon third-party service providers for important functions of our services. If these third-party service providers do not fulfill their contractual obligations or choose to discontinue their services, our business and operations could be disrupted and our operating results would be harmed.

We depend upon third-party providers, and in some cases, limited or single-source providers, for important functions of our services. For example, we rely on Access Healthcare Services USA, LLC to provide the majority of our data entry and certain other services, from facilities located in India and the Philippines, to support our client service operations, including, among other things, processing critical claims data and clinical documents, credentialing, and enrollment services. In addition, we rely on our banking partner, U.S. Bank, for depositing client funds that we collect into our clients' bank accounts. Failure of these service providers to perform satisfactorily could result in client dissatisfaction and harm to our reputation, and could disrupt our business operations, and adversely affect our operating results. Political and economic uncertainties and natural disasters of the

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international locations where certain of our third-party service providers have facilities and operations also increases our risk. With respect to certain of our service providers, we have significantly less control over the systems and processes involved than if we maintained and operated them ourselves. In some cases, functions necessary to our business are performed on proprietary systems and software to which we have no access or through third-party platforms to which our clients provide us with access. Although we have back-up functionality for some of these services, if we need to find an alternative source for performing these functions, we may have to expend significant money, resources, and time to develop the alternative, and if this development is not accomplished in a timely manner and without significant disruption to our business, we may be unable to fulfill our responsibilities to clients or the expectations of clients, with the attendant potential for liability claims and a loss of business reputation, loss of ability to attract or maintain clients, and reduction of our revenue or operating margin.

Our business could be adversely affected if our clients are not satisfied with our services.

We depend on client satisfaction to succeed, both with respect to our cloud-based software and client support services. Our sales organization is dependent on the quality of our service offerings, our business reputation, and strong recommendations from existing clients. If our cloud-based software does not function reliably or fails to achieve client expectations in terms of performance, clients could assert claims against us or terminate their contracts with us. This could damage our reputation and impair our ability to attract or retain clients. We provide client support services to resolve any issues related to our service offerings. Our client support team may be unable to respond quickly or efficiently enough to accommodate short-term increases in client demand for support, particularly as we increase the size of our client base. It is difficult to predict client demand for support services and if client demand increases significantly, we may be unable to provide satisfactory support services to our clients. Any failure to maintain high-quality and highly-responsive client support, or a market perception that we do not maintain high-quality and highly-responsive support, could harm our reputation, adversely affect our ability to sell our service offerings to existing and prospective clients, and harm our business, operating results, and financial condition.

Various risks could affect our worldwide operations, exposing us to significant costs.

We conduct operations in the United States, India, and the Philippines, either directly or through our service providers. Such worldwide operations expose us to potential operational disruptions and costs as a result of a wide variety of events, including local inflation or economic downturn, protectionism, currency exchange fluctuations, political turmoil, terrorism, labor issues, natural disasters, unfavorable intellectual property protection, and pandemics. Any such disruptions or costs could have a negative effect on our ability to provide our services or meet our contractual obligations, the cost of our services, client and user satisfaction, our ability to attract or maintain clients and users, and, ultimately, our profits.

In the foreign countries where we operate, local laws and customs may differ from those in the U.S. For example, it may be a local custom in certain countries for businesses to engage in practices that are prohibited by our internal policies and procedures or U.S. laws and regulations applicable to us. We cannot guarantee that our employees, contractors, and agents will comply with all of our compliance policies and procedures. If we or our employees, contractors, or agents fail to comply with the legal requirements, government authorities in the U.S. and elsewhere could seek to impose civil or criminal fines and penalties which could have a material adverse effect on our business, operating results, and financial condition.

Because competition for our target employees is intense, we may not be able to attract and retain the highly skilled employees we need to support our continued growth.

To continue to execute on our growth plan, we must attract and retain highly qualified personnel. Competition for such personnel is intense, especially for senior sales executives and software engineers with high levels of experience in designing and developing software and internet-related services. We may not be successful in attracting and retaining qualified personnel. We have from time to time in the past experienced, and we expect to continue to experience in the future, difficulty in hiring and retaining highly skilled employees with appropriate qualifications. In addition, our search for replacements for departed employees may cause uncertainty regarding the future of our business, impact employee hiring and retention, and adversely impact our revenue, operating results, and financial condition.

Many of the companies with which we compete for experienced personnel have greater resources than we have. In addition, in making employment decisions, particularly in the internet and high-technology industries, job candidates often consider the value of the equity awards they may receive in connection with their employment. Volatility in the price of our stock or failure to obtain stockholder approval for increases in the number of shares available for grant under our equity plans may, therefore, adversely affect our ability to attract or retain key employees. If we fail to attract new personnel or fail to retain and motivate our current personnel, our business and future growth prospects could be severely harmed.

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If we acquire or invest in companies or technologies, they could prove difficult to integrate, disrupt our business, dilute stockholder value, and adversely affect our operating results and the value of our common stock. As part of our business strategy, we may acquire, enter into joint ventures with, or make investments in complementary companies, services, and technologies in the future. Acquisitions and investments involve numerous risks, including:

- difficulties in identifying and acquiring products, technologies, or businesses that will help our business;
- challenges in integrating operations, technologies, services, and personnel;
- the loss of key personnel;
- failure to achieve anticipated operational efficiencies;
- inconsistencies in standards, controls, procedures, or policies that give rise to additional costs;
- diversion of financial and managerial resources from existing operations and other potential acquisitions and investments;
- the risk of entering new markets in which we have little to no experience;
- risks related to the assumption of known and unknown liabilities;
- the risk of write-offs and the accelerated amortization of expenses related to purchased intangible assets; and
- delays in client purchases due to uncertainty and the inability to maintain relationships with clients of the acquired businesses.

As a result, if we fail to properly evaluate acquisitions or investments, we may not achieve the anticipated benefits of any such acquisitions or investments, we may incur costs in excess of what we anticipate, and management resources and attention may be diverted from other necessary or valuable activities. We may not successfully use the acquired technology to accelerate the development of our service offerings and integrate acquired service offerings and realize the expected benefits of these acquisitions. Our acquisitions could also result in dilutive issuances of our equity securities, aggregate margin dilution, the incurrence of debt, contingent liabilities, additional amortization expenses, or impairment of goodwill and purchased long-lived assets, any of which could harm our financial condition, operating results, or value of our common stock.

### RISKS RELATED TO OUR BUSINESS — FINANCIALS

Our operating results have in the past fluctuated and may continue to fluctuate significantly, and if we fail to meet the expectations of analysts or investors, our stock price and the value of an investment in our common stock could decline substantially.

Our operating results are likely to fluctuate, and if we fail to meet or exceed the expectations of securities analysts or investors, the trading price of our common stock could decline. Moreover, our stock price may be based on expectations of our future performance that may be unrealistic or that may not be met. Some of the important factors that could cause our revenues and operating results to fluctuate from quarter to quarter include:

- the extent to which our services achieve or maintain market acceptance;
- our ability to introduce new services, updates, and enhancements to our existing services on a timely basis;
- new competitors and the introduction of enhanced products and services from new or existing competitors;
- the length of our contracting and implementation cycles and our fulfillment periods for our services to pharmaceutical companies;
- changes in client days in accounts receivable;
- the severity, length, and timing of seasonal and pandemic illnesses;
- declines in use of healthcare provider services during the holiday season, which leads to a decline in collections by our healthcare provider clients in mid-January;
- the financial condition of our current and future clients;
- changes in client budgets and procurement policies;
- changes in pharmaceutical company demand as a result of delays or changes in product approvals and changes in regulations or marketing strategies;
- the amount and timing of our investment in research and development activities;
- the amount and timing of our investment in sales and marketing activities;

- technical difficulties or interruptions in our services;
- our ability to hire and retain qualified personnel;

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changes in the regulatory environment related to healthcare;  
regulatory compliance costs;  
the timing, size, and integration success of potential future acquisitions; and  
unforeseen legal expenses, including litigation and settlement costs.

Many of these factors are not within our control, and the occurrence of one or more of them might cause our operating results to vary widely. As such, we believe that quarter-to-quarter comparisons of our revenues and operating results may not be meaningful and should not be relied upon as an indication of future performance.

A significant portion of our operating expense is relatively fixed in nature in the short term, and planned expenditures are based in part on expectations regarding future revenue and profitability. Accordingly, unexpected revenue shortfalls, lower-than-expected revenue increases as a result of planned expenditures, and longer-than-expected impact on profitability and margins as a result of planned expenditures may decrease our gross margins and profitability and could cause significant changes in our operating results from quarter to quarter. In addition, our future quarterly operating results may fluctuate and may not meet the expectations of securities analysts or investors. If this occurs, the trading price of our common stock could fall substantially, either suddenly or over time.

If the revenue of our clients decreases, or if our clients cancel or elect not to renew their contracts or certain services, our revenue will decrease.

Under most of our client contracts, we base our charges on a percentage of the revenue that the client realizes while using our services. Many factors may lead to decreases in client revenue, including:

- interruption of client access to our system for any reason;
- our failure to provide services in a timely or high-quality manner;
- failure of our clients to adopt or maintain effective business practices;
- actions by third-party payers of medical claims to reduce reimbursement;
- government regulations and government or other payer actions or inaction reducing or delaying reimbursement; and
- reduction of client revenue resulting from increased competition or other changes in the marketplace for physician services.

Changes in economic conditions and government requirements may increase the likelihood of several of these factors. For example, patients who have lost health insurance coverage due to unemployment or who face increased deductibles imposed by financially struggling employers or insurers could reduce the number of visits those patients make to our clients. Patients without health insurance or with reduced coverage may also default on their payment obligations at a higher rate than patients with coverage. Added financial stress on our clients could lead to their acquisition or bankruptcy, which could cause the termination of some of our service relationships. Further, despite the cost benefits that we believe our services provide, prospective clients may wish to delay contract decisions due to implementation costs or be reluctant to make any material changes in their established business methods based upon the economic climate. With a reduction in tax revenue, state and federal government healthcare programs, including reimbursement programs such as Medicaid or initiatives under the Patient Protection and Affordable Care Act, which we refer to as the ACA, may be reduced or eliminated, which could negatively impact the payments that our clients receive.

Also, although we currently estimate our expected client life for clients of athenahealth-branded services to be 12 years, this is only an estimate, and there can be no assurance that our clients will elect to renew their contracts for this period of time. Our clients typically purchase one-year contracts that, in most cases, may be terminated without cause, typically with a prescriptive notice period. The majority of our clinical information subscriptions have terms of one year, and our contracts with our market research, payer, and pharmaceutical clients for our interactive services typically have one-year terms. We cannot assure you that members of our Epocrates network and other Epocrates-branded services clients will continue to participate in our existing programs beyond the terms of their existing contracts or that they will enter into any additional contracts for new programs that we offer. If our clients' revenue decreases for any of the above or other reasons, or if our clients cancel or elect not to renew their contracts or certain services, our revenue will decrease.

If we are required to collect sales and use taxes on the services we sell in various jurisdictions, we may be subject to liability for past sales and incur additional related costs and expenses, and our future sales may decrease.

We may lose sales or incur significant expenses should states be successful in imposing state sales and use taxes on our services. A successful assertion by one or more states that we should collect sales or other taxes on the sale of our services could result in substantial tax liabilities for past sales, decrease our ability to compete on pricing with other vendors, and

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otherwise harm our business. Each state has different rules and regulations governing sales and use taxes, and these rules and regulations are subject to varying interpretations that may change over time. We review these rules and regulations periodically and, when we believe that our services are subject to sales and use taxes in a particular state, we voluntarily approach state tax authorities in order to determine how to comply with their rules and regulations. We cannot assure you that we will not be subject to sales and use taxes or related penalties for past sales in states where we believe no compliance is necessary.

Vendors of services, like us, are typically held responsible by taxing authorities for the collection and payment of any applicable sales and similar taxes. If one or more taxing authorities determines that taxes should have, but have not, been paid with respect to our services, we may be liable for past taxes in addition to taxes going forward. Liability for past taxes may also include very substantial interest and penalty charges. Our client contracts provide that our clients must pay all applicable sales and similar taxes. Nevertheless, clients may be reluctant to pay back taxes and may refuse responsibility for interest or penalties associated with those taxes. If we are required to collect and pay back taxes and the associated interest and penalties, and if our clients fail or refuse to reimburse us for all or a portion of these amounts, we will incur unplanned expenses that may be substantial. Moreover, imposition of such taxes on our services going forward will effectively increase the cost of such services to our clients and may adversely affect our ability to retain existing clients or to gain new clients in the states in which such taxes are imposed.

We may also become subject to tax audits or similar procedures in states where we already pay sales and use taxes. The incurrence of additional accounting and legal costs and related expenses in connection with, and the assessment of, taxes, interest, and penalties as a result of audits, litigation, or otherwise could be materially adverse to our current and future results of operations and financial condition.

As a result of our variable sales and implementation cycles for our athenahealth services, and the uncertainty as to the timing of fulfillment of our Epocrates services, we may be unable to recognize revenue to offset expenditures, which could result in fluctuations in our quarterly results of operations or otherwise harm our future operating results.

The sales cycle for our athenahealth services can be variable, typically ranging from three to five months from initial contact to contract execution, although this period can be substantially longer. During the sales cycle, we expend time and resources, and we do not recognize any revenue to offset such expenditures. Our implementation cycle is also variable, typically ranging from three to five months from contract execution to completion of implementation, although some of our new-client set-up projects—especially those for larger clients—are complex and require a lengthy delay and significant implementation work. Each client's situation is different, and unanticipated difficulties and delays may arise as a result of failure by us or by the client to meet our respective implementation responsibilities.

Even if implementation has begun, there can be no assurance that we will recognize revenue on a timely basis or at all from our efforts. Implementation for a given client may be canceled. In addition, implementation may be delayed, or the target dates for completion may be extended into the future, for a variety of reasons, including the needs and requirements of the client, delays with payer processing, and the volume and complexity of the implementations awaiting our work. If implementation periods are extended, our provision of our athenahealth services upon which we realize most of our revenues will be delayed, and our financial condition may be adversely affected.

In regard to our Epocrates-branded services, the time between the date of the signing of the contract with a pharmaceutical client for a program, the actual fulfillment of the services under such contract and the revenue pattern associated with such revenues may be lengthy, especially for larger contracts with multiple deliverables, and may be subject to delays over which we have little or no control, including those that result from that client's need for internal approvals.

These factors may contribute to fluctuations in our quarterly operating results, particularly during any period in which our sales volume is relatively low. As a result, our operating results could fall below the expectations of securities analysts or investors.

Because we recognize revenue from our drug and clinical reference tool subscriptions and certain of our interactive services over the term or at the end of the service period, a significant downturn in our business may not be reflected immediately in our operating results, which may make it more difficult to evaluate our prospects.

We recognize revenue from our Epocrates subscription agreements monthly over the terms of these agreements, which are typically one year. In most cases, we recognize revenue from our interactive services over the terms of these

agreements or upon delivery of each service element. As a result, a significant portion of the revenue we report in each quarter is generated from subscription and service agreements entered into during prior periods. Consequently, a decline in new or renewed subscriptions or service agreements in any one quarter may not materially affect our financial performance in that quarter but will negatively affect our revenue in future quarters. In addition, we may be unable to adjust our costs, many of which are fixed, in response to reduced revenue. Accordingly, the effect of significant declines in sales and market acceptance of our services

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may not be reflected in our short-term results of operations, which would make our reported results less indicative of our future prospects.

**RISKS RELATED TO OUR SERVICE OFFERINGS**

Our proprietary software or our services may not operate properly, which could damage our reputation, give rise to claims against us, or divert application of our resources from other purposes, any of which could harm our business and operating results.

Proprietary software development is time-consuming, expensive, and complex. Unforeseen difficulties can arise. We may encounter technical obstacles, and it is possible that we discover additional problems that prevent our applications from operating properly. If our systems do not function reliably or fail to achieve user or client expectations in terms of performance, clients could assert liability claims against us or attempt to cancel their contracts with us, and members could choose to terminate their use of our services. This could damage our reputation and impair our ability to attract or retain clients and members.

Information services as complex as those we offer have in the past contained, and may in the future develop or contain, undetected defects, vulnerabilities, or errors. We cannot assure you that material performance problems or defects in our services will not arise in the future. Errors may result from sources beyond our control, including the receipt, entry, or interpretation of patient information; interface of our services with legacy systems that we did not develop; or errors in data provided by third parties. It is challenging for us to test our software for all potential problems because it is difficult to simulate the wide variety of computing environments or treatment methodologies that our clients or members may deploy or rely upon. Therefore, despite testing, defects or errors may arise in our existing or new software or service processes following introduction to the market. For example, changes in payer requirements and practices are frequent and sometimes difficult to determine except through trial and error, so we are continuously discovering defects and errors in our software and service processes compared against these requirements and practices.

Because clients rely on our services to collect, manage, and report clinical, business, and administrative data, including information to assist providers in tracking and treating ill patients, and members rely on our services to provide timely and accurate information regarding medical conditions and medicines, they may have a greater sensitivity to service errors and security vulnerabilities than clients of software products in general. Any operational delay in or failure of our technology or service processes may result in the disruption of patient care and could cause harm to patients and thereby give rise to a product liability claim or errors or omissions claim. Such claims could subject us to significant legal defense costs and adverse publicity, regardless of the merits or eventual outcome of those claims. Limitations of liability and disclaimers that purport to limit our liability for damages related to defects in our software or content which we may include in our subscription and services agreements may not be enforced by a court or other tribunal or otherwise effectively protect us from related claims. In most cases, we maintain liability insurance coverage, including coverage for errors and omissions. However, it is possible that claims could exceed the amount of our applicable insurance coverage or that this coverage may not continue to be available on acceptable terms or in sufficient amounts.

In light of this, defects, vulnerabilities, and errors and any failure by us to identify and address them could result in loss of revenue or market share; liability to clients, members, their patients, or others; failure to achieve market acceptance or expansion; diversion of development and management resources; delays in the introduction of new services; injury to our reputation; and increased service and maintenance costs. Defects, vulnerabilities, or errors in our software and service processes might discourage existing or potential clients or members from purchasing services from us. Correction of defects, vulnerabilities, or errors could prove to be impossible or impracticable. The costs incurred in correcting any defects, vulnerabilities, or errors or in responding to resulting claims or liability may be substantial and could adversely affect our operating results.

If our security measures are breached or fail or unauthorized access is obtained to a client's or member's data, our services may be perceived as not being secure, clients and members may curtail or stop using our services, and we may incur significant liabilities.

Our services involve the web-based storage and transmission of clients' and members' proprietary information, including personal or identifying information and protected health information of patients. Because of the sensitivity

of this information, security features of software used in connection with our services are very important. From time to time we may detect vulnerabilities in our systems, which, even if they do not result in a security breach, may reduce client confidence and require substantial resources to address. If our security measures are breached or fail as a result of third-party action, employee error, malfeasance, insufficiency, defective design, or otherwise, someone may be able to obtain unauthorized access to client, member, or patient data. As a result, our reputation could be damaged, our business may suffer, and we could face damages for contract breach, penalties for violation of applicable laws or regulations, and significant costs for remediation and efforts to

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prevent future occurrences. We rely upon users of our systems for key activities to promote security of those systems and the data within them, such as administration of client-side access credentialing and control of client-side display of data. On occasion, our users have failed to perform these activities. Failure of users to perform these activities may result in claims against us that this reliance was misplaced, which could expose us to significant expense and harm to our reputation. Because techniques used to obtain unauthorized access or to sabotage systems change frequently and generally are not recognized until launched against a target, we may be unable to anticipate these techniques or to implement adequate preventive measures. If an actual or perceived breach of our security occurs, the market perception of the effectiveness of our security measures could be harmed and we could lose sales, clients, and members.

In addition, we use third-party technology and service providers, and our clients may authorize or enable third parties to access their data or the data of their patients. For example, we depend on third-party service providers for processing claims data and clinical documents for our clients and we partner with other healthcare information technology companies to offer our clients more seamless integration with those companies through electronic interfaces. Vendor management programs, security obligations imposed upon third-party technology and service providers, contractual security obligations of third-party technology and service providers, and processes for assessment of our partners' information security which we have designed cannot provide absolute security. Our clients may have their own computer systems, devices (including mobile devices), or servers (whether internally developed or provided by a third party) to manage, store, and transmit clinical and financial data, which may interact with or contain information obtained from our services. Because we do not control our vendors', partners', or clients' or clients' users' information security systems, devices, or servers, we cannot ensure the complete integrity or security of these systems, devices, or servers. A security breach of our vendors', partners', or clients' system, device, or server may damage our reputation, adversely affect our ability to attract new clients, cause existing clients to cancel their contracts, and/or subject us to third-party lawsuits, all of which could adversely affect our operating results. Failure by our clients to obtain proper permissions and waivers may result in claims against us or may limit or prevent our use of data, which could harm our business.

We require our clients to provide necessary notices and to obtain necessary permissions and waivers for use and disclosure of the information that we receive, and we require contractual assurances from them that they have done so and will do so. If they do not obtain necessary permissions and waivers, then our use and disclosure of information that we receive from them or on their behalf may be limited or prohibited by state or federal privacy laws or other laws. This could impair our functions, processes, and databases that reflect, contain, or are based upon such data and may prevent use of such data, including our ability to provide such data to third parties that are incorporated into our service offerings. Furthermore, this may cause us to breach obligations to a third party to whom we may provide such data, such as third-party service or technology providers that are incorporated into our service offerings. In addition, this could interfere with or prevent creation or use of rules, and analyses or limit other data-driven activities that benefit us. Moreover, we may be subject to claims or liability for use or disclosure of information by reason of lack of valid notice, permission, or waiver. These claims or liabilities could subject us to unexpected costs and adversely affect our operating results.

Various events could interrupt users' access to our systems, exposing us to significant costs or reducing our operating results.

The ability to access our systems is critical to our clients' administration of care, cash flow, and business viability. Our operations and facilities are vulnerable to interruption or damage from a number of sources, many of which are beyond our control, including, without limitation: (i) power loss and telecommunications failures; (ii) earthquake, fire, flood, hurricane, and other natural disasters; (iii) terrorism and acts of war; (iv) software and hardware errors, failures, or crashes in our systems or those of others; and (v) computer viruses, ransomware, hacking, and similar disruptive problems in our systems or those of others. If users' access is interrupted because of problems in the operation of our facilities, we could be exposed to significant claims by clients or their patients, particularly if the access interruption is associated with problems in the timely delivery of funds due to those clients or medical information relevant to patient care. Our plans for disaster recovery and business continuity rely in part upon third-party providers of related services, and if those vendors fail us at a time that our systems are not operating correctly, we could incur a loss of revenue and

liability for failure to fulfill our obligations. Additionally, our existing contracts with our clients include commitments related to the availability of our offerings and we are obligated to issue credits to our clients if we do not meet those commitments. Our business interruption insurance only covers some, but not all, of these potential events, and even for those events that are covered, it may not be sufficient to compensate us fully for losses or damages that may occur as a result of such events, including, for example, loss of market share and diminution of our brand, reputation, and member and client loyalty.

In addition, even in the absence of direct damage to our operations, large natural disasters, terrorist attacks or other unanticipated catastrophes could have a significant impact on our clients' and partners' businesses, which in turn could negatively impact our results of operations.



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Furthermore, retention and availability of patient care and physician reimbursement data are subject to federal and state laws governing record retention, accuracy, and access. Some laws impose obligations on our clients and on us to produce information to third parties and to amend or expunge data at their direction. Our failure to meet these obligations may result in liability that could increase our costs and reduce our operating results.

We rely on internet infrastructure, bandwidth providers, data center providers, other third parties, and our own systems for providing services to our users, and any failure or interruption in the services provided by these third parties or our own systems could expose us to litigation, potentially require us to issue credits to our clients, and negatively impact our relationships with users or clients, adversely affecting our brand and our business.

In addition to the services we provide from our offices, we serve our clients primarily from third-party data-hosting facilities. These facilities are vulnerable to damage or interruption from earthquakes, floods, fires, power loss, telecommunications failures, and similar events. They are also subject to break-ins, sabotage, intentional acts of vandalism, and similar misconduct. Their systems and servers could also be subject to hacking, ransomware, viruses, and other disruptive problems or vulnerabilities. Despite precautions taken at these facilities, the occurrence of a natural disaster or an act of terrorism, a decision to close the facilities without adequate notice, or other unanticipated problems at two or more of the facilities could result in lengthy interruptions in our services. Even with our disaster recovery arrangements, our services could be interrupted.

Our ability to deliver our internet- and telecommunications-based services is dependent on the development and maintenance of the infrastructure of the internet and other telecommunications services by third parties. This includes maintenance of a reliable network backbone with the necessary speed, data capacity, and security for providing reliable internet access and services and reliable mobile device, telephone, facsimile, and pager systems, all at a predictable and reasonable cost. We have experienced and expect that we will experience interruptions and delays in services and availability from time to time. We rely on internal systems as well as third-party vendors, including data center, bandwidth, and telecommunications equipment or service providers, to provide our services. We do not maintain redundant systems or facilities for some of these services. In the event of a catastrophic event with respect to one or more of these systems or facilities, we may experience an extended period of system unavailability, which could negatively impact our relationship with users or clients. To operate without interruption, both we and our service providers must guard against:

- damage from fire, power loss, and other natural disasters;
- telecommunications failures;
- software and hardware errors, failures, and crashes;
- security breaches, computer viruses, ransomware, and similar disruptive problems; and
- other potential interruptions.

Any disruption in the network access, telecommunications, or co-location services provided by these third-party providers or any failure of or by these third-party providers or our own systems to handle current or higher volume of use could significantly harm our business. We exercise limited control over these third-party vendors, which increases our vulnerability to problems with services they provide.

Any errors, failures, interruptions, or delays experienced in connection with these third-party technologies and information services or our own systems could negatively impact our relationships with users and clients, adversely affect our brands and business, and expose us to third-party liabilities. The insurance coverage under our policies may not be adequate to compensate us for all losses that may occur. In addition, we cannot provide assurance that we will continue to be able to obtain adequate insurance coverage at an acceptable cost.

The reliability and performance of the internet may be harmed by increased usage or by denial-of-service attacks. The internet has experienced a variety of outages and other delays as a result of damages to portions of its infrastructure, and it could face outages and delays in the future. These outages and delays could reduce the level of internet usage as well as the availability of the internet to us for delivery of our internet-based services.

Finally, recent changes in law could impact the cost and availability of necessary internet infrastructure. Increased costs and/or decreased availability would negatively affect our results of operations.

We are subject to the effect of payer and provider conduct that we cannot control and that could damage our reputation with clients and result in liability claims that increase our expenses.

We offer certain electronic claims submission services for which we rely on content from clients, payers, and others. Features and safeguards we have implemented to maximize the accuracy and completeness of claims content may not be sufficient to prevent inaccurate claims data from being submitted to payers. Should inaccurate claims data be submitted to

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payers, we may experience poor operational results and may be subject to liability claims and regulatory action, which could damage our reputation with clients and increase our expenses and/or subject us to corrective action plans imposed by regulators which could negatively affect our operations.

If our services fail to provide accurate and timely information, or if our content or any other element of any of our services is associated with faulty clinical decisions or treatment, we could have liability to clients, members, clinicians, or patients, which could adversely affect our results of operations.

Our software, content, and services are used to support clinical decision-making by providers and deliver information about patient medical histories, treatment plans, medical conditions, and the use of particular medications. If our software, content, or services fail to provide accurate and timely information or we are associated with faulty clinical decisions or treatment, then clients, members, clinicians, or their patients could assert claims against us that could result in substantial costs to us, harm our reputation in the industry, and cause demand for our services to decline.

Our athenaClinicals service is utilized by our clients during their clinical decision-making, provides access to patient medical histories, and assists in creating patient treatment plans, including the issuance of prescription drugs.

Therefore, if these data are incorrect or incomplete or if we make mistakes in the capture or input of these data, adverse consequences, including death, may occur and give rise to product liability and other claims against us by clients, clinicians, patients, or others. We often have little control over data accuracy, yet a court or government agency may take the position that our storage and display of health information exposes us to personal injury liability or other liability for wrongful delivery or handling of healthcare services or erroneous health information.

Our Epocrates clinical reference tools and interactive services provide healthcare professionals with access to clinical information, including information regarding particular medical conditions and the use of particular medications. If our content, or content we obtain from third parties, contains inaccuracies, or we introduce inaccuracies in the process of implementing third-party content, it is possible that patients, physicians, consumers, the providers of the third-party content, or others may sue us if they are harmed as a result of such inaccuracies. We cannot assure you that our editorial and other quality control procedures will be sufficient to ensure that there are no errors or omissions in particular content, and we have had content errors in the past.

The assertion of such claims and ensuing litigation, regardless of its outcome, could result in substantial cost to us, divert management's attention from operations, damage our reputation, and decrease market acceptance of our services. We attempt to limit by contract our liability for damages, have our members assume responsibility for clinical treatment, diagnoses, medical oversight and dosing decisions; and require that our clients assume responsibility for medical care and approve key system rules, protocols, and data. Despite these precautions, the allocations of responsibility and limitations of liability set forth in our contracts may not be enforceable, be binding upon patients, or otherwise protect us from liability for damages. Furthermore, general liability and errors and omissions insurance coverage may not continue to be available on acceptable terms or may not be available in sufficient amounts to cover one or more large claims against us. In addition, the insurer might disclaim coverage as to any future claim. One or more large claims could exceed our available insurance coverage.

If any of these risks occur, they could materially adversely affect our business, financial condition, or results of operations.

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**RISKS RELATED TO REGULATION**

Government regulation of healthcare creates risks and challenges with respect to our compliance efforts and our business strategies.

The healthcare industry is highly regulated and is subject to changing political, legislative, regulatory, and other influences. Existing and new laws and regulations affecting the healthcare industry, or changes to existing laws and regulations, including the potential amendment or repeal of all or parts of the ACA, could create unexpected liabilities for us, cause us to incur additional costs, and restrict our operations.

Many healthcare laws are complex, and their application to specific services and relationships may not be clear. In particular, many existing healthcare laws and regulations, when enacted, did not anticipate the healthcare information and interactive services that we provide, and these laws and regulations may be applied to our services in ways that we do not anticipate, particularly as we develop and release new and more sophisticated products and services. Our failure to accurately anticipate the application of these laws and regulations, or our other failure to comply with them, could create liability for us, result in adverse publicity, and negatively affect our business. Some of the risks we face from healthcare regulation are described below:

**False or Fraudulent Claim Laws.** There are numerous federal and state laws that prohibit submission of false information, or the failure to disclose information, in connection with submission and payment of physician claims for reimbursement. In some cases, these laws also prohibit abuse in connection with such submission and payment. Any failure of our services to comply with these laws and regulations could result in substantial liability (including, but not limited to, criminal liability), adversely affect demand for our services, and force us to expend significant capital, research and development, and other resources to address the failure. Errors by us or our systems with respect to entry, formatting, preparation, or transmission of claim information or inaccurate submission of information or certifications related to government quality measures or programs, whether by us or our clients, may be determined or alleged to be in violation of these laws and regulations. Any determination by a court or regulatory agency that our services violate these laws could subject us to civil or criminal penalties, invalidate all or portions of some of our client contracts, require us to change or terminate some portions of our business, require us to refund portions of our services fees, cause us to be disqualified from serving clients doing business with government payers, and have an adverse effect on our business.

In most cases where we are permitted to do so, we calculate charges for our services based on a percentage of the collections that our clients receive as a result of our services. To the extent that violations or liability for violations of these laws and regulations require intent, it may be alleged that this percentage calculation provides us or our employees with incentive to commit or overlook fraud or abuse in connection with submission and payment of reimbursement claims. The Centers for Medicare and Medicaid Services, which we refer to as CMS, has stated that it is concerned that percentage-based billing services may encourage billing companies to engage in or overlook fraudulent or abusive practices.

In addition, we may contract with third parties that offer software and services relating to the selection or verification of codes used to identify and classify the services for which reimbursement is sought. Submission of codes that do not accurately reflect the services provided or the location or method of their provision may constitute a violation of false or fraudulent claims laws. Our ability to comply with these laws depends on the coding decisions made by our clients and the accuracy of our vendors' software and services in suggesting possible codes to those clients and verifying that proper codes have been selected.

**HIPAA and other Health Privacy Regulations.** There are numerous federal and state laws related to patient privacy. In particular, HIPAA includes privacy standards that protect individual privacy by limiting the uses and disclosures of individually identifiable health information and implementing data security standards that require covered entities to implement administrative, physical, and technological safeguards to ensure the confidentiality, integrity, availability, and security of individually identifiable health information in electronic form. HIPAA also specifies formats that must be used in certain electronic transactions, such as claims, payment advice, and eligibility inquiries. Because we translate electronic transactions to and from HIPAA-prescribed electronic formats and other forms, we are considered a clearinghouse and, as such, a covered entity subject to HIPAA. In addition, our clients are also covered entities and are mandated by HIPAA to enter into written agreements with us – known as business associate agreements – that

require us to safeguard individually identifiable health information. Business associate agreements typically include:

- a description of our permitted uses of individually identifiable health information;
- a covenant not to disclose that information except as permitted under the agreement and to make our subcontractors, if any, subject to the same restrictions;
- assurances that reasonable and appropriate administrative, physical, and technical safeguards are in place to prevent misuse of that information;

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- an obligation to report to our client any use or disclosure of that information other than as provided for in the agreement;
- a prohibition against our use or disclosure of that information if a similar use or disclosure by our client would violate the HIPAA standards;
- the ability of our clients to terminate the underlying support agreement if we breach a material term of the business associate agreement and are unable to cure the breach;
- the requirement to return or destroy all individually identifiable health information at the end of our support agreement; and
- access by the HHS to our internal practices, books, and records to validate that we are safeguarding individually identifiable health information.

We may not be able to adequately address the business risks created by HIPAA implementation. Furthermore, we are unable to predict what changes to HIPAA or other laws or regulations might be made in the future or how those changes could affect our business or the costs of compliance. For example, the provisions of the HITECH Act and the regulations issued under it (including the omnibus rule promulgated in January 2013) have provided clarification of certain aspects of both the privacy and security rules issued under HIPAA, expansion of the disclosure requirements for a breach of the security rule, and strengthening of the civil and criminal penalties for failure to comply with HIPAA. In addition, the Office of the National Coordinator for Health Information Technology, which we refer to as ONCHIT, is coordinating the ongoing development of standards to enable interoperable health information technology infrastructure nationwide based on the widespread adoption of electronic health records in the healthcare sector. We are unable to predict what, if any, impact the changes in such standards will have on our compliance costs or our services.

In addition, some payers and clearinghouses with which we conduct business interpret HIPAA transaction requirements differently than we do. Where clearinghouses or payers require conformity with their interpretations as a condition of effecting transactions, and their interpretations are no less stringent than ours, we may seek to comply with their interpretations.

The HIPAA transaction standards include proper use of procedure and diagnosis codes. Since these codes are selected or approved by our clients, and since we generally do not verify their propriety, some of our capability to comply with the transaction standards is dependent on the proper conduct of those clients.

Among our services, we provide automated reminder services to patients, internet- and telephone-based access to medical test results, pager and email notification to practices of patient calls, and patient call answering services. Any failure of our clients to provide accurate contact information for their patients or physicians or any breach of our telecommunications systems could result in a disclosure of individually identifiable health information.

In addition to the HIPAA Privacy and Security Rules and the HITECH Act requirements, most states have enacted patient confidentiality laws that protect against the disclosure of confidential medical and other personally identifiable information, and many states have adopted or are considering further legislation in this area, including privacy safeguards, security standards, and data security breach notification requirements. Such state laws, if more stringent than HIPAA and HITECH Act requirements, are not preempted by the federal requirements, and we are required to comply with them.

Failure by us to comply with any of the federal and state standards regarding patient privacy may subject us to penalties, including civil monetary penalties and, in some circumstances, criminal penalties. In addition, such failure may injure our reputation and adversely affect our ability to retain clients and attract new clients.

In addition to false claims and HIPAA requirements, we are subject to a variety of other regulatory schemes, including:

• **Anti-Kickback and Anti-Bribery Laws.** There are federal and state laws that govern patient referrals, physician financial relationships, and inducements to healthcare providers and patients. For example, the federal healthcare programs' anti-kickback law 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 service covered by these programs. Many states also have similar anti-kickback laws that are

not necessarily limited to items or services for which payment is made by a federal healthcare program. Moreover, both federal and state laws prohibit bribery and similar behavior. Any determination by a state or federal regulatory agency that any of our activities or those of 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 service fees, disqualify us from providing services to clients doing business with government programs, subject us to corrective action plans imposed by regulators, and have an adverse effect on our business.

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Even an unsuccessful challenge by regulatory authorities of our activities could result in adverse publicity and could require a costly response from us.

**Legislation relating to payments to physicians.** Legislation enacted or pending in several states and enacted at the federal level as part of the ACA and the Healthcare and Education Reconciliation Act of 2010 mandates public disclosure of, or otherwise regulates or limits the providing of, certain gifts and payments by pharmaceutical companies to physicians. These laws may be interpreted to cover honorarium payments made to physicians for participation in market research activities sponsored by pharmaceutical companies. Because we currently provide market research services involving participants from our member network, the increased adoption and enforcement of these laws and the application of any public disclosure requirements or other limitations may have a negative impact on the ability of pharmaceutical companies to sponsor these activities or the willingness of physicians to participate in the market research. We cannot predict how pharmaceutical companies or physicians will respond when such legislation becomes more widespread or becomes effective at the federal level. A significant decline in the sponsorship of our market research services by pharmaceutical companies or the agencies that represent such companies, or a significant decline in physicians' willingness to participate in such studies could negatively impact our operating results.

**Anti-Referral Laws.** There are federal and state laws that prohibit payment for patient referrals, patient brokering, remuneration of patients, or billing based on referrals between individuals or entities that have various financial, ownership, or other business relationships with healthcare providers. In many cases, billing for care arising from such actions is illegal. These vary widely from state to state, and one of the federal anti-referral laws—the Stark Law—is very complex in its application. Any determination by a state or federal regulatory agency that any of our practice clients violate or have violated any of these laws may result in allegations that claims that we have processed or forwarded are improper. This could subject us to civil or criminal penalties, require us to change or terminate some portions of our business, require us to refund portions of our services fees, and have an adverse effect on our business. Even an unsuccessful challenge by regulatory authorities of our activities could result in adverse publicity and could require a costly response from us.

**Corporate Practice of Medicine Laws and Fee-Splitting Laws.** Many states have laws forbidding physicians from practicing medicine in partnership with non-physicians, such as business corporations. In some states, including New York, these take the form of laws or regulations forbidding splitting of physician fees with non-physicians or others. In some cases, these laws have been interpreted to prevent business service providers from charging their physician clients on the basis of a percentage of collections or charges. We have varied our charge structure in some states to comply with these laws, which may make our services less desirable to potential clients. Any determination by a state court or regulatory agency that our service contracts with our clients violate these laws could subject us to civil or criminal penalties, invalidate all or portions of some of those contracts, require us to change or terminate some portions of our business, require us to refund portions of our services fees, and have an adverse effect on our business. Even an unsuccessful challenge by regulatory authorities of our activities could result in adverse publicity and could require a costly response from us.

**Anti-Assignment Laws.** There are federal and state laws that prohibit or limit assignment of claims for reimbursement from government-funded programs. In some cases, these laws have been interpreted in regulations or policy statements to limit the manner in which business service companies may handle checks or other payments for such claims and to limit or prevent such companies from charging their physician clients on the basis of a percentage of collections or charges. Any determination by a state court or regulatory agency that our service contracts with our practice clients violate these laws could subject us to civil or criminal penalties, invalidate all or portions of some of those contracts, require us to change or terminate some portions of our business, require us to refund portions of our service fees, and have an adverse effect on our business. Even an unsuccessful challenge by regulatory authorities of our activities could result in adverse publicity and could require a costly response from us.

**Prescribing Laws.** The use of our software by physicians to perform a variety of functions relating to prescriptions, including electronic prescribing, electronic routing of prescriptions to pharmacies, and dispensing of medication, is governed by state and federal law, including fraud and abuse laws, drug control regulations, and state department of health regulations. States have differing prescription format requirements, and, due in part to recent industry



initiatives, federal law and the laws of all 50 states now provide a regulatory framework for the electronic transmission of prescription orders. Regulatory authorities such as the HHS' Centers for Medicare and Medicaid Services may impose functionality standards with regard to electronic prescribing and EHR technologies. Some of these standards must be implemented and maintained by our clients; however, we cannot ensure our clients will do so, even if we contractually impose such an obligation. Any determination that we or our practice clients have violated prescribing laws may expose us to liability, loss of reputation, and loss of business. These laws and requirements may also increase the cost and time necessary to market new services and could affect us in other respects not presently foreseeable.

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**Electronic Health Records Laws.** A number of federal and state laws govern the use and content of electronic health record systems, including fraud and abuse laws that may affect how such technology is provided. As a company that provides Electronic Health Records functionality, which we refer to as EHR, our systems and services must be designed in a manner that facilitates our clients' compliance with these laws. Because this is a topic of increasing state and federal regulation, we expect additional and continuing modification of the current legal and regulatory environment. We cannot predict the content or effect of possible future regulation on our business activities. The software component of our athenaClinicals service was certified as a 2014 Edition compliant Complete EHR by an ONC-ATCB in accordance with the applicable certification criteria adopted by the Secretary of the HHS. However, such certification does not represent an endorsement of our athenaClinicals service by HHS or guarantee the receipt of incentive payments. We cannot be certain that our system will meet future requirements.

**Claims Transmission Laws.** Our services include the manual and electronic transmission of medical practice claims for reimbursement from payers. Federal and various state laws provide for civil and criminal penalties for any person who submits, or causes to be submitted, a claim to any payer (including, without limitation, Medicare, Medicaid, and any private health plans and managed care plans) that is false or that overbills or bills for items that have not been provided to the patient. To the extent that such laws apply to a service that merely transmits claims on behalf of others, we could be subject to the same civil and criminal penalties as our practice clients.

**Prompt Pay Laws.** Laws in many states govern prompt payment obligations for healthcare services. These laws generally define claims payment processes and set specific time frames for submission, payment, and appeal steps. They frequently also define and require clean claims. Failure to meet these requirements and time frames may result in rejection or delay of claims. Failure of our services to comply may adversely affect our business results and give rise to liability claims by practice clients.

**Medical professional regulation.** The practice of most healthcare professions requires licensing under applicable state law. In addition, the laws in some states prohibit business entities from practicing medicine. We employ and contract with physicians who provide only medical information to our users, some of whom may be consumers, and we do not intend to provide medical care, treatment, or advice. Any determination that we are a healthcare provider and acted improperly as a healthcare provider may result in liability to us.

**Regulation of drug and medical device advertising and promotion.** We provide services involving promotion of prescription and over-the-counter drugs and medical devices. Any increase in regulation of these areas by the U.S. Food and Drug Administration, or the FDA; the Federal Trade Commission, or the FTC; or other governmental bodies at the federal, state, or local level, could make it more difficult for us to contract for certain of our interactive services. Physician groups and others have criticized the FDA's current policies and have called for restrictions on advertising of prescription drugs and for increased FDA enforcement. In response, the FDA has conducted hearings and sought public comment regarding its regulation of information concerning drugs on the internet and the relationships between pharmaceutical companies and those disseminating information on drugs. We cannot predict what actions the FDA or industry participants may take in response to these criticisms. It is also possible that new laws would be enacted that impose restrictions on such marketing and advertising. Our interactive services revenues could be significantly reduced by additional restrictions on the marketing or advertising of prescription drugs and medical devices, whether imposed by law or regulation or by policies adopted by industry members. If the FDA, the FTC, or another governmental body finds that any information available on our website or distributed by us violates the FDA, the FTC, or other laws or regulations, they may take regulatory or judicial action against us or the advertiser or sponsor of that information. State attorneys general may also take similar action based on their state's consumer protection statutes or other new or existing laws.

**Medical Device Laws.** The FDA may regulate medical or health-related software if such software falls within the definition of a "device" under the Federal Food, Drug, and Cosmetic Act ("FFDCA"). However, the FDA exercises enforcement discretion for certain low risk software, as described in its guidance documents for Mobile Medical Applications, General Wellness: Policy for Low Risk Devices, and Medical Device Data Systems, Medical Image Storage Devices, and Medical Image Communications Devices. In addition, in December of 2016, President Obama signed into law the 21st Century Cures Act, which included exemptions for certain medical-related software, including software used for administrative support functions at a healthcare facility, software intended for maintaining

or encouraging a healthy lifestyle, and EHR software, software for transferring, storing, or displaying medical device data or in vitro diagnostic data, and certain clinical decision support software. The FDA has also issued draft guidance documents to clarify how it intends to interpret and apply the new exemptions under the 21st Century Cures Act. Although we believe that our software products are currently not subject to active FDA regulation, we continue to follow the FDA's developments in this area. There is a risk that the FDA could disagree with our determination or that the FDA could develop new final guidance documents that would subject our products to active FDA oversight. If FDA determines that any of our current or future software products are regulated as medical devices, we would become subject to various requirements under the FFDCA and the FDA's implementing regulations, including both

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premarket and post-market requirements, and we would need to bring the affected technologies into compliance with such requirements. Depending on the functionality and FDA classification of our software products, we may be required to:

register and list our products with the FDA; and

notify the FDA and demonstrate substantial equivalence to other products on the market before marketing our functionality; or

submit a de novo request to the FDA to down-classify our software products prior to marketing; or

obtain FDA approval by demonstrating safety and effectiveness before marketing our functionality.

The FDA can impose extensive requirements governing pre- and post-market conditions, such as service investigation and others relating to approval, labeling, and manufacturing. In addition, the FDA can impose extensive requirements governing software development controls and quality assurance processes.

Potential additional regulation of the disclosure of health information outside the United States may adversely affect our operations and may increase our costs.

Federal or state, as well as international, governmental authorities may impose additional data security standards or additional privacy or other restrictions on the collection, use, storage, transmission, and other disclosures of health information. Legislation has been proposed at various times at both the federal and the state level, and may exist in international jurisdictions, that would limit, forbid, or regulate the use, storage, or transmission of medical information outside of the United States. Such legislation, if adopted, may render our use of our off-shore partners, such as our data-entry and client service providers, for work related to such data impracticable or substantially more expensive, and may increase our compliance costs and potential liability in foreign jurisdictions. Alternative processing of such information within the United States may involve substantial delay in implementation and increased cost of operations which could negatively impact our cash flow.

Due to the particular nature of certain services we provide or the manner in which we provide them, we may be subject to government regulation unrelated to healthcare.

While our services are primarily subject to government regulations pertaining to healthcare, certain aspects of those services may require us to comply with regulatory schemes from other areas. Examples of such regulatory schema include:

**Anti-spam Laws.** We may be required to comply with current or future anti-spam legislation by limiting or modifying some of our interactive services, such as our clinical messaging, which may result in a reduction in our revenue. One such law, the Controlling the Assault of Non-Solicited Pornography and Marketing Act of 2003, or CAN-SPAM, became effective in the United States on January 1, 2004. CAN-SPAM imposes complex and often burdensome requirements in connection with the sending of commercial e-mail. CAN-SPAM or similar laws may impose burdens on our member communication practices and on certain of our services, which in turn could harm our ability to attract new payer and pharmaceutical clients and increase revenues.

**Antitrust Laws.** Our national cloud-based network allows us access to cost and pricing data for a large number of providers in most regional markets, as well as to the contracted rates for third-party payers. To the extent that our services enable providers to compare their cost and pricing data with those of their competitors, those providers could collude to increase the pricing for their services, to reduce the compensation they pay their employees, or to collectively negotiate agreements with third parties. Similarly, if payers are able to compare their contracted rates of payment to providers, those payers may seek to reduce the amounts they might otherwise pay. Such actions may be deemed to be anti-competitive and a violation of federal antitrust laws. To the extent that we are deemed to have enabled such activities, we could be subject to fines and penalties imposed by the U.S. Department of Justice or the FTC and be required to curtail or terminate the services that permitted such collusion.

**Debt Collection Laws.** As a billing service that offers patient communication and registration services, our employees or those of our service providers may from time to time come into contact with patients who owe our clients outstanding amounts. Communications with patients that relate to amounts owed may be deemed to subject us or our service providers to federal or state debt collection laws and regulations. Such laws and regulations, if deemed to apply to us, are continually evolving and could require registration with government agencies and compliance with

significant administrative obligations (e.g., to maintain an in-state office with local employees), which could result in increased expenses and subject us to fines and penalties for violation.

Privacy Regulation. The FTC and many state attorneys general are applying federal and state consumer protection laws to require that the online collection, use, and dissemination of data, and the presentation of website or other electronic content, comply with certain standards for notice, choice, security, and access. Courts may also adopt these developing standards. A

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number of states, including California, have enacted laws or are considering the enactment of laws governing the release of credit card or other personal information received from consumers.

In addition, several foreign governments have regulations dealing with the collection and use of personal information obtained from their residents. For example, the European Union, or EU, adopted the Data Protection Directive, or DPD, imposing strict regulations and establishing a series of requirements regarding the collection and use of personally identifiable information. The new General Data Protection Regulation (GDPR), which will be in force in May 2018, has extra-territorial provisions requiring all non-EU countries offering goods or services to EU residents to provide adequate data privacy protection when receiving personal data from any of the EU member states. Similarly, Canada's Personal Information and Protection of Electronic Documents Act provides Canadian residents with privacy protections in regard to transactions with businesses and organizations in the private sector and sets out ground rules for how private sector organizations may collect, use, and disclose personal information in the course of commercial activities. As another example, India has amended the Information Technology Act and adopted the Information Technology (Reasonable Security Practices and Procedures and Sensitive Personal Data or Information) Rules, 2011 to provide extra territorial provisions for protecting personal data or information and sensitive personal data or information. The Information Technology (Reasonable Security Practices and Procedures and Sensitive Personal Data or Information) Rules, 2011 enable Indian citizens to protect their personal data by placing requirements to be adhered to by any entities collecting, receiving, possessing, storing, dealing, and handling of their information in India for the safety of the personal data being collected, shared, and processed. Foreign governments may attempt to apply such laws extraterritorially or through treaties or other arrangements with U.S. governmental entities, and our practice management services for practices along the Canadian border and our market research services could each involve the personal information of foreign residents. Furthermore, in the conduct of our market research activities outside of the United States, we rely upon a third party to identify and recruit respondents for the market research and to comply with the applicable privacy laws in each jurisdiction in which it operates. We cannot assure you that this third party will successfully comply with such laws or that we would not be responsible for any failure of this third party to comply.

We cannot assure you that the privacy policies and other statements regarding our practices will be found sufficient to protect us from liability or adverse publicity relating to the privacy and security of personal information. Whether and how existing local and international privacy and consumer protection laws in various jurisdictions apply to the internet and other online technologies is still uncertain and may take years to resolve. Privacy laws and regulations, if drafted or interpreted broadly, could be deemed to apply to the technology we use and could restrict our information collection methods or decrease the amount and utility of the information that we would be permitted to collect. The costs of compliance with, and the other burdens imposed by, these and other laws or regulatory actions may prevent us from selling our products or services, or increase the costs of doing so, and may affect our ability to invest in or jointly develop products. In addition, a determination by a court or government agency that any of our practices, or those of our agents, do not meet these standards could result in liability, result in adverse publicity, and adversely affect our business.

Errors or illegal activity on the part of our clients may result in claims against us.

We require our clients to provide us with accurate and appropriate data and directives for our actions. We also rely upon our clients as users of our system to perform key activities in order to produce proper claims for reimbursement. Failure of our clients to provide these data and directives or to perform these activities may result in claims against us alleging that our reliance was misplaced or unreasonable or that we have facilitated or otherwise participated in submission of false claims.

If participants in our channel marketing and sales lead programs do not maintain appropriate relationships with current and potential clients, our sales accomplished with their help or data may be unwound and our payments to them may be deemed improper.

We maintain a series of relationships with third parties that we term "channel relationships." These relationships take different forms under different contractual language. Some relationships help us identify sales leads. Other relationships permit third parties to act as value-added resellers or as independent sales representatives for our services. In some cases, for example in the case of some membership organizations, these relationships involve

endorsement of our services as well as other marketing activities. In each of these cases, we require contractually that the third party disclose information to and limit their relationships with potential purchasers of our services for regulatory compliance reasons. If these third parties do not comply with these regulatory requirements or if our requirements are deemed insufficient, sales accomplished with the data or help that they have provided, as well as the channel relationships themselves, may not be enforceable, may be unwound, and may be deemed to violate relevant laws or regulations. Third parties that, despite our requirements, exercise undue influence over decisions by current and prospective clients, occupy positions with obligations of fidelity or fiduciary obligations to current and prospective clients, or who offer bribes or kickbacks to current and prospective clients or their employees may be committing illegal acts that could render any resulting contract between us and the client unenforceable or in violation of relevant laws or regulations. Any misconduct by these third parties with respect to current or prospective clients, any failure to follow

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contractual requirements, or any insufficiency of those contractual requirements may result in allegations that we have encouraged or participated in illegal behavior and that payments to such third parties under our channel contracts are improper. This misconduct could subject us to civil or criminal claims and liabilities, require us to change or terminate some portions of our business, require us to refund portions of our services fees, and adversely affect our revenue and operating margin. Even an unsuccessful challenge of our activities could result in adverse publicity, require a costly response from us, impair our ability to attract and maintain clients, and adversely affect our business.

Our services present the potential for embezzlement, identity theft, or other similar illegal behavior by our employees or subcontractors with respect to third parties.

Among other things, our services involve handling mail from payers and from patients for many of our clients, and this mail frequently includes original checks and credit card information and occasionally includes currency. Even in those cases in which we do not handle original documents or mail, our services also involve the use and disclosure of personal and business information that could be used to impersonate third parties or otherwise gain access to their data or funds. If any of our employees or subcontractors takes, converts, or misuses such funds, documents, or data, we could be liable for damages, and our business reputation could be damaged or destroyed. In addition, we could be perceived to have facilitated or participated in illegal misappropriation of funds, documents, or data and therefore be subject to civil or criminal liability.

Subsidy of services similar to ours may reduce client demand if we do not participate in such programs.

In the past few years, various entities and federal programs have provided subsidies for services similar to ours, including EHR initiatives. We cannot guarantee that we will be able to continue to qualify for and participate in such subsidy programs in the future. To the extent that we do not participate in such programs, demand for our services may be reduced, which may decrease our revenues.

### **RISKS RELATED TO OWNERSHIP OF OUR COMMON STOCK**

The price of our common stock may continue to be volatile.

The trading price of our common stock has been and is likely to remain highly volatile and could be subject to wide fluctuations in response to various factors, some of which are beyond our control or unrelated to our operating performance. In addition to the factors discussed in this “Risk Factors” section and elsewhere in this Annual Report on Form 10-K, these factors include:

- the operating performance of similar companies;
- the overall performance of the equity markets;
- announcements by us or our competitors of acquisitions, business plans, or commercial relationships;
- threatened or actual litigation;
- changes in laws or regulations relating to the provision of healthcare or the sale of health insurance;
- any major change in our board of directors or management;
- publication of research reports or news stories about us, our competitors, or our industry or positive or negative recommendations or withdrawal of research coverage by securities analysts;
- large volumes of sales of our shares of common stock by existing stockholders; and
- general political and economic conditions.

In addition, the stock market in general, and the market for internet-related companies in particular, has experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of those companies. Securities class action litigation has often been instituted against companies following periods of volatility in the overall market and in the market price of a company’s securities. This litigation, if instituted against us, could result in very substantial costs; divert our management’s attention and resources; and harm our business, operating results, and financial condition.

Provisions in our certificate of incorporation and by-laws or Delaware law might discourage, delay, or prevent a change of control of our company or changes in our management and, therefore, depress the trading price of our common stock.

Provisions of our certificate of incorporation and by-laws and Delaware law may discourage, delay, or prevent a merger, acquisition, or other change in control that stockholders may consider favorable, including transactions in which they might otherwise receive a premium for their shares of our common stock. These provisions may also



prevent or frustrate attempts by our stockholders to replace or remove our management. These provisions include:  
•our classified board of directors and limitations on the removal of directors;

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advance notice requirements for stockholder proposals and nominations;  
the inability of stockholders to act by written consent or to call special meetings; and  
the ability of our board of directors to make, alter, or repeal our by-laws.

The affirmative vote of the holders of at least 75% of our shares of capital stock entitled to vote is necessary to amend or repeal the above provisions of our certificate of incorporation. As our board of directors has the ability to designate the terms of and issue new series of preferred stock without stockholder approval, the effective number of votes required to make such changes could increase. Also, absent approval of our board of directors, our by-laws may only be amended or repealed by the affirmative vote of the holders of at least 75% of our shares of capital stock entitled to vote.

In addition, Section 203 of the Delaware General Corporation Law prohibits a publicly held Delaware corporation from engaging in a business combination with an interested stockholder (generally an entity that, together with its affiliates, owns, or within the last three years has owned, 15% or more of our voting stock) for a period of three years after the date of the transaction in which the entity became an interested stockholder, unless the business combination is approved in a prescribed manner.

The existence of the foregoing provisions and anti-takeover measures could limit the price that investors might be willing to pay in the future for shares of our common stock. They could also deter potential acquirers of our company, thereby reducing the likelihood that stockholders could receive a premium for their common stock in an acquisition. We do not currently intend to pay dividends on our common stock, and, consequently, stockholders' ability to achieve a return on their investment will depend on appreciation in the price of our common stock.

We have never declared or paid any cash dividends on our common stock and do not currently intend to do so for the foreseeable future. We currently intend to invest our future earnings, if any, to fund our growth. Therefore, investors are not likely to receive any dividends on their common stock for the foreseeable future, and the success of an investment in shares of our common stock will depend upon any future appreciation in its value. There is no guarantee that shares of our common stock will appreciate in value or even maintain the price at which our stockholders have purchased their shares.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties.

Our corporate headquarters is located in Watertown, Massachusetts on the Arsenal on the Charles campus, which we own. The Arsenal on the Charles is a 29-acre, multi-building, commercial property, which includes approximately 697,000 square feet of office space and approximately 71,000 square feet of retail space. We currently occupy 551,984 square feet of these facilities and lease the remainder to third parties. Additionally, we own a complex of buildings, including approximately 210,400 square feet of office space, on approximately 53 acres of land in Belfast, Maine, as well as a conference and training facility on approximately 396 acres of land in Northport, Maine.

We lease the remainder of our facilities in various locations in the United States, including: Atlanta, Georgia; Austin, Texas; Princeton, New Jersey; and San Francisco, California, which we currently sublease; as well as in Bangalore, India; Chennai, India; and Pune, India. Additionally, we operate data centers nationwide.

Item 3. Legal Proceedings.

On May 21, 2015, a class action petition was filed by St. Louis Heart Center, Inc. in the State Circuit Court of St. Louis County, Missouri, against athenahealth. The petition alleges we violated the Telephone Consumer Protection Act. Following service, we removed the case to federal court in the United States District Court for the Eastern District of Missouri, Case No. 4:15-cv-01215. After filing our answer in the case on March 8, 2016, we moved for and obtained a stay of the action pending a decision by the U.S. Court of Appeals for the D.C. Circuit in *Bais Yaakov of Spring Valley v. FCC*, No. 14-1234, regarding the validity of a regulation promulgated by the Federal Communications Commission, or FCC, relating to the claims asserted in the petition. On March 31, 2017, the U.S. Court of Appeals for the D.C. Circuit issued its decision, invalidating the FCC regulation in question. On April 7, 2017, we notified the federal court of the U.S. Court of Appeals for the D.C. Circuit's decision in *Bais Yaakov*. On

joint motion of the parties, the federal court on May 9, 2017 reinstated the stay, pending any further appellate

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review of the D.C. Circuit's decision in Bais Yaakov. On September 5, 2017, a petition for a writ of certiorari as to the D.C. Circuit's decision in Bais Yaakov was filed with the United States Supreme Court, which remains pending.

In addition, from time to time we may be subject to other legal proceedings, claims, and litigation arising in the ordinary course of business. We do not, however, currently expect that the ultimate costs to resolve any pending matter will have a material effect on our consolidated financial position, results of operations, or cash flows.

Item 4. Mine Safety Disclosures.

None.

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## PART II

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

## Market Information

Our common stock is listed on the NASDAQ Global Select Market under the trading symbol "ATHN." The following table sets forth, for each of the periods indicated, the high and low sales prices per share of our common stock as reported by the NASDAQ Global Select Market.

	High	Low
Fiscal Year Ended December 31, 2017		
First Quarter	\$127.18	\$104.42
Second Quarter	\$149.55	\$95.01
Third Quarter	\$158.66	\$119.95
Fourth Quarter	\$137.21	\$111.61
Fiscal Year Ended December 31, 2016		
First Quarter	\$167.46	\$114.59
Second Quarter	\$143.85	\$120.10
Third Quarter	\$142.40	\$117.80
Fourth Quarter	\$132.84	\$90.11

## Holders

The last reported sale price of our common stock on the NASDAQ Global Select Market on January 30, 2018 was \$127.59 per share. As of January 30, 2018, we had 72 holders of record of our common stock. Because many shares of common stock are held by brokers and other institutions on behalf of stockholders, we are unable to estimate the total number of stockholders represented by these record holders.

## Dividends

We have never declared or paid any dividends on our capital stock. We currently intend to retain any future earnings and do not intend to declare or pay cash dividends on our common stock in the foreseeable future. Any future determination to pay dividends will be, subject to applicable law, at the discretion of our board of directors and will depend upon, among other factors, our results of operations, financial condition, contractual restrictions, and capital requirements.

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Performance Graph

The following performance graph and related information shall not be deemed “soliciting material” or to be “filed” with the Securities and Exchange Commission, nor shall such information be incorporated by reference into any future filing under the Securities Act of 1933 or Securities Exchange Act of 1934, each as amended, except to the extent that we specifically incorporate it by reference into such filing.

Set forth below is a graph comparing the cumulative total stockholder return on our common stock with the NASDAQ Composite-Total Returns Index and the NASDAQ Computer and Data Processing Index for each of the last five fiscal years ended December 31, 2017, assuming an investment of \$100 at the beginning of such period and the reinvestment of any dividends.

	12/31/12	12/31/13	12/31/14	12/31/15	12/31/16	12/31/2017
athenahealth, Inc.	\$ 100	\$ 184	\$ 199	\$ 220	\$ 144	\$ 182
NASDAQ Composite-Total Returns Index	\$ 100	\$ 140	\$ 161	\$ 172	\$ 187	\$ 243
NASDAQ Computer and Data Processing Index	\$ 100	\$ 144	\$ 154	\$ 202	\$ 219	\$ 309

Recent Sales of Unregistered Securities

None.

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Issuer Purchases of Equity Securities

During the quarter ended December 31, 2017, there were no purchases made by us, on our behalf, or by any “affiliated purchasers” of shares of our common stock.

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## Item 6. Selected Financial Data.

The following tables summarize our consolidated financial data for the periods presented. You should read the following financial information together with the information under “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our consolidated financial statements and the related notes to these consolidated financial statements appearing elsewhere in this Form 10-K. Historical results are not necessarily indicative of the results to be expected in future periods.

	Years Ended December 31,				
	2017	2016	2015	2014	2013
	(in millions, except per share data)				
Revenue:					
Business services	\$1,188.4	\$1,047.6	\$886.1	\$711.2	\$563.2
Implementation and other	31.9	35.3	38.6	41.4	31.8
Total revenue	\$1,220.3	\$1,082.9	\$924.7	\$752.6	\$595.0
Net income (loss)	\$53.1	\$21.0	\$14.0	\$(3.1)	\$2.6
Net income (loss) per share – Basic	\$1.33	\$0.53	\$0.36	\$(0.08)	\$0.07
Net income (loss) per share – Diluted	\$1.31	\$0.52	\$0.35	\$(0.08)	\$0.07

	As of December 31,				
	2017	2016	2015	2014	2013
	(in millions)				
Balance Sheet Data:					
Total assets	\$1,332.3	\$1,189.2	\$1,118.7	\$930.6	\$794.5
Long-term liabilities	333.1	358.0	381.7	250.3	254.0
Total liabilities	540.8	555.9	575.4	455.5	403.2



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

The following discussion and analysis should be read in conjunction with our consolidated financial statements, the accompanying notes to these financial statements, and the other financial information that appears elsewhere in this Annual Report on Form 10-K. This Annual Report on Form 10-K contains predictions, estimates, and other forward-looking statements. All statements other than statements of historical fact contained in this Annual Report on Form 10-K are forward-looking statements, including statements regarding management's expectations for future financial and operational performance and operating expenditures, expected growth, and business outlook; statements regarding the implementation, timing, and impact of the Plan (as defined below); the benefits of and demand for our service offerings; the impact of new accounting pronouncements; seasonality and changes in seasonality of our business; increased automation; changes in expenses related to operations, selling and marketing, research and development, general and administrative matters, depreciation and amortization, interest, and income taxes; statements regarding competition; statements regarding the impact of new legislation, including new tax legislation; the impact of litigation; the impact of foreign currency fluctuations; the impact of acquisitions and associated measurements of fair value; and liquidity matters. Forward-looking statements may be identified with words such as "will," "may," "expect," "plan," "anticipate," "upcoming," "believe," "estimates," or similar terminology, and the negative of terms.

Forward-looking statements are not promises or guarantees of future performance, and are subject to a variety of risks and uncertainties, many of which are beyond our control, and which could cause actual results to differ materially from those contemplated in these forward-looking statements. These factors include, among other things, those set forth in the section entitled "Risk Factors" and elsewhere in this Annual Report on Form 10-K.

Although we believe that the expectations reflected in the forward-looking statements contained in this Annual Report on Form 10-K are reasonable, we cannot guarantee future results, levels of activity, performance, or achievements. Except as required by law, we undertake no obligation to update or revise any of such forward-looking statements, whether as a result of new information, future events, or otherwise, after the date of this Annual Report on Form 10-K.

#### Overview

athenahealth, Inc. (which we refer to as athenahealth, the Company, we, or our) partners with hospital and ambulatory clients to drive clinical and financial results. We offer network-based medical record, revenue cycle, patient engagement, care coordination, and population health services, as well as Epocrates® and other point-of-care mobile applications. Our network provides clients better insight into their own organizations as well as the ability to learn from the experience of every other client on the network. Through our model, we infuse the knowledge clients need to thrive in a changing industry directly into their workflow, from clinical guidelines to payer rules. We take on back-office work at scale so providers can focus on patients, not paperwork.

We deliver the majority of our service offerings through a single instance of cloud-based software, which we refer to as athenaNet. By combining our commitment to opening up the network, multiplying our intelligence, and freeing people to do what matters, we help healthcare providers leverage technology to automate certain back-office tasks, assist at the point of care, and adapt to changes in government regulatory schemes or the billing requirements of payers. We believe that including our clients on the same instance of software creates a network effect that enables each client to benefit from the collective experience of other clients. As our network grows, we believe these benefits expand and we can further multiply intelligence for all clients on the network. athenaNet acts as a conduit for the exchange of information among clients, payers, trading partners, and our own experienced team. It enables us to learn continuously, innovate with agility, and deliver near-instant updates that we believe rapidly improve performance for our clients. In addition, our clients benefit from back-office administrative work that we perform on their behalf. This work ranges from receiving, scanning, and delivering faxes to tracking claims with payers and managing denials. We automate this work whenever possible; when automation is not an option, we perform the work at massive scale with our internal team. The knowledge we gain from doing work for our clients and discovering ways to improve their performance is culled, curated, and captured within athenaNet through mechanisms that include our proprietary billing rules engine and clinical quality management engine. Using this knowledge, we also proactively coach our clients on best practices to help improve their performance. As we work with clients, payers, and other industry trading partners, more knowledge is infused into each service, which we believe makes athenaNet "smarter" and more powerful for our

clients. This unique combination of opening up the network, multiplying our intelligence, and freeing people to do what matters is fundamental to our service model and value proposition to clients.

For the year ended December 31, 2017, we generated revenue of \$1,220.3 million, compared to \$1,082.9 million for the year ended December 31, 2016 and \$924.7 million for the year ended December 31, 2015. Given the scope of our market opportunity, we have also increased our spending each year on growth, innovation, and infrastructure.

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Our revenue is predominately derived from core athenahealth-branded business services. In most cases, we charge clients a percentage of payments collected by us on behalf of our clients, connecting our financial results directly to those of our clients and our ability to drive revenue to medical practices. Therefore, the key drivers of our revenue include growth in the number of providers working within our client accounts, the collections of these providers, and the number of services purchased. To provide these services, we incur expenses in several categories, including cost of revenue, selling and marketing, research and development, and general and administrative expense. In general, our cost of revenue increases as our volume of work increases, whereas our selling and marketing expense correlates with current and expected market demand. Our research and development and general and administrative expense categories are less directly related to growth of revenues and relate more to our planning for the future and our overall business management activities. We manage our cash and our use of credit facilities to ensure adequate liquidity and to ensure adherence to related financial covenants.

Critical Accounting Policies

Our discussion and analysis of our financial condition and results of operations are based on our consolidated financial statements, which have been prepared in accordance with generally accepted accounting principles in the United States, or GAAP. In connection with the preparation of our consolidated financial statements, we are required to make assumptions and estimates about future events and apply judgments that affect the reported amounts of assets and liabilities, the disclosures of contingent assets and liabilities as of the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. We base our assumptions, estimates and judgments on historical experience, current trends, and other factors we believe to be relevant at the time we prepare our consolidated financial statements. The accounting estimates used in the preparation of our consolidated financial statements may change as new events occur, as more experience is acquired, as additional information is obtained, and as our operating environment changes. On a regular basis, we review the accounting policies and assumptions and update our assumptions, estimates, and judgments to ensure that our consolidated financial statements are presented fairly and in accordance with GAAP. Additionally, we may employ outside experts to assist in our evaluations. However, because future events and their effects cannot be determined with certainty, actual results could differ from our assumptions and estimates, and such differences could be material.

Our significant accounting policies are discussed in Note 1 – Nature of Operations and Summary of Significant Accounting Policies, to our accompanying consolidated financial statements. We consider the following accounting policies to be “critical accounting policies,” as they require management to make difficult, subjective, or complex judgments, and to make estimates about the effect of matters that are inherently uncertain. We have reviewed these critical accounting policies and related disclosures with the Audit Committee of our Board of Directors.

Description	Judgment and Uncertainties	Effect if Actual Results Differ from Assumptions
Revenue Recognition	<p>Determining whether and when some of our revenue recognition criteria have been satisfied often involves judgments that can have a significant impact on the timing and amount of revenue we report.</p> <p>We do not recognize revenue for business services associated with our integrated network-enabled services until collections received by our clients are posted to their accounts, as the fees are not fixed or determinable until such time.</p> <p>The determination of the amount of revenue we can recognize each accounting period related to certain non-refundable, upfront fees associated with our integrated network-enabled services requires management to make estimates and judgments on the expected client life. We determined the expected client life considering the following key factors:</p> <ul style="list-style-type: none"> <li>- Renewal rate considerations</li> <li>- Economic life of the service</li> </ul> <p>The expected client life, or expected performance period, for the years presented is 12 years.</p>	<p>Although we believe that our approach to estimates and judgments is reasonable, actual results could differ, and we may be exposed to increases or decreases in revenue that could be material.</p> <p>Our estimate of the expected performance period may prove to be inaccurate, in which case we may have understated or overstated the revenue recognized in an accounting period. The amount of deferred revenue related to certain non-refundable, upfront fees is \$55.1 million and \$57.0 million as of December 31, 2017 and 2016, respectively. However, upon adoption of the new revenue recognition standard on January 1, 2018, we expect that this will no longer be a critical judgment, as the accounting for these fees will change.</p>
<p>All revenue, other than certain non-refundable, upfront fees, is recognized when the service is performed. We derive the majority of our revenue from business services associated with our integrated, network-enabled services. Our integrated services consist of medical billing and practice management; electronic health record, or EHR; patient engagement; order transmission and care coordination; and population health management, which are supported by our network, athenaNet.</p>		
<p>Our clients typically purchase one-year service contracts related to our integrated, network-enabled services that renew automatically. In most cases, our clients may terminate their agreements without cause by providing notice, generally over a time period prescribed in a client's contract. Our clients are billed monthly, in arrears, typically based upon a percentage of collections posted to our network; minimum fees; flat fees; or per-claim fees, where applicable. Invoices are generated within the first two weeks of the subsequent month. For most of our clients, amounts due are then deducted from a pre-defined bank account one week after invoice receipt via an auto-debit transaction. Unbilled amounts that have been earned are accrued and recorded as revenue, and are included in our accounts receivable balances.</p>		
<p>Certain expenses related to the implementation of a client, such as out-of-pocket travel, are typically reimbursed by the client. This is accounted for as both revenue and expense in the period the cost is incurred.</p>		

Description	Judgment and Uncertainties	Effect if Actual Results Differ from Assumptions
<p>Purchased Intangible Assets and Goodwill</p>		
<p>Business Combinations, including purchased intangible assets, are accounted for at fair value. Acquisition costs are expensed as incurred and recorded in general and administrative expenses. Measurement period adjustments relate to adjustments to the fair value of assets acquired and liabilities assumed based on information that we should have known at the time of acquisition. All changes to purchase accounting that do not qualify as measurement period adjustments are included in current period earnings. The fair value amount assigned to intangible assets is based on an exit price from a market participant’s viewpoint, and utilizes data such as discounted cash flow analysis and replacement cost models. We review acquired intangible assets for impairment whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. Indefinite-lived intangible assets are reviewed for recoverability at least annually, or more frequently if indicators of impairment are present or changes in circumstances suggest that impairment may exist.</p>	<p>Critical estimates in valuing certain intangible assets and the fair value of the reporting units during goodwill impairment tests include, but are not limited to, identifying reporting units, historical and projected client retention rates, anticipated growth in revenue from the acquired clients, expected future cash outflows, the allocation of those cash flows to identifiable intangible assets, estimated useful lives of these intangible assets, and a probability-weighted income approach based on scenarios in estimating achievement of operating results. Testing finite-lived intangible assets for impairment includes significant judgment in the determination of the separate asset groups as well as the recoverability of those asset groups. Management uses various assumptions when determining recoverability including, but not limited to, future cash flows, cash outflows necessary to obtain the cash inflows, and disposition of the asset group.</p>	<p>Future business and economic conditions, as well as differences actually related to any of the assumptions, could materially impact the financial statements through impairment of goodwill or intangible assets and acceleration of the amortization period of the purchased intangible assets, which are finite-lived assets.</p>
<p>Goodwill is recorded as the difference, if any, between the aggregate consideration paid for an acquisition and the fair value of the identifiable net tangible and intangible assets acquired. Goodwill is not amortized but is evaluated for impairment annually on November 30<sup>th</sup> or more frequently if indicators of impairment are present or changes in circumstances suggest that impairment may exist. The first step of the goodwill impairment test compares the fair value of the reporting unit with its carrying amount, including goodwill. If the fair value of the reporting unit exceeds its carrying amount, the goodwill of the reporting unit is not considered to be impaired. If the carrying amount of the reporting unit exceeds its fair value, the second step of the goodwill impairment test is performed to measure the amount of impairment loss, if any. The second step of the goodwill impairment test, used to measure the amount of impairment loss, compares the implied fair value of the affected reporting unit’s goodwill with the carrying value of that goodwill.</p>	<p>Testing goodwill for impairment includes significant judgment in the assessment of the number of reporting units, assigning assets and liabilities to the reporting units, and determining the fair value of each reporting unit based on management’s best estimates and assumptions, as well as other information compiled by management which sometimes include third-party valuations that utilize customary valuation procedures and techniques. Management’s best estimates and assumptions are employed in determining the appropriateness of these assumptions as of the acquisition</p>	<p>As of December 31, 2017, the carrying amounts of goodwill and purchased intangible assets were \$274.4 million and \$108.6 million, respectively. As of December 31, 2016, the carrying amounts of goodwill and purchased intangible assets were \$240.7 million and \$112.1 million, respectively.</p>

date and for each subsequent period.

Description	Judgment and Uncertainties	Effect if Actual Results Differ from Assumptions
<p>Capitalized Software Costs for Internal Use</p> <p>All of our software is considered internal use for accounting purposes, as we do not market or sell our software. As a result, we capitalize certain costs associated with the creation of internally-developed software for internal use (i.e., athenaNet). These costs are recorded in the Capitalized Software Costs, net line on our Consolidated Balance Sheets.</p> <p>We capitalize costs incurred during the application development stage related to the development of athenaNet services and other internally-developed software for internal use. Costs incurred during the application development phase are capitalized only when we believe it is probable that the development will result in new or additional functionality. The types of costs capitalized during the application development phase include employee compensation (including stock-based compensation), as well as external consultant fees for individuals working on these projects. Costs related to the preliminary project stage and post-implementation activities are expensed as incurred. Capitalized internal-use software is amortized on a straight-line basis over its estimated useful life when the asset has been placed in service.</p> <p>We account for costs associated with internal-use software on a project-by-project basis during initial capitalization as well as subsequent measurement.</p>	<p>Significant judgments related to the capitalization of internal use software costs include determining whether it is probable that projects will result in new or additional functionality; concluding on when the application development phase starts and ends; and estimating which costs, especially employee compensation costs, should be capitalized. Additionally, there is judgment applied to the useful lives of these capitalized costs; we have concluded that the useful life for capitalized internally-developed software ranges from two to five years. When internal-use software that was previously capitalized is abandoned, the cost less the accumulated amortization, if any, is recorded as amortization expense. Fully amortized capitalized internal-use software costs are removed from their respective accounts.</p>	<p>While we believe that our approach to estimates and judgments is reasonable, actual results could differ, and such differences could lead to an increase or decrease in expenses in the current period.</p> <p>As of December 31, 2017 and December 31, 2016, the carrying amounts of internally-developed capitalized software were \$115.7 million and \$95.6 million, respectively. Note that these totals exclude acquired third-party software licenses for internal use.</p>

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### Financial Operations Overview

#### Revenue

We partner with hospital and ambulatory clients to drive clinical and financial results. We derive our revenue from two sources: business services, and implementation and other services. Business services primarily consists of revenue from our athenaNet providers who use our network-enabled medical record, revenue cycle, patient engagement, care coordination, and population health services. Business services also includes revenue from Epocrates® and other point-of-care mobile applications. No single client accounted for a significant amount of revenues for the years ended December 31, 2017, December 31, 2016, and December 31, 2015.

**Business Services Revenue.** Business services revenue accounted for 97%, 97%, and 96% of our total revenues the years ended December 31, 2017, December 31, 2016, and December 31, 2015, respectively. Business services revenue for athenahealth-branded services is typically 2% to 8% of a practice's or health system's total collections depending upon the services purchased and the size, complexity, and other characteristics of the practice or health system. Accordingly, business services revenue is largely driven by: the number of clients we serve, the number of physicians and other healthcare providers working in those practices, the volume of activity and related collections of those providers, the mix of our services used by those medical practices and healthcare providers, and our contracted rates. There is moderate seasonality in the activity level and service mix of healthcare providers. Typically, discretionary use of healthcare provider services declines during the holiday season, which leads to a decline in collections by our healthcare provider clients in mid-January. Based on the new revenue recognition guidance that we will adopt on January 1, 2018, we believe that the seasonality associated with the timing of when claims are submitted by our clients and when our clients receive payment on these claims will be reflected in our financial results with differing patterns than under today's recognition method.

**Implementation and Other Revenue.** Implementation and other revenue consists of all non-core revenue streams and includes the amortization of deferred revenue on non-refundable, upfront fees. We expect the amortization of deferred implementation fees to cease upon the adoption of the new revenue recognition guidance on January 1, 2018. Refer to Note 1 – Nature of Operations and Summary of Significant Accounting Policies for further information.

#### Operating Expenses

During 2017, we commenced a comprehensive plan, which we refer to as the Plan, designed to increase strategic focus and improve operational efficiency. The Plan is expected to generate \$100 million to \$115 million in gross pre-tax expense savings by the end of 2018. In connection with the Plan, we took steps to reduce our workforce by approximately 9%. Implementation of the Plan is expected to result in cumulative pre-tax charges of approximately \$15 million to \$25 million by the end of 2018, primarily related to workforce reductions, most of which occurred during the three months ended December 31, 2017.

**Cost of Revenue.** Cost of revenue primarily consists of compensation expense related to personnel who provide services, including implementation of new clients and client support, costs associated with our business partner outsourcing arrangements and clearing house, software subscriptions, claim processing costs, certain overhead costs, depreciation of certain fixed assets, and amortization of capitalized software development costs and certain purchased intangible assets. We currently expense implementation costs as incurred. However, we expect that upon adoption of the new revenue recognition standard on January 1, 2018, certain costs associated with implementation activities prior to go-live will be capitalized and amortized ratably on a straight-line basis over the average expected customer life. We expect to increase our overall level of automation as we become a larger operation with higher volumes of work in particular functions, lower cost geographies, and medical specialties, as well as streamlining and simplifying client support. However, we will continue to perform work on our clients' behalf, which will require investments in the near future. We expect that cost of revenue will still increase in absolute terms; however, we expect that costs will remain relatively consistent as a percentage of revenue compared to prior periods. Due to the new revenue recognition guidance that we will adopt January 1, 2018, in initial years post-adoption, we will capitalize more implementation



activities than we will amortize, resulting in a net benefit to cost of revenue; however, at the point at which the amortization of capitalized implementation activities equals the amount capitalized in the corresponding period, cost of revenue will no longer receive a benefit from the new revenue recognition guidance.

**Selling and Marketing Expense.** Selling and marketing expense primarily consists of compensation expense for selling and marketing employees, marketing programs (including trade shows, brand messaging, and online initiatives), certain overhead costs, depreciation of certain fixed assets, and amortization of certain purchased intangible assets. Although we recognize substantially all revenue when services have been delivered, we recognize a portion of our sales commission expense at the time of contract signature and a portion at other milestone achievements. Accordingly, we incur a portion of our selling and marketing expense prior to the recognition of the corresponding revenue. We expect that, upon adoption of the new revenue recognition standard on January 1, 2018, certain commissions will be capitalized and amortized ratably on a straight-line basis over the average expected customer life. In connection with the Plan, we are taking and plan to continue to take measures to

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adjust our selling and marketing expenses to reflect today's market conditions, while reallocating resources to address the best opportunities to grow our market share. As a result, we expect that, in the near-term, selling and marketing expense will decline in absolute terms and as a percentage of revenue.

**Research and Development Expense.** Research and development expense primarily consists of compensation expense for research and development employees, consulting fees for third-party developers, certain overhead costs, and depreciation of certain fixed assets. We expect that, in the near-term, research and development expenditures will increase in absolute terms and will likely remain constant or slightly decrease as a percentage of revenue as we develop and enhance new and existing services; however, the amount of expenditures that will be capitalized as software costs versus expensed as research and development costs could vary based on the specific projects we undertake.

**General and Administrative Expense.** General and administrative expense primarily consists of compensation expense for administrative employees, professional fees for third-party accountants, lawyers, and consultants, certain overhead expenses, and depreciation of certain fixed assets. We expect that general and administrative expense will decrease with the implementation of the Plan, but increase modestly in absolute terms over time as we make investments to support our growth. Though expenses are expected to continue to rise in absolute terms, we expect general and administrative expense to decline as a percentage of revenue over time.

**Other**

**Interest Expense.** Interest expense primarily consists of interest costs related to our term and revolving loans under our current credit facility and the amortization of deferred financing fees.

**Other (Expense) Income.** Other (expense) income consists of various expense and income items that are not part of our core business activities. For the year ended December 31, 2015, other (expense) income primarily consists of gains realized from the sale of marketable securities in Castlight Health, Inc. Upon adoption of the new investment accounting standard as of January 1, 2018, we will be required to recognize gains and losses on our cost method investments in our statement of income. Such gains and losses could be volatile and significant depending upon the market activity of each investment.

**Income Tax Provision.** Income tax provision includes the federal and state jurisdictions in the United States and India. The difference between our effective tax rate and our statutory tax rate has historically been driven by the amount of research and development credits we generate each year through the development of new and enhanced services offset by the amount of non-deductible (or permanent) differences and the amount of our pre-tax net income. On December 22, 2017, President Trump enacted "H.R.1," formerly known as the "Tax Cuts and Jobs Act" which, beginning in 2018, will reduce our corporate statutory rate but will increase certain permanent differences in the near term. As of the date of enactment, we have reduced our net deferred tax assets for our new statutory rate which has resulted in a decrease to our income tax provision for the year ended December 31, 2017. In the future, we expect the difference from our effective tax rate and our newly reduced statutory rate will be less than in the past as the amount of research and development credits that we will generate each year will be offset by higher non-deductible items related to highly compensated employees. In addition, as we expect a higher pre-tax net income as a result of the Plan described above.

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## Results of Operations

## Consolidated Results of Operations

The following table sets forth our consolidated results of operations as a percentage of total revenue for the years ended December 31, 2017, 2016, and 2015:

	Year Ended December 31,			
	2017	2016	2015	
Revenue:				
Business services	97.4 %	96.7 %	95.8 %	
Implementation and other	2.6	3.3	4.2	
Total revenue	100.0	100.0	100.0	
Cost of revenue	47.4	49.3	50.0	
Gross profit	52.6	50.7	50.0	
Other operating expenses:				
Selling and marketing	20.7	23.7	25.7	
Research and development	14.2	12.4	12.0	
General and administrative	11.9	12.2	12.8	
Total other operating expenses	46.8	48.3	50.5	
Operating income (loss)	5.8	2.5	(0.4 )	
Other (expense) income:				
Interest expense	(0.5 )	(0.5 )	(0.6 )	
Other (expense) income	(0.1 )	—	3.1	
Total other (expense) income	(0.6 )	(0.5 )	2.5	
Income before income tax provision	5.2	1.9	2.0	
Income tax provision	(0.9 )	—	(0.5 )	
Net income	4.4 %	1.9 %	1.5 %	

Percentages for each line item may not sum to the totals or subtotals for each fiscal year due to rounding.

## Comparison of the Years Ended December 31, 2017 and 2016

	Year Ended		Change	
	December 31,	December 31,	Amount	Percent
	2017	2016		
	(in millions)			
Business services revenue	\$1,188.4	\$1,047.6	\$140.8	13 %
Implementation and other revenue	31.9	35.3	(3.4 )	(10 )%
Total	\$1,220.3	\$1,082.9	\$137.4	13 %

Total revenue for the year ended December 31, 2017 increased due to an increase in collections-based revenue. The increase in collections-based revenue was primarily due to an increase in the number of clients we serve. The amount of collections processed was as follows:

	Year Ended		Change	
	December 31,	December 31,	Amount	Percent
	2017	2016		
	(in millions)			
Collections processed	\$26,009.8	\$22,615.0	\$3,394.8	15 %

	Year Ended		Change	
	December 31,	December 31,	Amount	Percent
	2017	2016		
	(in millions)			
Cost of revenue	\$578.5	\$533.5	\$45.0	8 %



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Cost of Revenue. Cost of revenue increased primarily due to compensation costs and costs associated with our business partner outsourcing and clearing house activities. Compensation costs increased \$23.3 million in the year ended December 31, 2017, largely due to a \$16.9 million increase in salaries expense as a result of a 14% average headcount increase compared to December 31, 2016. Compensation costs also includes a \$6.3 million charge related to severance associated with the Plan, as we decreased headcount by 7% from the three months ended September 30, 2017 to the three months ended December 31, 2017. In addition, costs associated with our business partner outsourcing and clearing house activities increased \$14.0 million, or 17%, as the number of claims that we processed on behalf of our clients increased during those same periods. The total claims submitted on behalf of clients were as follows:

	Year Ended		Change	
	December 31,	December 31,	Amount	Percent
	2017	2016		
	(in millions)			
Total claims submitted	194.5	172.0	22.5	13 %

	Year Ended		Change	
	December 31,	December 31,	Amount	Percent
	2017	2016		
	(in millions)			
Selling and marketing	\$252.2	\$256.6	\$(4.4)	(2)%
Research and development	173.6	134.5	39.1	29 %
General and administrative	145.4	131.7	13.7	10 %
Total	\$571.2	\$522.8	\$48.4	9 %

Selling and Marketing Expense. Selling and marketing expense remained relatively flat for the year ended December 31, 2017. Compensation costs increased \$6.7 million for the year ended December 31, 2017, which included \$3.3 million in severance due to an 18% average decrease in headcount associated with the Plan during the three months ended December 31, 2017. That increase was offset by a \$16.3 million decrease in marketing program spend for the year ended December 31, 2017, as we pursued cost-saving opportunities.

Research and Development Expense. Research and development expense increased for the year ended December 31, 2017 primarily due to compensation costs. Compensation costs increased \$25.5 million for the year ended December 31, 2017, largely due to a 9% increase in headcount, as well as an increase in expensed versus capitalized projects from the year ended December 31, 2016. In addition, key employee retention costs associated with our acquisitions of Filament Labs, Inc., or Patient IO, and Praxify Technologies, Inc., or Praxify, contributed \$7.1 million to research and development expense in the year ended December 31, 2017.

General and Administrative Expense. General and administrative expense increased for the year ended December 31, 2017 primarily due to the use of consultants. Consulting expense increased \$12.1 million for the year ended December 31, 2017. We used consultants in numerous capacities, including assistance in identifying significant cost-savings opportunities related to the Plan, temporarily staffing open positions, and assisting in our analysis and implementation of the new revenue recognition standard.

	Year Ended		Change	
	December 31,	December 31,	Amount	Percent
	2017	2016		
	(in millions)			
Income tax provision	\$(10.8)	\$ —	\$(10.8)	100%
Effective tax rate	17 %	—%		

Income Tax Provision. The difference in our effective tax rate for the year ended December 31, 2017, compared to the year ended December 31, 2016, is due to the H.R.1, formerly known as the Tax Cuts and Jobs Act, enactment, the

adoption of the new stock-based compensation accounting standard, the release of a portion of our valuation allowance, and the increase in the amount of pre-tax net income. Upon adoption of the new stock-based compensation guidance on January 1, 2017, we began recognizing excess tax benefits and tax deficiencies through the income tax provision in the consolidated statement of income. Prior to adoption, the excess tax benefits and tax deficiencies were recorded to additional paid-in capital on the consolidated balance sheet and excess tax benefits were not recorded until they were able to be utilized. Refer to Note 1 – Nature of Operations and Summary of Significant Accounting Policies for further information on the impact on the adoption of this new accounting guidance. Refer to Note 11 – Income Taxes for a further description of the H.R.1 enactment impact and our reconciliations of the federal statutory income tax rate to our effective income tax rate.

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## Comparison of the Years Ended December 31, 2016 and 2015

	Year Ended December 31,		Change	
	2016	2015	Amount	Percent
	(in millions)			
Business services revenue	\$1,047.6	\$886.1	\$161.5	18 %
Implementation and other revenue	35.3	38.6	(3.3)	(9)%
Total	\$1,082.9	\$924.7	\$158.2	17 %

Total revenue for the year ended December 31, 2016 increased due to an increase in business services revenue. The increase in business services revenue was primarily driven by the growth in the number of providers using our services. Also contributing to this increase was the growth in related collections on behalf of these providers. The amount of collections processed was as follows:

	Year Ended December 31,		Change	
	2016	2015	Amount	Percent
	(in millions)			
Collections processed	\$22,615.0	\$18,829.0	\$3,786.0	20 %

	Year Ended December 31,		Change	
	2016	2015	Amount	Percent
	(in millions)			
Cost of revenue	\$533.5	\$462.2	\$71.3	15 %

Cost of Revenue. Cost of revenue increased primarily due to compensation costs, which increased \$33.4 million in the year ended December 31, 2016, as a result of a 22% increase in headcount from December 31, 2015. We increased headcount due to the increase in the number of providers added to the network and the expansion of our emerging services. In addition, amortization expense increased \$13.3 million due to an increase in new software functionality that we placed in service, such as certain projects associated with our athenaOne for Hospitals and Health Systems service, in the year ended December 31, 2016. Finally, cost of revenue increased \$6.7 million in the year ended December 31, 2016 due to our investment in various software subscriptions necessary to support our clients and our operations.

	Year Ended December 31,		Change	
	2016	2015	Amount	Percent
	(in millions)			
Selling and marketing	\$256.6	\$237.3	\$19.3	8 %
Research and development	134.5	111.0	23.5	21 %
General and administrative	131.7	118.3	13.4	11 %
Total	\$522.8	\$466.6	\$56.2	12 %

Selling and Marketing Expense. Selling and marketing expense increased for the year ended December 31, 2016, primarily due to increases in compensation costs and consulting fees. The increase in compensation for the year ended December 31, 2016 was \$9.9 million, and was largely due to a 15% increase in headcount that was partially offset by a lower increase in variable compensation from December 31, 2015. The increase in consulting fees for the year ended December 31, 2016 was \$4.3 million. We hired additional sales personnel and utilized consultants to focus on adding new clients and increasing penetration within new and existing markets.

Research and Development Expense. Research and development expense increased for the year ended December 31, 2016 primarily due to compensation costs and allocated amortization expense. Compensation costs increased \$10.2

million for the year ended December 31, 2016, primarily due to restructuring costs incurred for strategic re-alignment purposes during the three months ended December 31, 2016. In addition, research and development expense for the year ended December 31, 2016 was impacted by a \$6.2 million increase in amortization expense related to capitalized software projects that were ultimately decided not to be placed in service.

General and Administrative Expense. General and administrative expense increased in the year ended December 31, 2016, primarily due to professional services fees and compensation costs. General and administrative expense was impacted by an



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increase of \$5.8 million in professional service fees, which include legal and consulting fees. General and administrative expense was also impacted by a \$3.7 million increase in facilities-related expenses for the year ended December 31, 2016, largely due to our growth.

Year Ended			
December		Change	
31,			
2016	2015	Amount	Percent
(in millions)			

Other (expense) income	\$ (5.6)	\$ 23.0	\$ (28.6)	(124)%
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Other (Expense) Income. Other (expense) income primarily relates to interest expense for the year ended December 31, 2016 and gains realized from the sale of marketable securities during the year ended December 31, 2015.

Year Ended			
December		Change	
31,			
2016	2015	Amount	Percent
(in millions)			

Income tax provision	\$ —	\$ (4.9)	\$ 4.9	(100)%
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Effective tax rate	—%	26%		
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Income Tax Provision. The difference in our effective tax rate for the year ended December 31, 2016, compared to the year ended December 31, 2015, is primarily due to the increase in our research and development tax credits.

#### Liquidity and Capital Resources

##### Sources of Liquidity

As of December 31, 2017, our principal source of liquidity consisted of cash and cash equivalents of \$165.1 million compared to cash and cash equivalents of \$147.4 million as of December 31, 2016. In addition, we have a credit agreement, which we refer to as the 2015 Senior Credit Facility, that provides for a \$500.0 million senior credit facility comprised of a \$300.0 million unsecured term loan facility and a \$200.0 million unsecured revolving credit facility, which we refer to as the 2015 Senior Credit Facility. As of December 31, 2017 and December 31, 2016, we had \$273.8 million and \$292.5 million outstanding on the unsecured term loan facility, respectively. As of both December 31, 2017 and December 31, 2016, we had \$200.0 million available on the unsecured revolving credit facility.

The 2015 Senior Credit Facility may be used to refinance existing indebtedness and for working capital and other general corporate purposes. We may increase the revolving credit facility up to an additional \$100.0 million and may increase the term loan facility to the extent that such amount will not cause us to be in breach of our financial covenants (such as compliance with a consolidated fixed charge coverage, consolidated leverage, and consolidated senior leverage ratios), subject to certain conditions, including obtaining lender commitments. The 2015 Senior Credit Facility matures on May 5, 2020, although we may prepay the 2015 Senior Credit Facility in whole or in part at any time without premium or penalty. As of December 31, 2017, we were in compliance with our covenants under the 2015 Credit Agreement.

Our cash balance increased in the year ended December 31, 2017 compared to the year ended December 31, 2016 primarily due to our cost savings program associated with implementation of the Plan. We believe our current sources of liquidity will be sufficient to sustain operations, to make payments on our contractual obligations, and to purchase property and equipment in the foreseeable future. Our 2015 Senior Credit Facility, including our currently underutilized \$200.0 million line of credit, provides additional flexibility to pursue strategic initiatives in the future, if needed. Our analysis is supported by the growth in our new client base and a high rate of renewal with our existing clients, as well as the corresponding increase in billings and collections. However, there can be no assurance that we will continue to generate cash flows at or above current levels or that we will be able to maintain our ability to borrow under these credit facilities or obtain additional financing.

##### Commitments

We enter into various purchase commitments with vendors in the normal course of business. We believe that our existing sources of liquidity will be adequate to fund these purchases during the 2018 fiscal year. In the normal course of business, we make representations and warranties that guarantee the performance of services under service arrangements with clients. Historically, there have been no material losses related to such guarantees.

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## Comparison of the Years Ended December 31, 2017 and 2016

	Year Ended		Change
	2017	2016	
	(in millions)		
Net income	\$53.1	\$21.0	\$ 32.1
Non-cash adjustments	213.6	190.0	23.6
Net income after non-cash adjustments are added back	266.7	211.0	55.7
Cash used in changes in operating assets and liabilities	(25.6 )	(28.4 )	2.8
Net cash provided by operating activities	\$241.1	\$182.6	\$ 58.5

## Operating Cash Flow Activities

Net cash provided by operating activities increased \$58.5 million for the year ended December 31, 2017 compared to the year ended December 31, 2016 primarily due to an increase in net income excluding the effect of non-cash items. There was a slight decrease in cash used from changes in our operating assets and liabilities, as our \$16.5 million spend on prepaid retention payments associated with our acquisition of Praxify was largely offset by favorable timing in our accounts receivable, deferred revenue, and accounts payable accounts compared to the year ended December 31, 2016. We expect that, in the near-term, due to higher expected pre-tax net income as a result of the Plan, we will substantially utilize our remaining Federal and State net operating losses and our existing R&D tax credits, and therefore, we will begin paying substantially more in income taxes.

## Investing Cash Flow Activities

Net cash used in investing activities increased \$29.1 million for the year ended December 31, 2017 compared to the year ended December 31, 2016 primarily due to a \$24.2 million increase in payments on acquisitions, net of cash acquired, as a result of our purchase of Praxify. We expect to continue to invest in capitalized software costs as we continue to develop new and enhance existing services and in property and equipment as we continue to grow.

## Financing Cash Flow Activities

The increase in net cash used in financing activities was \$18.1 million for the year ended December 31, 2017 compared to the year ended December 31, 2016, primarily due to an additional \$11.3 million in principal payments on our 2015 Senior Credit Facility in the year ended December 31, 2017. In addition, net cash used in financing activities increased \$9.0 million, as we no longer present excess tax benefits within cash flows from financing activities but instead present these cash flows in cash flows from operating activities in the consolidated statements of cash flows, per a change in accounting guidance we adopted January 1, 2017. For the foreseeable future, we anticipate that income taxes paid for the net settlement of restricted stock unit awards will be greater than the cash received for stock option exercises due to our stock price and the increase in the issuance of restricted stock units compared to stock options.

## Comparison of the Years Ended December 31, 2016 and 2015

## Operating Cash Flow Activities

Net income after non-cash and reclassification adjustments contributed an additional \$64.9 million to cash provided by operating activities during the year ended December 31, 2016 compared to the year ended December 31, 2015. The increase in non-cash and reclassification adjustments was the result of a \$24.7 million increase in depreciation and amortization during the year ended December 31, 2016 and a \$28.7 million gain on the sale of marketable securities during the year ended December 31, 2015. The increase in net income after non-cash and reclassification adjustments was partially offset by a decrease in cash provided by working capital of \$46.1 million in the year ended December 31, 2016 compared to the year ended December 31, 2015. This decrease was primarily due to decreases in deferred revenue associated with implementations and in accrued compensation due to the timing of payments. In 2014, we began including implementation fees in our ongoing monthly rate as part of our go to market strategy, which resulted in a decrease in deferred revenue.

## Investing Cash Flow Activities

Net cash used in investing activities decreased \$24.2 million for the year ended December 31, 2016 compared to the year ended December 31, 2015, as 2016 required less cash for acquired third-party licenses and business acquisitions.

During the year ended December 31, 2016, we acquired Filament Labs, Inc. (doing business as Patient IO) for \$15.2 million (included in the payments on acquisitions, net of cash acquired line on the consolidated statements of cash flows). This activity contrasts with our acquisition of Razor Insights, LLC (included in the payments on acquisitions, net of cash acquired line on the

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consolidated statements of cash flows) and our purchase of WebOMR (a third-party license included in the capitalized software costs line on the consolidated statements of cash flows) in the year ended December 31, 2015 for \$39.9 million and \$22.0 million, respectively. Net cash used in investing activities also decreased due to \$29.8 million of cash provided from the sales of Castlight Health, Inc. stock in the year ended December 31, 2015. In addition, net cash used for property and equipment additions decreased \$18.2 million in the year ended December 31, 2016 compared to the year ended December 31, 2015 primarily due to higher spend, particularly in building improvements, in the year ended December 31, 2015.

**Financing Cash Flow Activities**

The variance in net cash (used in) provided by financing activities was \$105.8 million for the year ended December 31, 2016 compared to the year ended December 31, 2015, primarily due to net proceeds received from the 2015 Senior Credit Facility in the year ended December 31, 2015.

**Contractual Obligations**

The following table summarizes our long-term contractual obligations and commitments as of December 31, 2017:

**Payments Due by Period**

(in millions)	Total	Less than 1 Year	1 - 3 Years	3 - 5 Years	More than 5 Years	Other
Long-term debt <sup>(1)</sup>	\$273.8	\$ 20.7	\$ 253.1	\$ —	\$—	\$ —
Operating lease obligations <sup>(2), (3)</sup>	151.1	19.5	35.7	33.6	62.3	—
Purchase obligations	135.0	50.5	54.2	21.4	8.9	—
Other <sup>(4)</sup>	1.9	—	—	—	—	1.9
<b>Total</b>	<b>\$561.8</b>	<b>\$ 90.7</b>	<b>\$ 343.0</b>	<b>\$ 55.0</b>	<b>\$71.2</b>	<b>\$ 1.9</b>

<sup>(1)</sup> We have cash interest requirements due on the 2015 Senior Credit Facility payable at variable rates which are not included in the above table.

<sup>(2)</sup> We are party to agreements for non-cancelable operating leases for office space and data centers which expire between 2018 and 2030.

<sup>(3)</sup> We have entered into sublease agreements related to facilities included in operating lease obligations, and therefore, we expect that we will receive payments from such agreements which are not included in the above table. Expected payments from these agreements are as follows:

**Cash Receipts Due by Period**

(in millions)	Total	Less than 1 Year	1 - 3 Years	3 - 5 Years	More than 5 Years	Other
Sublease agreements	\$41.7	\$ 5.1	\$ 10.3	\$ 9.9	\$16.4	\$ —

<sup>(4)</sup> “Other” consists of uncertain tax benefits. We have not recognized these uncertain tax benefits, nor do we have an expectation of when these uncertain tax benefits would be challenged. As of December 31, 2017, we cannot reasonably estimate when any future cash outlays would occur related to these uncertain tax positions.

**Off-Balance Sheet Arrangements**

As of December 31, 2017 and 2016, we did not have any relationships with unconsolidated entities or financial partnerships, such as entities often referred to as “special purpose” entities, which would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes. Other than our operating leases, which are primarily for office space and data centers, we do not engage in off-balance sheet financing arrangements. Upon adoption of the new lease accounting guidance on January 1, 2019, we anticipate that the requirement to capitalize all long-term leases will result in a material impact to our consolidated balance sheet.

**Item 7A. Quantitative and Qualitative Disclosures About Market Risk.**

**Foreign Currency Exchange Risk.** Our results of operations and cash flows are subject to fluctuations due to changes in the Indian rupee. An insignificant amount of our consolidated revenues is generated outside of the United States.

Some of our contracts with our offshore vendors are denominated in currencies other than the U.S. dollar, namely Indian rupees. For the years ended December 31, 2017, 2016, and 2015, approximately 1-2% of our expenses occurred in our operations in India. We

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therefore do not believe that the risk of a significant impact on our operating income from foreign currency fluctuations is likely.

**Interest Rate Risk.** We had \$273.8 million and \$292.5 million of outstanding borrowings under our 2015 Senior Credit Facility at December 31, 2017 and December 31, 2016, respectively. The 2015 Senior Credit Facility bears interest at the British Bankers Association London Interbank Offered Rate, or LIBOR, plus an interest margin based on (i) our consolidated leverage ratio, or (ii) the base rate (which is the highest of (a) the Bank of America prime rate, (b) the Federal Funds rate plus 0.50%, and (c) one month LIBOR plus 1.00%) plus an interest margin based on our consolidated leverage ratio. Accordingly, we are exposed to fluctuations in interest rates on borrowings under the 2015 Senior Credit Facility. A one hundred basis point change in the interest rate on our borrowings outstanding as of December 31, 2017 and December 31, 2016 would result in an annual change in interest expense of \$2.7 million and \$2.9 million, respectively.

**Item 8. Financial Statements and Supplementary Data.**

The financial statements required by this Item are located beginning on page F-1 of this report.

**Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.**

None.

**Item 9A. Controls and Procedures.**

**Evaluation of Disclosure Controls and Procedures**

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in the reports that we file or submit under the Securities and Exchange Act of 1934 is (1) recorded, processed, summarized, and reported within the time periods specified in the Securities and Exchange Commission's rules and forms and (2) accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, to allow timely decisions regarding required disclosure. As of December 31, 2017 (the "Evaluation Date"), our management, with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities and Exchange Act of 1934). Our management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives, and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Our Chief Executive Officer and Chief Financial Officer have concluded based upon the evaluation described above that, as of the Evaluation Date, our disclosure controls and procedures were effective at the reasonable assurance level.

**Management's Report on Internal Control over Financial Reporting**

Our management is responsible for establishing and maintaining adequate internal control over financial reporting for our company. Internal control over financial reporting is defined in Rules 13a-15(f) and 15(d)-15(f) promulgated under the Securities Exchange Act of 1934, as amended, as a process designed by, or under the supervision of, our Chief Executive and Chief Financial Officers and effected by our board of directors, management, and other personnel 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 and includes those policies and procedures that:

- pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and disposition of our assets;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles;
- provide reasonable assurance that our receipts and expenditures are being made only in accordance with authorization of our management and directors; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of our assets that could have a material effect on the financial statements.

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





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Our management, including our Chief Executive Officer and Chief Financial Officer, has conducted an evaluation of the effectiveness of our internal control over financial reporting as of December 31, 2017. In conducting this evaluation, we used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in Internal Control-Integrated Framework (2013).

Based upon this evaluation and those criteria, management believes that, as of December 31, 2017, our internal controls over financial reporting were effective.

Deloitte & Touche LLP, our independent registered public accounting firm, has audited our consolidated financial statements and the effectiveness of our internal control over financial reporting as of December 31, 2017, as stated in their report which appears herein.

Changes in Internal Control

There have been no changes in our internal control over financial reporting for the three months ended December 31, 2017 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of athenahealth, Inc.

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of athenahealth, Inc. and subsidiaries (the "Company") as of December 31, 2017, based on criteria established in Internal Control – Integrated Framework (2013) 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, 2017, based on criteria established in Internal Control – Integrated Framework (2013) issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended December 31, 2017, of the Company and our report dated February 1, 2018, 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. 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/ Deloitte & Touche LLP  
Boston, Massachusetts  
February 1, 2018

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Item 9B. Other Information.

None.

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**PART III**

Certain information required by Part III of Form 10-K is omitted from this report because we expect to file a definitive proxy statement for our 2018 Annual Meeting of Stockholders, which we refer to as the 2018 Proxy Statement, within 120 days after the end of our fiscal year pursuant to Regulation 14A promulgated under the Securities Exchange Act of 1934, as amended, and the information included in our 2018 Proxy Statement is incorporated herein by reference to the extent provided below.

**Item 10. Directors, Executive Officers and Corporate Governance.**

The information required by this Item is set forth in our 2018 Proxy Statement to be filed with the SEC within 120 days of December 31, 2017, and is incorporated by reference into this Annual Report on Form 10-K.

**Item 11. Executive Compensation.**

The information required by this Item is set forth in our 2018 Proxy Statement to be filed with the SEC within 120 days of December 31, 2017, and is incorporated by reference into this Annual Report on Form 10-K.

**Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.**

The information required by this Item is set forth in our 2018 Proxy Statement to be filed with the SEC within 120 days of December 31, 2017, and is incorporated by reference into this Annual Report on Form 10-K.

**Item 13. Certain Relationships and Related Transactions, and Director Independence.**

The information required by this Item is set forth in our 2018 Proxy Statement to be filed with the SEC within 120 days of December 31, 2017, and is incorporated by reference into this Annual Report on Form 10-K.

**Item 14. Principal Accountant Fees and Services.**

The information required by this Item is set forth in our 2018 Proxy Statement to be filed with the SEC within 120 days of December 31, 2017, and is incorporated by reference into this Annual Report on Form 10-K.

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PART IV

Item 15. Exhibits, Financial Statement Schedules.

- (a) Documents filed as part of this report.
  - (1) The following consolidated financial statements are filed herewith in Item 8 of Part II above.
    - (i) Report of Independent Registered Public Accounting Firm
    - (ii) Consolidated Balance Sheets
    - (iii) Consolidated Statements of Income
    - (iv) Consolidated Statements of Comprehensive Income
    - (v) Consolidated Statements of Stockholders' Equity
    - (v) Consolidated Statements of Cash Flows
    - (vi) Notes to Consolidated Financial Statements
  - (2) Financial Statement Schedules

All other supplemental schedules are omitted because of the absence of conditions under which they are required or because the required information is given in the financial statements or notes thereto.

(3) Exhibits

See the Exhibit Index immediately following the signature page of this Annual Report on Form 10-K.

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SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

ATHENAHEALTH, INC.

By: /s/ Jonathan Bush  
Jonathan Bush  
Chief Executive Officer, President, and Chairman

By: /s/ Marc Levine  
Marc Levine  
Chief Financial Officer

Date: February 1, 2018

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Jonathan Bush Jonathan Bush	Chief Executive Officer (Principal Executive Officer)	February 1, 2018
/s/ Marc Levine Marc Levine	Chief Financial Officer (Principal Financial and Accounting Officer)	February 1, 2018
/s/ Amy Abernethy Amy Abernethy	Director	February 1, 2018
/s/ Brandon H. Hull Brandon H. Hull	Lead Director	February 1, 2018
/s/ Dev Ittycheria Dev Ittycheria	Director	February 1, 2018
/s/ John A. Kane John A. Kane	Director	February 1, 2018
/s/ Jacqueline B. Kosecoff Jacqueline B. Kosecoff	Director	February 1, 2018
/s/ Brian McKeon Brian McKeon	Director	February 1, 2018
/s/ Ed Park Ed Park	Director	February 1, 2018
/s/ David E. Robinson David E. Robinson	Director	February 1, 2018

/s/ Thomas J. Szkutak  
Thomas J. Szkutak

Director

February 1, 2018

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Exhibit No.	Exhibit Description
2.1	<u>Agreement and Plan of Merger by and among the Registrant, Echo Merger Sub, Inc., and Epocrates, Inc., dated January 7, 2013 (incorporated by reference to Exhibit 2.1 to the Current Report on Form 8-K filed by the Registrant on January 7, 2013)</u>
3.1	<u>Amended and Restated Certificate of Incorporation of the Registrant (incorporated by reference to Exhibit 3.2 to the Registration Statement on Form S-1 filed by the Registrant on September 11, 2007)</u>
3.2	<u>Amended and Restated Bylaws of the Registrant (incorporated by reference to Exhibit 3.1 to the Current Report on Form 8-K filed by the Registrant on March 24, 2017)</u>
4.1	<u>Specimen Certificate evidencing shares of common stock (incorporated by reference to Exhibit 4.1 to the Registration Statement on Form S-1 filed by the Registrant on August 3, 2007)</u>
10.1	<u>Form of Indemnification Agreement between the Registrant and each of its directors and officers (incorporated by reference to Exhibit 10.1 to the Registration Statement on Form S-1 filed by the Registrant on September 6, 2007)</u>
†10.2	<u>athenahealth, Inc. 2007 Stock Option and Incentive Plan, as amended, and form of agreements (incorporated by reference to Exhibit 10.1 to the Quarterly Report on Form 10-Q filed by the Registrant on October 18, 2013)</u>
†10.3	<u>athenahealth, Inc. 2007 Employee Stock Purchase Plan, as amended (incorporated by reference to Exhibit 10.1 to the Quarterly Report on Form 10-Q filed by the Registrant on October 19, 2012)</u>
†10.4	<u>Epocrates, Inc. 2010 Equity Incentive Plan, as amended, and form of agreements (incorporated by reference to Exhibit 10.1 to the Quarterly Report on Form 10-Q filed by the Registrant on July 18, 2014)</u>
†10.5	<u>Employment Agreement by and between the Registrant and Jonathan Bush, dated November 1, 1999, as amended (incorporated by reference to Exhibit 10.15 to the Registration Statement on Form S-1 filed by the Registrant on July 13, 2007)</u>
†10.6	<u>Employment Agreement by and between the Registrant and Stephen Kahane, dated February 18, 2011 (incorporated by reference to Exhibit 10.1 to the Quarterly Report on Form 10-Q filed by the Registrant on April 29, 2011)</u>
†10.7	<u>Employment Agreement by and between the Registrant and Karl Stubelis, dated May 19, 2016 (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by the Registrant on May 19, 2016)</u>
†10.8	<u>Employment Agreement by and between the Registrant and Kyle Armbruster, dated January 9, 2012 (incorporated by reference to Exhibit 10.1 to the Quarterly Report on Form 10-Q filed by the Registrant on October 22, 2010)</u>
†10.9	<u>athenahealth, Inc. Executive Incentive Plan, adopted March 29, 2013 (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by the Registrant on April 4, 2013)</u>
10.10	

Office Lease Agreement by and between the Registrant and JAMESTOWN Ponce City Market, L.P., dated June 24, 2013 (incorporated by reference to Exhibit 10.3 to the Quarterly Report on Form 10-Q filed by the Registrant on July 19, 2013)

10.11 Amendment No. 1 to Office Lease Agreement by and between the Registrant and JAMESTOWN Ponce City Market, L.P., dated April 23, 2014 (incorporated by reference to Exhibit 10.3 to the Quarterly Report on Form 10-Q filed by the Registrant on July 18, 2014)

10.12 Amendment No. 2 to Office Lease Agreement by and between the Registrant and JAMESTOWN Ponce City Market, L.P., dated August 18, 2014 (incorporated by reference to Exhibit 10.2 to the Quarterly Report on Form 10-Q filed by the Registrant on October 17, 2014)

10.13 Amendment No. 3 to Office Lease Agreement by and between the Registrant and JAMESTOWN Ponce City Market, L.P., dated February 27, 2015 (incorporated by reference to Exhibit 10.21 to the Annual Report on Form 10-K filed by the Registrant on February 4, 2016)

10.14 Amendment No. 4 to Office Lease Agreement by and between the Registrant and JAMESTOWN Ponce City Market, L.P., dated July 27, 2015 (incorporated by reference to Exhibit 10.22 to the Annual Report on Form 10-K filed by the Registrant on February 4, 2016)

10.15 Purchase and Sale Agreement by and between the Registrant and the President and Fellows of Harvard College, dated December 5, 2012 (incorporated by reference to Exhibit 10.29 to the Annual Report on Form 10-K filed by the Registrant on February 11, 2013)

10.16 First Amendment to Purchase and Sale Agreement by and between athenahealth, Inc. and President and Fellows of Harvard College, dated March 12, 2013 (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by the Registrant on March 18, 2013)

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Exhibit No.	Exhibit Description
10.17	<u>Credit Agreement among the Registrant, Bank of America, N.A., as Administrative Agent, Swing Line Lender, and Letter of Credit Issuer, the other lenders party thereto, and Merrill Lynch, Pierce, Fenner &amp; Smith Incorporated and TD Securities (USA) LLC as Joint Lead Arrangers and Joint Book Managers, dated May 10, 2013, and exhibits and schedules thereunder (incorporated by reference to Exhibit 10.1 to the Quarterly Report on Form 10-Q filed by the Registrant on July 19, 2013)</u>
10.18	<u>First Amendment to Credit Agreement among the Registrant, Bank of America, N.A., as Administrative Agent, dated December 18, 2014 (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by the Registrant on December 24, 2014)</u>
10.19	<u>Amended and Restated Credit Agreement by and between the Registrant and Bank of America, N.A. as Administrative Agent, Swing Line Lender, and Letter of Credit Issuer; the other lenders party thereto from time to time; and Merrill Lynch, Pierce, Fenner &amp; Smith Incorporated, TD Securities (USA) LLC, and U.S. Bank National Association as Joint Lead Arrangers and Joint Book Managers, dated May 5, 2015 (incorporated by reference to Exhibit 10.1 to the Quarterly Report on Form 10-Q filed by the Registrant on July 23, 2015)</u>
10.20	<u>Seaholm Triple Net Lease, effective as of January 31, 2014 (incorporated by reference to Exhibit 10.1 to the Quarterly Report on Form 10-Q filed by the Registrant on April 18, 2014)</u>
10.21	<u>First Amendment to Lease by and between the Registrant and Seaholm L/R, LLC, dated May 12, 2015 (incorporated by reference to Exhibit 10.2 to the Quarterly Report on Form 10-Q filed by the Registrant on July 23, 2015)</u>
10.22	<u>Construction Management Agreement by and between Athena Arsenal, LLC, a subsidiary of the Registrant, and C.E. Floyd Company, Inc., dated December 5, 2016 (incorporated by reference to Exhibit 10.26 to the Annual Report on Form 10-K filed by the Registrant on February 2, 2017)</u>
†10.23	<u>Separation Agreement between athenahealth, Inc. and Karl Stubelis, dated July 10, 2017 (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by the Registrant on July 14, 2017)</u>
†10.24	<u>Employment Agreement by and between the Registrant and John A. Kane, dated July 21, 2017 (incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K/A filed by the Registrant on July 25, 2017)</u>
10.25	<u>Amended and Restated Services Agreement by and between athenahealth, Inc. and Access Healthcare Services USA, LLC, dated August 8, 2017, portions of which have been omitted pursuant to a confidential treatment order from the Securities and Exchange Commission (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by the Registrant on August 10, 2017)</u>
†10.26	<u>Addendum to February 18, 2011 Employment Agreement by and between the Registrant and Stephen Kahane, M.D., dated October 19, 2017 (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by the Registrant on October 19, 2017)</u>
†10.27	<u>athenahealth, Inc. Change in Control Severance Plan for Certain U.S. Officers and Executives, effective October 23, 2017 (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by the Registrant on October 27, 2017)</u>

- †10.28 athenahealth, Inc. Severance Plan for U.S. Officers and Executives, effective October 23, 2017 (incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K filed by the Registrant on October 27, 2017)
- †10.29 Employment Agreement by and between the Registrant and Marc A. Levine, dated November 24, 2017 (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by the Registrant on November 27, 2017)
- †10.30 Director Compensation Plan of the Registrant, effective as of February 7, 2017 (incorporated by reference to Exhibit 10.1 to the Quarterly Report on Form 10-Q filed by the Registrant on April 27, 2017)
- †10.31\* Addendum to July 21, 2017 Employment Agreement by and between the Registrant and John A. Kane, dated January 2, 2018
- 21.1\* Subsidiaries of the Registrant
- 23.1\* Consent of Independent Registered Public Accounting Firm
- 31.1\* Rule 13a-14(a) or 15d-14 Certification of Chief Executive Officer
- 31.2\* Rule 13a-14(a) or 15d-14 Certification of Chief Financial and Administrative Officer
- 32.1\* Certifications of Chief Executive Officer and Chief Financial and Administrative Officer pursuant to Exchange Act rules 13a-14(b) or 15d-14(b) and 18 U.S.C. Section 1350

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Exhibit No. Exhibit Description

101 XBRL (eXtensible Business Reporting Language). The following materials from athenahealth, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2017, formatted in XBRL: (i) the Consolidated Balance Sheets, (ii) the Consolidated Statements of Income, (iii) the Consolidated Statements of Comprehensive Income, (iv) the Consolidated Statements of Stockholders' Equity, (v) the Consolidated Statements of Cash Flows, and (vi) notes to consolidated financial statements.

†Indicates a management contract or any compensatory plan, contract, or arrangement.

\*Furnished or filed herewith.

Financial Statements and Supplementary Data

athenahealth, Inc.

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of athenahealth, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of athenahealth, Inc. and subsidiaries (the "Company") as of December 31, 2017 and 2016, the related consolidated statements of income, comprehensive income, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2017, and the related notes (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, 2017 and 2016, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2017, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2017, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 1, 2018, expressed an unqualified opinion on the Company's internal control over financial reporting.

Basis for Opinion

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

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

/s/ Deloitte & Touche LLP

Boston, Massachusetts

February 1, 2018

We have served as the Company's auditor since 2003.

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athenahealth, Inc.

## CONSOLIDATED BALANCE SHEETS

(Amounts in millions, except per share amounts)

	December 31, 2017	December 31, 2016
Assets		
Current assets:		
Cash and cash equivalents	\$ 165.1	\$ 147.4
Accounts receivable, net <sup>(1)</sup>	169.5	161.6
Prepaid expenses and other current assets	46.8	34.2
Total current assets	381.4	343.2
Property and equipment, net	355.1	347.7
Capitalized software costs, net	139.7	125.8
Purchased intangible assets, net	108.6	112.1
Goodwill	274.4	240.7
Deferred tax asset, net	41.8	2.2
Investments and other assets	31.3	17.5
Total assets	\$ 1,332.3	\$ 1,189.2
Liabilities & Stockholders' Equity		
Current liabilities:		
Accounts payable <sup>(1)</sup>	\$ 10.6	\$ 9.5
Accrued compensation	94.7	89.7
Accrued expenses <sup>(1)</sup>	51.5	51.7
Long-term debt	20.2	18.3
Deferred revenue	30.7	28.7
Total current liabilities	207.7	197.9
Deferred rent, net of current portion	29.3	30.8
Long-term debt, net of current portion	252.6	272.8
Deferred revenue, net of current portion	46.5	48.4
Other long-term liabilities	4.7	6.0
Total liabilities	540.8	555.9
Commitments and contingencies (Note 1)		
Stockholders' equity:		
Preferred stock, \$0.01 par value: 5.0 shares authorized; no shares issued and outstanding at December 31, 2017 and December 31, 2016, respectively	—	—
Common stock, \$0.01 par value: 125.0 shares authorized; 40.1 shares issued and 40.1 shares outstanding at December 31, 2017; 40.8 shares issued and 39.5 shares outstanding at December 31, 2016	0.4	0.4
Additional paid-in capital	646.7	591.5
Treasury stock, at cost	—	(1.2 )
Accumulated other comprehensive loss	(0.4 )	(0.9 )
Retained earnings	144.8	43.5
Total stockholders' equity	791.5	633.3
Total liabilities and stockholders' equity	\$ 1,332.3	\$ 1,189.2

<sup>(1)</sup> Refer to Footnote 1 – Nature of Operations and Summary of Significant Accounting Policies for disclosure of related party amounts.

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





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athenahealth, Inc.

## CONSOLIDATED STATEMENTS OF INCOME

(Amounts in millions, except per share amounts)

	Year Ended December 31,		
	2017	2016	2015
Revenue:			
Business services <sup>(1)</sup>	\$1,188.4	\$1,047.6	\$886.1
Implementation and other	31.9	35.3	38.6
Total revenue	1,220.3	1,082.9	924.7
Cost of revenue <sup>(1)</sup>	578.5	533.5	462.2
Gross profit	641.8	549.4	462.5
Other operating expenses:			
Selling and marketing	252.2	256.6	237.3
Research and development <sup>(1)</sup>	173.6	134.5	111.0
General and administrative	145.4	131.7	118.3
Total other operating expenses	571.2	522.8	466.6
Operating income (loss)	70.6	26.6	(4.1 )
Other (expense) income:			
Interest expense	(6.0 )	(5.9 )	(5.7 )
Other (expense) income	(0.7 )	0.3	28.7
Total other (expense) income	(6.7 )	(5.6 )	23.0
Income before income tax provision	63.9	21.0	18.9
Income tax provision	(10.8 )	—	(4.9 )
Net income	\$53.1	\$21.0	\$14.0
Net income per share – Basic	\$1.33	\$0.53	\$0.36
Net income per share – Diluted	\$1.31	\$0.52	\$0.35
Weighted average shares used in computing net income per share:			
Basic	39.9	39.3	38.6
Diluted	40.7	40.1	39.6

<sup>(1)</sup> Refer to Footnote 1 – Nature of Operations and Summary of Significant Accounting Policies for disclosure of related party amounts.

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

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athenahealth, Inc.

## CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(Amounts in millions)

	Year Ended December 31,		
	2017	2016	2015
Net income	\$53.1	\$21.0	\$14.0
Other comprehensive income (loss)			
Unrealized loss on securities, net of tax of \$3.5 for the year ended December 31, 2015	—	—	(7.7 )
Reclassification adjustments for gains on sales of marketable securities included in net income, net of tax of \$11.5 for the year ended December 31, 2015	—	—	(17.1 )
Unrealized gain on change in fair value of interest rate swap, net of tax	—	0.1	—
Foreign currency translation adjustment	0.5	(0.2 )	(0.2 )
Total other comprehensive income (loss)	0.5	(0.1 )	(25.0 )
Comprehensive income (loss)	\$53.6	\$20.9	\$(11.0)

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

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athenahealth, Inc.

## CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

(Amounts in millions)

	Common Stock			Treasury Stock		Accumulated		Total Stockholders' Equity
	Shares	Amount	Additional Paid-In Capital	Shares	Amount	Other Comprehensive Income (Loss)	Retained Earnings	
BALANCE – January 1, 2015	39.4	\$ 0.4	\$ 443.2	(1.3 )	\$(1.2 )	\$ 24.2	\$ 8.5	\$ 475.1
Stock-based compensation			71.4					71.4
Stock options exercised and restricted stock units vested, net	0.7	—	(5.0 )					(5.0 )
Common stock issued under employee stock purchase plan	0.1	—	5.6					5.6
Tax benefit realized from stock-based awards			7.2					7.2
Net income							14.0	14.0
Other comprehensive loss						(25.0 )		(25.0 )
BALANCE – December 31, 2015	40.2	\$ 0.4	\$ 522.4	(1.3 )	\$(1.2 )	\$ (0.8 )	\$ 22.5	\$ 543.3
Stock-based compensation			68.7					68.7
Stock options exercised and restricted stock units vested, net	0.5	—	(10.2 )					(10.2 )
Common stock issued under employee stock purchase plan	0.1	—	6.8					6.8
Tax benefit realized from stock-based awards			3.8					3.8
Net income							21.0	21.0
Other comprehensive loss						(0.1 )		(0.1 )
BALANCE – December 31, 2016	40.8	\$ 0.4	\$ 591.5	(1.3 )	\$(1.2 )	\$ (0.9 )	\$ 43.5	\$ 633.3
Cumulative effect of adoption of new accounting standard	—	—	1.0	—	—	—	48.2	49.2
BALANCE – January 1, 2017	40.8	\$ 0.4	\$ 592.5	(1.3 )	\$(1.2 )	\$ (0.9 )	\$ 91.7	\$ 682.5
Stock-based compensation			56.8					56.8
Stock options exercised and restricted stock units vested, net	0.5	—	(7.7 )					(7.7 )
Common stock issued under employee stock purchase plan	0.1	—	6.3					6.3
Retirement of treasury shares	(1.3 )	—	(1.2 )	1.3	1.2			—
Net income							53.1	53.1
Other comprehensive income						0.5		0.5
BALANCE – December 31, 2017	40.1	\$ 0.4	\$ 646.7	—	\$—	\$ (0.4 )	\$ 144.8	\$ 791.5

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

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athenahealth, Inc.

## CONSOLIDATED STATEMENTS OF CASH FLOWS

(Amounts in millions)

	Year Ended December 31,		
	2017	2016	2015
<b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>			
Net income	\$53.1	\$21.0	\$14.0
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	147.3	142.7	118.0
Excess tax benefit from stock-based awards	—	(9.0 )	(12.9 )
Deferred income tax	7.3	(9.9 )	(8.5 )
Stock-based compensation expense	54.3	66.5	64.1
Gain on sale of marketable securities	—	—	(28.7 )
Other reconciling adjustments	4.7	(0.3 )	0.1
Changes in operating assets and liabilities:			
Accounts receivable, net	(7.9 )	(13.5 )	(25.3 )
Prepaid expenses and other current assets	(12.5 )	5.1	4.2
Other long-term assets	(9.8 )	(4.3 )	(2.7 )
Accounts payable	4.5	(4.8 )	2.8
Accrued expenses and other long-term liabilities	(3.7 )	(0.9 )	8.2
Accrued compensation	4.5	1.0	17.2
Deferred revenue	0.1	(11.4 )	3.2
Deferred rent	(0.8 )	0.4	10.1
Net cash provided by operating activities	241.1	182.6	163.8
<b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>			
Capitalized software costs	(82.8 )	(89.5 )	(97.8 )
Purchases of property and equipment	(80.1 )	(69.0 )	(87.2 )
Proceeds from sales and maturities of investments	—	—	29.8
Payments on acquisitions, net of cash acquired	(41.1 )	(16.9 )	(39.9 )
Other investing activities	—	0.5	(4.0 )
Net cash used in investing activities	(204.0 )	(174.9 )	(199.1 )
<b>CASH FLOWS FROM FINANCING ACTIVITIES:</b>			
Proceeds from issuance of common stock under stock plans and warrants	16.5	16.2	22.1
Taxes paid related to net share settlement of stock awards	(17.9 )	(19.6 )	(21.4 )
Excess tax benefit from stock-based awards	—	9.0	12.9
Proceeds from long-term debt	—	—	300.0
Proceeds from line of credit	—	—	60.0
Payments on line of credit	—	—	(95.0 )
Payments on long-term debt	(18.8 )	(7.5 )	(173.8 )
Other financing activities	0.1	(0.1 )	(1.0 )
Net cash (used in) provided by financing activities	(20.1 )	(2.0 )	103.8
Effects of exchange rate changes on cash and cash equivalents	0.7	(0.2 )	(0.4 )
Net increase in cash and cash equivalents	17.7	5.5	68.1
Cash and cash equivalents at beginning of period	147.4	141.9	73.8
Cash and cash equivalents at end of period	\$165.1	\$147.4	\$141.9
<b>Non-cash transactions</b>			
Property, equipment, and purchased software recorded in accounts payable and accrued expenses	\$10.1	\$17.5	\$12.5
Non-cash leasehold improvements	\$—	\$—	\$2.3

Additional disclosures

Cash paid for interest, net \$5.1 \$4.6 \$5.7

Cash paid for income taxes \$2.6 \$0.3 \$0.6

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

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athenahealth, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(Amounts in millions, except per share amounts)

1. NATURE OF OPERATIONS AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

General – athenahealth, Inc. (which we refer to as athenahealth, the Company, we, or our) partners with hospital and ambulatory clients to drive clinical and financial results. We offer network-based medical record, revenue cycle, patient engagement, care coordination, and population health services, as well as Epocrates® and other point-of-care mobile applications. Our network provides clients better insight into their own organizations as well as the ability to learn from the experience of every other client on the network. Through our model, we infuse the knowledge clients need to thrive in a changing industry directly into their workflow, from clinical guidelines to payer rules. We take on back-office work at scale so providers can focus on patients, not paperwork.

Principles of Consolidation – The accompanying consolidated financial statements include the results of operations of the Company and its wholly-owned subsidiaries. All intercompany balances and transactions have been eliminated in consolidation.

Use of Estimates – The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America, or GAAP, requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements, as well as the reported amounts of revenues and expenses during the reporting period. Significant estimates and assumptions are used for, but are not limited to: (1) revenue recognition, including the expected client life; (2) asset impairments; (3) depreciable lives of assets; (4) fair value of stock-based compensation; (5) fair value of identifiable purchased tangible and intangible assets in a business combination; (6) determination of the reporting unit(s) for goodwill impairment testing; (7) litigation reserves; and (8) capitalized software costs. Actual results could significantly differ from those estimates.

Segment Reporting – Operating segments are identified as components of an enterprise about which separate discrete financial information is evaluated by the chief operating decision maker, which we refer to as the CODM, or decision-making group in assessing performance and making decisions regarding resource allocation. We use consolidated financial information in determining how to allocate resources and assess performance, and have determined that we operate in one segment. The CODM, our Chief Executive Officer, uses non-GAAP adjusted operating income (defined as the sum of GAAP net income before (provision for) benefit from income taxes; total other (expense) income; stock-based compensation expense; amortization of capitalized stock-based compensation related to software development; amortization of purchased intangible assets; integration and transaction costs; exit costs, including restructuring costs; and gain or loss on investments) as the measure of our profit on a regular basis.

Revenue Recognition – We recognize revenue when there is evidence of an arrangement, the service has been provided to the client, the collection of the fees is reasonably assured, and the amount of fees to be paid by the client is fixed or determinable.

We derive our revenue from two sources: business services, and implementation and other services. Business services primarily consists of revenue from our athenaNet providers who use our network-enabled medical record, revenue cycle, patient engagement, care coordination, and population health services. Business services also includes revenue from Epocrates and other point-of-care mobile applications.

Our clients typically purchase one-year service contracts for our integrated, network-enabled services that renew automatically. In most cases, our clients may terminate their agreements without cause by providing notice, generally over a time period prescribed in a client's contract. We bill our clients monthly, in arrears, based either upon a percentage of collections posted to athenaNet, minimum fees, flat fees, or per-claim fees. We do not recognize revenue for athenahealth-branded business services fees until client collections are posted, as the services fees are not fixed or determinable until such time. Unbilled amounts that have been earned are accrued and recorded as revenue

and are included in our accounts receivable balances.

Implementation and other services revenue primarily consists of the amortization of deferred revenue on implementation fees. Prior to 2014, these fees were billed upfront and recorded as deferred revenue until the implementation was complete, and then, as the service did not have stand-alone value, it was recognized ratably over the longer of the life of the agreement or the expected client life, which is currently estimated to be 12 years. We evaluate the length of the amortization period of the implementation fees based on our experience with client contract renewals and consideration of the period over which those clients will receive benefits from our current portfolio of services.

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athenahealth, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(Amounts in millions, except per share amounts)

During 2014, we began to sell go-live and training support services separate from the required implementation services. The client can purchase go-live and training support services from us or third-party vendors, and therefore, those services have stand-alone value and are recognized as those services are delivered. When we began selling these services separately from the required implementation services, we began to include the fees associated with the required implementation services in our ongoing monthly rate; therefore, the required implementation services are being recognized ratably over the expected client life. Previously deferred revenue balances related to implementation services that were billed upfront and did not have stand-alone value continue to be amortized over those remaining client lives.

Certain expenses related to the implementation, go-live, and training of a client, such as out-of-pocket travel, are typically reimbursed by the client. These costs are recorded as both revenues and expenses in the period the costs are incurred.

Research and Development Expense – Research and development expense primarily consists of compensation expense for research and development employees and consulting fees for third-party developers. All such costs are expensed as incurred, except for certain internal use software costs, which may be capitalized (refer to Note 6 – Capitalized Software Costs). Research and development expense also includes allocated amounts for overhead, depreciation, and amortization.

Stock-Based Compensation – We account for share-based awards, including shares issued under employee stock purchase plans; stock options; and restricted stock units with compensation cost measured using the fair value of the awards issued (refer to Note 10 – Stock-Based Compensation). The assumptions used in calculating the fair value of share-based awards represent management’s best estimates. We generally issue previously unissued shares for the exercise of stock options.

Certain employees have received awards for which the ultimate number of shares that will be subject to vesting is dependent upon the achievement of certain financial targets for the year. Such determination is not made until the award’s vesting determination date, which is the date our fiscal year financial statements are available for issuance. The value of such awards are initially recorded based on the attainable number of shares that are most likely to be subject to vesting based on available financial forecasts as of the date of grant. This amount is adjusted on a quarterly basis as new financial forecasts become available. Stock based compensation expense for these awards is recorded over the requisite service period, which is generally three or four years. Such awards generally vest ratably over three or four years from the vesting determination date.

Advertising Expenses – Advertising expenses are expensed as incurred and are included in selling and marketing expense in the Consolidated Statements of Income. Advertising expense totaled \$27.3 million, \$30.6 million, and \$28.1 million for the years ended December 31, 2017, 2016, and 2015, respectively.

Cash and Cash Equivalents – We consider all highly liquid investments with an original or remaining maturity from the Company’s date of purchase of 90 days or less to be cash equivalents.

Investments – Management determines the classification of investments at the time of purchase based upon management’s intent with regard to such investments. Our convertible notes receivable from privately-held companies are accounted for as available-for-sale investments which are carried at cost, which we believe approximates fair value. Upon conversion, if any, we assess whether the resulting holdings in equity interests should be accounted for on a cost or equity method basis, depending on whether we believe we have significant influence over the investee, the type of equity interest held, and the level of equity interest held in the investee. Marketable securities, if any, are also accounted for as available-for-sale investments and recorded at fair value. Unrealized holding gains and losses on available-for-sale investments are recorded as a component of accumulated other comprehensive (loss) income. The



Company determines realized gains and losses based on the specific identification method. Management monitors and assesses individual investments for other-than-temporary impairment on a quarterly basis.

Concentrations of Credit Risk – Financial instruments that potentially subject us to concentrations of credit risk are cash equivalents, investments, derivatives, notes receivable, and accounts receivable. We attempt to limit our credit risk associated with cash equivalents and investments by investing or making deposits in highly-rated corporate and financial institutions, and engaging with highly-rated financial institutions as counterparties to our derivative transactions. With respect to client accounts receivable, we manage our credit risk by performing ongoing credit evaluations of our clients. No single client accounted for a significant amount of revenues for the years ended December 31, 2017, 2016, and 2015. No single client accounted for a significant portion of accounts receivable as of December 31, 2017 and 2016.

Accounts Receivable – Accounts receivable represents unbilled amounts and amounts due from clients for business services. Accounts receivable are stated net of an allowance for uncollectible accounts, which is determined by establishing reserves for specific accounts and consideration of historical and estimated probable losses.

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athenahealth, Inc.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(Amounts in millions, except per share amounts)

Activity in the allowance for doubtful accounts is as follows:

	Years Ended		
	December 31,		
	2017	2016	2015
Beginning balance	\$0.6	\$0.7	\$0.6
Provision	0.7	0.7	0.6
Write-offs	(1.0 )	(0.8 )	(0.5 )
Ending balance	\$0.3	\$0.6	\$0.7

Prepaid Expenses and Other Current Assets – Prepaid expenses and other current assets consist of the following:

	As of	
	December	
	31,	
	2017	2016
Other prepaid expenses	\$35.1	\$23.6
Other receivables	11.7	10.6
Prepaid expenses and other current assets	\$46.8	\$34.2

Property and Equipment – Property and equipment are stated at cost less accumulated depreciation. The cost of an asset consists of its purchase price and any necessary costs incurred to bring the asset to its working condition and location for its intended use. We capitalize certain costs incurred during the construction of an asset and record such costs in construction in progress until construction is completed. Once the related asset is placed into service, we transfer its carrying value into the appropriate asset category and begin depreciating the value over its estimated useful life. Depreciation is calculated on a straight-line basis over the following estimated useful lives:

Equipment, furniture, fixtures and aircraft 3-5 years

Buildings 3-5 years

Building improvements 10-25 years

Land 10 years

Leasehold improvements 10-25 years

Land 10 years

Leasehold improvements 10-25 years

Leasehold improvements are depreciated using the straight-line method over the lesser of the useful life of the improvements or the applicable lease terms, excluding renewal periods. Costs associated with maintenance and repairs are expensed as incurred. When any assets are retired or otherwise disposed of, the cost and accumulated depreciation and amortization are removed from their respective accounts.

Capitalized Interest Cost – Interest costs related to major capital projects, specifically capital costs related to the build-out of our corporate headquarters and capitalized internal-use software costs, are capitalized until each underlying asset is placed into service. Capitalized interest is calculated by multiplying the capitalization rate by the qualifying costs. Once the qualifying asset is placed into service, the cost of the qualifying asset and the related capitalized interest are amortized over the estimated useful life of the asset.

Capitalized Software Costs – We capitalize certain costs related to the development of athenaNet services and other internal-use software. Costs incurred during the application development phase are capitalized only when we believe it is probable the development will result in new or additional functionality. The types of costs capitalized during the application development phase include employee compensation, as well as consulting fees for third-party developers working on these projects. Costs related to the preliminary project stage and post-implementation activities are expensed as incurred. Internal-use software is amortized on a straight-line basis over the estimated useful life of the asset, which ranges from two to five years. When internal-use software that was previously capitalized is abandoned, the cost less the accumulated amortization, if any, is recorded as amortization expense. Fully amortized capitalized internal-use software costs are removed from their respective accounts.

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athenahealth, Inc.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(Amounts in millions, except per share amounts)

Long-Lived Assets – We review long-lived assets to be held and used for impairment whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. Determination of recoverability of long-lived assets is based on an estimate of undiscounted future cash flows resulting from the use of the asset and its eventual disposition, as compared with the carrying value of the asset. Measurement of an impairment loss for long-lived assets that management expects to hold and use is based on the fair value of the asset.

Long-lived assets classified as held for sale are reported at the lower of carrying amount or fair value, less costs to sell. Long-lived assets are considered held for sale when certain criteria are met, including when management has committed to a plan to sell the asset, the asset is available for sale in its immediate condition, and the sale is probable within one year of the reporting date. Subsequent to classification of an asset as held for sale, no further depreciation is recorded.

Goodwill – Goodwill is recorded as the difference, if any, between the aggregate consideration paid for an acquisition and the fair value of the identifiable net tangible and intangible assets acquired. Goodwill is not amortized but is evaluated for impairment annually or more frequently if indicators of impairment are present or changes in circumstances suggest that impairment may exist. We evaluate the carrying value of our goodwill annually on November 30. The first step of the goodwill impairment test compares the fair value of the reporting unit with its carrying amount, including goodwill. If the fair value of the reporting unit exceeds its carrying amount, the goodwill of the reporting unit is not considered impaired. If the carrying amount of the reporting unit exceeds its fair value, the second step of the goodwill impairment test is performed to measure the amount of impairment loss, if any. The second step of the goodwill impairment test compares the implied fair value of the affected reporting unit's goodwill with the carrying value of that goodwill. No impairments have been recognized.

Purchased Intangible Assets – Most of our purchased intangible assets were acquired in connection with business acquisitions, and are amortized over their estimated useful lives based on the pattern of economic benefit expected from each asset. We concluded for certain purchased intangible assets that the pattern of economic benefit approximated the straight-line method, and therefore, the use of the straight-line method was appropriate, as the majority of the cash flows will be recognized ratably over the estimated useful lives and there is no degradation of the cash flows over time.

Accrued compensation and accrued expenses – Accrued expenses consist of the following:

	As of	
	December	
	31,	
	2017	2016
Accrued bonus	\$53.6	\$53.4
Accrued vacation	11.4	11.2
Accrued payroll	20.8	14.8
Accrued commissions	8.9	10.3
Accrued compensation expenses	\$94.7	\$89.7
General operations accrued liabilities	\$45.0	\$41.1
Accrued property and equipment additions	6.5	10.6
Accrued expenses	\$51.5	\$51.7

Commitments and Contingencies – We are engaged from time to time in certain legal disputes arising in the ordinary course of business, including employment discrimination claims and challenges to our intellectual property. We believe that we have adequate legal defenses and that the likelihood of a loss contingency relating to the ultimate

disposition of any of these disputes is remote. When the likelihood of a loss contingency becomes at least reasonably possible with respect to any of these disputes, or, as applicable in the future, if there is at least a reasonable possibility that a loss exceeding amounts already recognized may have been incurred, we will revise our disclosures in accordance with the relevant authoritative guidance.

Additionally, we will accrue a liability for loss contingencies when we believe that it is both probable that a liability has been incurred and that we can reasonably estimate the amount of the loss. We will review these accruals and adjust them to reflect ongoing negotiations, settlements, rulings, advice of legal counsel, and other relevant information. To the extent new information is obtained, and our views on the probable outcomes of claims, suits, assessments, investigations, or legal proceedings change, changes in our accrued liabilities would be recorded in the period in which such determination is made. We expense legal costs, including those incurred in connection with loss contingencies, as incurred.

Exit Costs, Including Restructuring Costs – Exit costs, including restructuring costs, represent costs related to workforce reductions and other charges related to strategic re-alignment. On October 13, 2017, the Board of Directors approved a

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comprehensive plan, which we refer to as the Plan, designed to increase strategic focus and improve operational efficiency. Implementation of the Plan is expected to result in cumulative pre-tax charges of approximately \$15 million to \$25 million, primarily related to workforce reductions.

During the year ended December 31, 2017, we recorded a charge of \$18.7 million associated with the Plan, of which \$6.6 million, \$3.4 million, \$3.2 million, and \$0.6 million of costs related to workforce reductions are included in cost of revenue, selling and marketing expense, research and development expense, and general and administrative expense, respectively, and \$4.9 million of non-cash charges related to other activities are included in general and administrative expense.

In the 2015 and 2016 fiscal years, management performed various activities that resulted in the Company incurring exit costs associated with workforce reductions and termination of leases and other agreements. During the years ended December 31, 2016 and 2015, the costs related to workforce reductions are primarily included in research and development expenses and the costs related to termination of leases and other agreements are primarily included in general and administrative expenses.

The activity related to the exit cost accrual during the years ended December 31, 2017 and 2016 consist of the following:

	Workforce Reductions	Termination of Leases and Contractual Agreements	Total
Accrual at December 31, 2015	\$ 0.8	\$ 0.2	\$1.0
Additions	7.3	4.0	11.3
Cash Payments	(5.0 )	(4.2 )	(9.2 )
Accrual at December 31, 2016	\$ 3.1	\$ —	\$3.1
Additions	13.8	—	13.8
Cash Payments	(13.5 )	—	(13.5)
Accrual at December 31, 2017	\$ 3.4	\$ —	\$3.4

Deferred Revenue – Deferred revenue primarily consists of billings or payments received in advance of the revenue recognition criteria being met. Deferred revenue largely includes amounts associated with sponsored clinical information and decision support services which are recognized as services are performed and pre-2014 implementation services fees which continue to be recognized as revenue ratably over the longer of the life of the agreement or the expected client life, which is currently estimated to be 12 years. Deferred revenue that will be recognized during the succeeding 12-month period is recorded as current deferred revenue and the remaining portion is recorded as non-current. The treatment of these fees has not been adjusted for expected changes as a result of new accounting pronouncements that will be adopted as of January 1, 2018, as described below.

Deferred Rent – Deferred rent consists of rent escalation, tenant improvement allowances, and other incentives received from landlords related to the operating leases for our facilities. Rent escalation represents the difference between actual operating lease payments due and straight-line rent expense, which we record over the term of the lease. The excess is recorded as a deferred credit in the early periods of the lease, when cash payments are generally lower than straight-line rent expense, and is reduced in the later periods of the lease when payments begin to exceed the straight-line expense. Tenant allowances from landlords for tenant improvements are generally comprised of cash received from the landlord or paid on our behalf as part of the negotiated terms of the lease. These tenant

improvement allowances and other incentives are recorded when realizable as deferred rent and are amortized as a reduction of periodic rent expense over the term of the applicable lease.

Preferred Stock – Our Board of Directors has the authority, without further action by stockholders, to issue up to 5 million shares of preferred stock in one or more series. Our Board of Directors may designate the rights, preferences, privileges, and restrictions of the preferred stock, including dividend rights, conversion rights, voting rights, terms of redemption, liquidation preference, and number of shares constituting any series or the designation of any series. The issuance of preferred stock could have the effect of restricting dividends on our common stock, diluting the voting power of our common stock, impairing the liquidation rights of our common stock, or delaying or preventing a change in control. The ability to issue preferred stock could delay or impede a change in control. As of December 31, 2017 and 2016, no shares of preferred stock were outstanding.

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**Common Stock** – Common stockholders are entitled to one vote per share and dividends, when declared by the Board of Directors, subject to any preferential rights of preferred stockholders.

**Business Combinations** – Business combinations are accounted for at fair value. The associated acquisition costs are expensed as incurred and recorded in general and administrative expenses; non-controlling interests, if any, are reflected at fair value at the acquisition date; in-process research and development, if any, is recorded at fair value as an intangible asset at the acquisition date; restructuring costs associated with a business combination are expensed; contingent consideration is measured at fair value at the acquisition date, with changes in the fair value after the acquisition date affecting earnings; changes in deferred tax asset valuation allowances and income tax uncertainties after the measurement period affect income tax expense; and goodwill is determined as the excess of the fair value of the consideration conveyed in the acquisition over the fair value of the net assets acquired. The accounting for business combinations requires estimates and judgments as to expectations for future cash flows of the acquired business and the allocation of those cash flows to identifiable intangible assets in determining the estimated fair value for assets and liabilities acquired. The fair values assigned to tangible and intangible assets acquired and liabilities assumed are based on management's estimates and assumptions, including valuations that utilize customary valuation procedures and techniques. If the actual results differ from our estimates and judgments, the amounts recorded in the financial statements could result in a possible impairment of the intangible assets and goodwill, or require acceleration of the amortization expense of finite-lived intangible assets. The results of the acquired businesses' operations are included in the Consolidated Statements of Income of the combined entity beginning on the date of acquisition.

**Related Party Transactions** – We have a long-term investment in Access Healthcare Services Private Limited, or Access, a vendor that provides business partner outsourcing services for us. The total expense related to this vendor for the years ended December 31, 2017, 2016, and 2015 was \$62.4 million, \$41.1 million, and \$23.6 million, respectively. Expense for the year ended December 31, 2017 reflects \$61.9 million in cost of revenue and \$0.5 million in research and development expense. The total amount payable related to this vendor at December 31, 2017 was \$5.6 million. The total amount accrued for this vendor at December 31, 2017 and 2016 was \$5.7 million and \$4.6 million, respectively. Our contractual obligations with Access include a purchase obligation that limits our ability to decrease our purchased services more than 33% from the previous calendar year's volume.

A member of our Board of Directors also serves as a director of one of our clients. The total revenue recognized for this client for the years ended December 31, 2017, 2016, and 2015 was \$19.3 million, \$14.4 million, and \$9.9 million, respectively. The total receivables related to this client were \$3.5 million and \$1.6 million for the years ended December 31, 2017 and 2016, respectively.

**Income Taxes** – Deferred tax assets and liabilities relate to temporary differences between the financial reporting and income tax bases of assets and liabilities and are measured using enacted tax rates and laws expected to be in effect at the time of their reversal. Any change in an enacted tax rate would result in a charge or credit to the income tax provision. A valuation allowance is established to reduce net deferred tax assets if, based on the available positive and negative evidence, it is more likely than not that some or all of the deferred tax assets will not be realized. In making such determination, we consider all available positive and negative evidence, including future reversals of existing taxable temporary differences, projected future taxable income, tax planning strategies, and recent financial results. We recognize a tax benefit from an uncertain tax position when it is more likely than not that the position will be sustained upon examination, including resolutions of any related appeals or litigation processes, based on the technical merits. Our income tax positions must meet a more-likely-than-not recognition threshold at the balance sheet date to be recognized in the related period. We record interest and penalties related to unrecognized tax benefits in income tax expense.



**Sales and Use Taxes** – Our services are subject to sales and use taxes in certain jurisdictions. Our contractual agreements with clients provide that payment of any sales or use tax assessments is the responsibility of the client. In certain jurisdictions, sales taxes are collected from the client and remitted to the respective agencies. These taxes are recorded on a net basis and excluded from revenue and expense in our financial statements as presented.

**Incentives Received from Governmental Bodies** – From time to time, we receive incentives from various government agencies and programs. We account for the portion of the credits that are expected to be used as grants by reducing general and administrative expense. Credits which are expected to be used to reduce general and administrative expense are recognized when the requirements to earn the credits have been met. We recognized \$3.3 million, \$3.8 million, and \$4.1 million from our participation in incentive programs during the years ended December 31, 2017, 2016, and 2015, respectively.

**Foreign Currency Translation** – The financial position and results of operations of our foreign subsidiaries are measured using local currency as the functional currency. Assets and liabilities are translated at the rate of exchange in effect at the end of

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each reporting period. Revenues and expenses are translated at the average exchange rate for the period. Foreign currency translation gains and losses are recorded within other comprehensive income (loss).

**Employee Benefit Plan** – We sponsor a 401(k) retirement savings plan, which we refer to as the 401(k) Plan, under which eligible employees may contribute specified percentages of their compensation, subject to maximum aggregate annual contributions imposed by the Internal Revenue Code of 1986. All employee contributions are allocated to the employee’s individual account and are invested in various investment options as directed by the employee. Employees’ cash contributions are fully vested and non-forfeitable. We may make a discretionary contribution in any year, subject to authorization by our Board of Directors. During the years ended December 31, 2017, 2016, and 2015, our contributions to the 401(k) Plan were \$11.8 million, \$11.3 million, and \$5.3 million, respectively.

**Recently Adopted Pronouncement** – In March 2016, the Financial Accounting Standards Board, or FASB, issued new guidance which changes the accounting for stock-based compensation. The guidance simplifies several aspects of the accounting for employee share-based payment transactions, including the accounting for income taxes, forfeitures, and statutory tax withholding requirements, as well as classification in the statement of cash flows. We adopted this standard on January 1, 2017, using a modified retrospective approach, which requires the cumulative effect of initially applying the standard to be recorded as an adjustment to the opening balance of retained earnings of the annual reporting period that includes the date of initial application, and which resulted in a cumulative-effect increase of \$49.2 million to retained earnings and deferred tax assets. Upon adoption, we now recognize all excess tax benefits and tax deficiencies as income tax expense or benefit in the income statement. We no longer present excess tax benefits within cash flows from financing activities but instead present these cash flows in cash flows from operating activities in the consolidated statements of cash flows. Prior to adoption, the excess tax benefits and tax deficiencies were recorded to additional paid-in capital and excess tax benefits were not recorded until they were able to be utilized. In addition, we elected to no longer calculate an estimate of expected forfeitures and began recognizing forfeitures as they occurred, including a cumulative-effect decrease of \$1.0 million to retained earnings at January 1, 2017 with the offset as an increase to additional paid-in capital.

**New Accounting Pronouncements Not Yet Adopted**

**Revenue from Contracts with Customers**

New revenue recognition guidance, which was issued in March 2014 and amended thereafter, is effective for public companies for annual reporting periods beginning after December 15, 2017, including interim periods within those reporting periods. The new revenue standard outlines a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers and supersedes most current revenue recognition guidance, including industry-specific guidance. In addition, the new standard provides guidance on accounting for certain revenue-related costs including costs associated with obtaining and fulfilling a contract.

While the impact of this standard will vary across our industry peers, our unique go-to-market strategy centered around charging a percentage of our clients’ collections for our services within athenaOne deals, combined with our offering that essentially provides a series of integrated services and our clients’ ability to terminate our services at a fixed number of days’ notice without a significant penalty, will result in additional complexity in our pattern of revenue recognition compared to the current revenue recognition pattern. We have reached conclusions on key accounting assessments and are substantially complete with the implementation of new processes for the accounting under the new standard. These new processes include implementing a new information technology system and creating additional internal controls over financial reporting.

Under today’s accounting standards, the criterion impacting the timing of our revenue recognition is the requirement of fees to be either fixed or determinable; therefore, we do not recognize revenue for many athenaOne-based business services deals until these collections are posted, as the fees are not fixed or determinable until such time. The new

guidance does not limit the recognition of revenue to only fees that are fixed or determinable. Instead, the standard focuses on recognizing revenue as value is transferred to customers. The impact on our athenaOne services offering is a revenue recognition and reporting model that reflects revenue recognized over time rather than delaying the recognition of revenue until the point in time in which the fees to be charged become determinable. For athenaOne arrangements, we will estimate the value of the consideration we will earn over the remaining contractual period as our services are provided and recognize the fees over the term; this estimation will typically involve predicting the amounts our clients will ultimately collect associated with the services they provide with the assistance of athenaNet. Because most of our contracts require our clients to provide a fixed number of days' notice prior to terminating our services, our contractual term resets daily, requiring us to estimate the amount of consideration to be paid to us over the continuously changing period during which our contracts are legally enforceable and we are providing services. As such, we believe certain estimates required to measure athenaOne-based revenue under the new standard will be significant estimates.

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Under the new standard, certain costs to obtain a contract and our contract fulfillment costs, which we currently expense, will be deferred and amortized over the period of contract performance or a longer period, generally the expected client life, if renewals are expected. Costs to obtain a contract primarily relate to commissions paid to employees and third parties and contract fulfillment costs primarily relate to the implementation of a client.

The new standard provides companies with two implementation methods. Companies can choose to adopt the standard retrospectively and apply the guidance to each prior reporting period presented. Alternatively, a modified retrospective adoption methodology is permitted, whereby the cumulative impact of all prior periods would be recorded in retained earnings or other impacted balance sheet line items as of January 1, 2018, the date of adoption. Under this method, previously presented years' financial positions and results would not be adjusted; however, certain disclosures are required to be presented for comparability to prior years' results. We plan to adopt this standard using the modified retrospective method.

Under the modified retrospective adoption method, we have elected to retroactively adjust only those contracts that do not meet the definition of a completed contract at the date of initial application. As a result, our initial adjustments to costs to obtain and costs to fulfill a contract may not be indicative of future capitalization amounts once the new revenue standard is effective. In addition, upon adoption the deferred implementation revenue balance associated with past implementation costs will no longer be recognized over the client life and such balance, net of tax, will be adjusted and recorded to retained earnings.

We anticipate that the new revenue standard will have a material impact on our consolidated balance sheet upon adoption, resulting from the requirement to capitalize certain commissions and contract fulfillment costs, which we currently expense as incurred, and from the removal of substantially all of the deferred revenue balances associated with past implementation fees for which \$55.1 million is recorded at December 31, 2017. Compared to our current accounting, we believe that the seasonality associated with the timing of when claims are submitted by our clients and when our clients receive payment on these claims will be reflected in our financial results with differing patterns. In addition, there may be a significant impact on pre-tax operating income until the amortization expense associated with capitalized commissions and costs to fulfill begins to approximate amounts capitalized.

Financial Instruments

In January 2016, the FASB issued guidance to address certain aspects of recognition, measurement, presentation, and disclosure of financial instruments. The most significant impact to our consolidated financial statements relates to the recognition and measurement of equity instruments, which are currently carried at cost, but will be measured at fair value with any unrecognized gains or losses being recorded in our consolidated statements of income. We are evaluating the impact to our consolidated financial statements but expect that it could have a significant impact, including additional volatility in other income (expense) within our statement of income in future periods as a result of the measurement of equity securities upon observable price changes and impairments. We expect to elect the measurement alternative for all equity investments without readily determinable fair values, which is defined as cost, less impairments, adjusted by observable price changes on a prospective basis. This guidance is effective for public companies for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2017. We will adopt this guidance on January 1, 2018 and the initial impact will be recognized in other income (expense) on the consolidated statement of income for the three months ending March 31, 2018.

Leases

In February 2016, the FASB issued new accounting guidance for leases. The new guidance most significantly impacts lessee accounting and disclosures, but also requires enhanced disclosures for lessors. First, this guidance requires lessees to identify arrangements that should be accounted for as leases. Under this guidance, for lease arrangements exceeding a 12-month term, a right-of-use asset and lease obligation is recorded by the lessee for all leases, whether

operating or financing, while the income statement reflects lease expense for operating leases and amortization and interest expense for financing leases. Leases with a term of 12 months or less will be accounted for similar to existing guidance for operating leases. In addition, the new lease guidance requires the use of the modified retrospective method. This guidance is effective for public companies for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. Early adoption is permitted; however, we will adopt this guidance on January 1, 2019. We anticipate that this standard will have a material impact on our consolidated financial statements, as all long-term leases will be capitalized on the consolidated balance sheet.

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2. BUSINESS COMBINATIONS

Praxify

On June 23, 2017, we acquired Praxify Technologies, Inc., or Praxify, a Palo Alto-based company focused on reinventing how doctors work with health data to drive productivity, portability, and improved decision support. We acquired Praxify to advance our platform strategy and mobile capabilities to drive streamlined workflows and intelligence at and around the moments of care. We anticipate that this acquisition will accelerate our research and development initiatives by adding significant expertise in mobile and user experience design. Additionally, the underlying technology on which Praxify is built will be integrated into our platform, and we anticipate it will create new opportunities for both internal and third-party developers to rapidly build and launch applications.

The purchase price of Praxify was \$41.1 million, net of cash acquired. The purchase price excludes \$16.5 million expected to be earned by key employees of Praxify based upon continued employment, which is accounted for as compensation expense and is being recognized in the consolidated statements of income over the requisite service period. As of December 31, 2017, there was \$5.5 million of prepaid compensation expense related to retention bonuses made at the time of acquisition included in the prepaid expenses and other current assets line and \$8.0 million in the investments and other assets line on our consolidated balance sheet. The fair value of net assets acquired primarily consisted of purchased intangible assets of \$15.7 million related to technology. The \$33.8 million excess of purchase consideration over the fair value of the net assets acquired was allocated to goodwill, which is not deductible for U.S. income tax purposes. We incurred transaction costs of \$1.4 million associated with this acquisition.

Patient IO

On August 25, 2016, we acquired Filament Labs, Inc. (doing business as Patient IO), an Austin-based care coordination platform used by providers to engage patients and caregivers outside of the clinic. We acquired Patient IO to strengthen our ability to partner with providers as they deliver value-based care. We anticipate this acquisition will accelerate our movement toward becoming a trusted resource and partner to the patient.

The purchase price of Patient IO was \$15.2 million, net of cash acquired. The purchase price excludes \$9.6 million to be earned by key employees of Patient IO based upon continued employment, which is accounted for as compensation expense and will be recognized in the consolidated statements of income over the requisite service period. The fair value of net assets acquired included purchased intangible assets of \$5.3 million related to technology acquired and \$0.6 million related to customer relationships. The \$10.7 million excess of purchase consideration over the fair value of the net assets acquired was allocated to goodwill, which is not deductible for U.S. income tax purposes.

Arsenal Health

On April 11, 2016, we acquired Arsenal Health, formerly known as Smart Scheduling, Inc., for \$1.7 million. We purchased Arsenal Health to add its schedule optimization functionality to our athenaCoordinator offering. We expect this acquisition to accelerate our capabilities in machine learning and predictive analytics. The fair value of the purchased intangible assets related to technology acquired was \$0.9 million. The \$0.8 million excess of purchase consideration over the fair value of the purchased intangible assets acquired was allocated to goodwill, which is deductible for U.S. income tax purposes. In conjunction with this acquisition, Smart Scheduling, Inc. settled the convertible note receivable and related interest from our More Disruption Please, or MDP, Accelerator Program, which represented a total fair value of \$0.3 million.

3. NET INCOME (LOSS) PER SHARE

Basic net income (loss) per share is computed by dividing net income (loss) by the weighted average number of common shares outstanding during the period. Diluted net income (loss) per share is computed by dividing net income (loss) by the weighted average number of common shares outstanding and potentially dilutive securities outstanding during the period under the treasury stock method. Potentially dilutive securities include stock options, restricted stock

units, and shares to be purchased under the employee stock purchase plan. Under the treasury stock method, dilutive securities are assumed to be exercised at the beginning of the periods and as if funds obtained thereby were used to purchase common stock at the average market price during the period. Securities are excluded from the computation of diluted net income (loss) per share if their effect would be anti-dilutive to earnings per share; therefore, in periods of net loss, shares used to calculate basic and dilutive net loss per share are equivalent.

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The following table reconciles the weighted average shares outstanding for basic and diluted net income per share for the periods indicated:

	Years Ended		
	December 31,		
	2017	2016	2015
Net income	\$53.1	\$21.0	\$14.0
Weighted average shares used in computing basic net income per share	39.9	39.3	38.6
Net income per share – Basic	\$1.33	\$0.53	\$0.36
Net income	\$53.1	\$21.0	\$14.0
Weighted average shares used in computing basic net income per share	39.9	39.3	38.6
Effect of dilutive securities	0.8	0.8	1.0
Weighted average shares used in computing diluted net income per share	40.7	40.1	39.6
Net income per share – Diluted	\$1.31	\$0.52	\$0.35

The computation of diluted net income per share does not include 0.4 million, 0.4 million, and 0.7 million shares for the years ended December 31, 2017, December 31, 2016, and December 31, 2015, respectively, because their inclusion would have an anti-dilutive effect on net income per share.

**4. FAIR VALUE OF FINANCIAL INSTRUMENTS**

As of December 31, 2017 and 2016, the carrying amounts of cash and cash equivalents, receivables, accounts payable, and accrued expenses approximated their estimated fair values because of the short-term nature of these financial instruments. Money market funds are valued using a market approach based upon the quoted market prices of identical instruments when available or other observable inputs such as trading prices of identical instruments in inactive markets or similar securities.

Our MDP Accelerator program is designed to cultivate health care information technology start-ups and expand services offered to our provider network. MDP Accelerator portfolio investments as of December 31, 2017 and 2016 are typically made in the form of convertible notes receivable or cost method investments, which are included in investments and other assets on our consolidated balance sheets. At December 31, 2017, as there is no indication of performance risk, we estimate that the fair value of the notes receivable approximates cost based on inputs that include the original transaction prices, our own recent transactions in the same or similar instruments, completed or pending third-party transactions in the underlying investments, subsequent rounds of financing, and changes in financial ratios or cash flows.

As of December 31, 2017 and 2016, we had \$273.8 million and \$292.5 million, respectively, outstanding on our term loan facility and we had not drawn on the revolving credit facility under our senior credit facility. The credit facility carries a variable interest rate set at current market rates, and as such, the carrying value approximates fair value.

The following table presents information about our financial assets and liabilities that are measured at fair value on a recurring basis as of December 31, 2017 and December 31, 2016, and indicates the fair value hierarchy of the valuation techniques we utilized to determine such fair value. In general, fair values determined by Level 1 inputs utilize quoted prices in active markets for identical assets or liabilities, and fair values determined by Level 2 inputs utilize quoted prices in inactive markets for identical assets or liabilities obtained from readily available pricing sources for similar instruments. The fair values determined by Level 3 inputs are unobservable values which are supported by little or no market activity. It is our policy to recognize transfers between levels of the fair value hierarchy, if any, at the end of the reporting period; however, there have been no such transfers during any of the periods presented.





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	Fair Value Measurements as of December 31, 2017, Using			
	Level 1	Level 2	Level 3	Total
Cash and cash equivalents:				
Money market	\$ 0.1	\$ —	\$ —	\$ 0.1
Debt securities:				
MDP Accelerator portfolio	\$ —	\$ —	\$ 0.5	\$ 0.5
Total assets	\$ 0.1	\$ —	\$ 0.5	\$ 0.6

	Fair Value Measurements as of December 31, 2016, Using			
	Level 1	Level 2	Level 3	Total
Cash and cash equivalents:				
Money market	\$ 15.0	\$ —	\$ —	\$ 15.0
Debt securities:				
MDP Accelerator portfolio	\$ —	\$ —	\$ 0.5	\$ 0.5
Total assets	\$ 15.0	\$ —	\$ 0.5	\$ 15.5

The following table presents our financial instruments measured at fair value using unobservable inputs (Level 3) as of the years ended December 31, 2017 and 2016:

	Fair Value Measurements Using Unobservable Inputs (Level 3)	
	Year Ended December 31, 2017	Year Ended December 31, 2016
Balance, beginning of period	\$ 0.5	\$ 1.3
Additions	—	0.3
Conversion	—	(0.3 )
Settlement	—	(0.3 )
Impairment	—	(0.5 )
Balance, end of period	\$ 0.5	\$ 0.5

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## 5. PROPERTY AND EQUIPMENT

Property and equipment consists of the following:

	As of December 31,	
	2017	2016
Equipment	\$154.4	\$141.4
Furniture and fixtures	37.0	32.0
Leasehold improvements	38.2	34.4
Aircraft	3.7	15.6
Building	131.7	131.7
Building improvements	104.7	95.4
Land	23.1	23.1
Land improvements	9.6	6.5
Total property and equipment, at cost	502.4	480.1
Accumulated depreciation	(196.6 )	(155.9 )
Construction in progress	49.3	23.5
Property and equipment, net	\$355.1	\$347.7

Depreciation expense on property and equipment was \$56.4 million, \$47.9 million, and \$40.1 million for the years ended December 31, 2017, 2016, and 2015, respectively. During the year ended December 31, 2017, we reclassified one of our aircraft to assets held for sale and reported it in the other assets line on our consolidated balance sheets.

## 6. CAPITALIZED SOFTWARE COSTS

Capitalized software consisted of the following:

	As of December 31,	
	2017	2016
Capitalized internal-use software development costs	\$113.9	\$122.7
Acquired third-party software licenses for internal use	53.8	47.5
Total gross capitalized software for internal-use	167.7	170.2
Accumulated amortization	(74.8 )	(82.9 )
Capitalized internal-use software in process	46.8	38.5
Total capitalized software costs	\$139.7	\$125.8

Capitalized software amortization expense totaled \$71.3 million, \$73.5 million, and \$53.4 million for the years ended December 31, 2017, 2016, and 2015, respectively. Future amortization expense for all capitalized software placed in service as of December 31, 2017 is estimated to be:

Years ending December 31,	Amount
2018	\$ 50.5
2019	25.4
2020	10.7
2021	5.5
2022	0.8



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athenahealth, Inc.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(Amounts in millions, except per share amounts)

## 7. GOODWILL AND PURCHASED INTANGIBLE ASSETS

## Goodwill

The following table summarizes the activity related to the carrying value of our goodwill during the years ended December 31, 2017 and 2016:

Gross balance as of January 1, 2016	\$229.2
Goodwill recorded in connection with the acquisition of Arsenal Health	0.8
Goodwill recorded in connection with the acquisition of Filament Labs, Inc.	10.7
Gross balance as of December 31, 2016	\$240.7
Goodwill recorded in connection with the acquisition of Praxify	33.8
Gross balance as of December 31, 2017	\$274.4

Numbers for each line item in the preceding table may not sum to the totals or subtotals for each fiscal year due to rounding.

## Purchased Intangible Assets

Finite-lived intangible assets acquired as of December 31, 2017 and 2016 are as follows:

	December 31, 2017		
	Gross	Accumulated Amortization	Net
Developed technology	\$21.9	\$ (3.9 )	\$18.0
Customer relationships	25.6	(16.8 )	8.8
Doctor network	104.0	(32.2 )	71.8
Drug information content	10.0	(9.6 )	0.4
Trade name	11.6	(5.5 )	6.1
Above market leases	0.2	(0.2 )	—
Leases in place	9.2	(5.9 )	3.3
Total	\$182.5	\$ (74.1 )	\$108.4

	December 31, 2016		
	Gross	Accumulated Amortization	Net
Developed technology	\$6.2	\$ (0.7 )	\$5.5
Customer relationships	26.0	(14.7 )	11.3
Doctor network	104.0	(23.2 )	80.8
Drug information content	10.0	(7.6 )	2.4
Trade name	11.6	(4.4 )	7.2
Trademark	0.1	—	0.1
Above market leases	0.2	(0.1 )	0.1
Leases in place	9.5	(5.0 )	4.5
Total	\$167.6	\$ (55.7 )	\$111.9

Amortization expense on purchased intangible assets for the years ended December 31, 2017, 2016, and 2015 was \$19.3 million, \$20.8 million, and \$24.0 million, respectively, and is included in cost of revenue and selling and marketing expense. Estimated amortization expense on purchased intangible assets, based upon our intangible assets at December 31, 2017, is as follows:

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(Amounts in millions, except per share amounts)

Years ending December 31, Amount

2018	\$ 19.1
2019	18.3
2020	17.0
2021	14.6
2022	10.9
Thereafter	28.5
Total	\$ 108.4

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athenahealth, Inc.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(Amounts in millions, except per share amounts)

## 8. OPERATING LEASES

We maintain operating leases for facilities and certain office equipment. The facility leases contain renewal options and require payments of certain utilities, taxes, and shared operating costs of each leased facility. The rental agreements expire at various dates from 2018 to 2030.

Rent expense totaled \$15.0 million, \$13.7 million, and \$9.8 million for the years ended December 31, 2017, 2016, and 2015, respectively. During the year ended December 31, 2017, we entered into sublease agreements for our office space in San Francisco and portions of our office space in Austin.

Future minimum lease payments under non-cancelable operating leases as of December 31, 2017 are as follows:

Years ending December 31,	Future Rent Payments
2018	\$ 19.5
2019	18.6
2020	17.1
2021	17.2
2022	16.4
Thereafter	62.3
Total minimum lease payments	\$ 151.1

Total future sublease income \$ 41.7

## 9. DEBT

We have a credit agreement which consists of a \$500.0 million senior credit facility comprised of a \$300.0 million unsecured term loan facility and a \$200.0 million unsecured revolving credit facility, which we refer to as the 2015 Senior Credit Facility. As of December 31, 2017 and 2016, we had \$273.8 million and \$292.5 million outstanding on the unsecured term loan facility, respectively. As of both December 31, 2017 and 2016, we had \$200.0 million available on the unsecured revolving credit facility.

Our credit agreement may be used to refinance existing indebtedness and for working capital and other general corporate purposes. We may increase the revolving credit facility up to an additional \$100.0 million and may increase the term loan facility to the extent that such amount will not cause us to be in breach of our financial covenants (such as compliance with a consolidated fixed charge coverage, consolidated leverage, and consolidated senior leverage ratios), subject to certain conditions, including obtaining lender commitments. The 2015 Senior Credit Facility matures on May 5, 2020, although we may prepay the 2015 Senior Credit Facility in whole or in part at any time without premium or penalty.

At our option, any loans under the 2015 Senior Credit Facility (other than swing line loans) will bear interest at a rate equal to (i) the British Bankers Association London Interbank Offered Rate, or LIBOR, plus an interest margin based on our consolidated leverage ratio, or (ii) the base rate (which is the highest of (a) the Bank of America prime rate, (b) the Federal Funds rate plus 0.50%, and (c) one month LIBOR plus 1.00%) plus an interest margin based on our consolidated leverage ratio. The interest rate for the 2015 Senior Credit Facility as of December 31, 2017 and 2016 was 2.35% and 1.61%, respectively. We will pay a commitment fee during the term of the 2015 Senior Credit Facility, which varies between 0.20% and 0.40% based on our consolidated leverage ratio.

We incurred financing fees of \$1.0 million for the 2015 Senior Credit Facility, which are being amortized as interest expense in the consolidated statements of income over the five-year term of the agreement.





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athenahealth, Inc.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(Amounts in millions, except per share amounts)

Future principal payments of the unsecured term loan facility at December 31, 2017 were as follows:

	Amount
2018	20.7
2019	28.1
2020	225.0
Total	\$ 273.8
Less current portion	20.7
Long-term portion	\$ 253.1

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athenahealth, Inc.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(Amounts in millions, except per share amounts)

## 10. STOCK-BASED COMPENSATION

Total stock-based compensation expense for the years ended December 31, 2017, 2016, and 2015 by line item on our consolidated statements of income was as follows:

	Years Ended		
	December 31,		
	2017	2016	2015
Cost of revenue	\$13.8	\$17.9	\$14.5
Selling and marketing	16.0	19.0	18.4
Research and development	13.2	12.3	9.0
General and administrative	11.3	17.3	22.2
Total stock-based compensation expense	\$54.3	\$66.5	\$64.1

In addition, for the years ended December 31, 2017, 2016, and 2015, \$2.5 million, \$2.2 million, and \$7.3 million, respectively, of stock-based compensation was capitalized as a component of Capitalized software costs, net line item in the consolidated balance sheets. For the years ended December 31, 2017, 2016, and 2015, amortization of stock-based compensation associated with capitalized software by line item on our consolidated statements of income was as follows:

	Years Ended		
	December 31,		
	2017	2016	2015
Cost of revenue	\$2.5	\$4.9	\$4.4
Research and development	0.3	0.1	—
Total capitalized software amortization expense	\$2.8	\$5.0	\$4.4

## Stock Plans

**2007 Stock Option and Incentive Plan.** In 2007, the Board of Directors adopted, and our stockholders approved, our 2007 Stock Option and Incentive Plan, which we refer to as the 2007 Plan. In 2011 and most recently in 2013, the Board of Directors and our stockholders approved amendments and restatements of the 2007 Plan. The 2007 Plan provides for the grant of stock options, stock appreciation rights, restricted stock awards, deferred stock awards, unrestricted stock awards, cash-based awards, performance share awards, and dividend equivalent rights. The 2007 Plan is administered by the Compensation Committee of our Board of Directors. As administrator, the Compensation Committee has full power and authority to select the participants to whom awards will be granted, to make any combination of awards to participants, to accelerate the exercisability or vesting of any award, and to determine the specific terms and conditions of each award, subject to the provisions of the 2007 Plan. As of December 31, 2017, 1,923,582 shares were available for grant under the 2007 Plan.

**Epocrates, Inc. 2010 Equity Incentive Plan.** Pursuant to an Agreement and Plan of Merger, dated as of January 7, 2013, among athenahealth, Inc.; Epocrates, Inc., a Delaware corporation; and Echo Merger Sub, Inc., a Delaware corporation; we assumed Epocrates, Inc.'s existing equity incentive plans, including its 2010 Equity Incentive Plan, which we refer to as the 2010 Plan. The 2010 Plan provides for the grant of incentive stock options, non-statutory stock options, stock appreciation rights, restricted stock awards, restricted stock unit awards, performance stock awards, and other stock awards. In addition, the 2010 Plan provides for the grant of performance cash awards. The 2010 Plan is administered by the Compensation Committee of our Board of Directors. As administrator, the Compensation Committee has full power and authority to select the participants to whom awards will be granted, to make any combination of awards to participants, to accelerate the exercisability or vesting of any award, and to determine the specific terms and conditions of each award, subject to the provisions of the 2010 Plan. As of

December 31, 2017, 342,530 shares of our common stock were available for grant under the 2010 Plan.

**Stock Options**

Options granted under the 2007 Plan and 2010 Plan may be incentive stock options or non-qualified stock options under the applicable provisions of the Internal Revenue Code. Pursuant to the terms of the 2007 Plan, the exercise price for stock options granted under the 2007 Plan is determined by our Board of Directors but cannot be less than 100% of the fair market value of our common stock on the date of grant. All options granted vest over a range of one to four years and have a maximum contractual term of ten years. Options granted typically vest 25% per year over a total of four years at each anniversary of the date of grant. No stock options are currently outstanding under the 2010 Plan.

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athenahealth, Inc.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(Amounts in millions, except per share amounts)

The following table presents the stock option activity for the year ended December 31, 2017:

	Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value
Outstanding – January 1, 2017	1.3	\$ 82.68		
Exercised	(0.2 )	46.87		
Forfeited	—	140.83		
Outstanding – as of December 31, 2017	1.1	\$ 89.08	4.4	\$ 55.3
Exercisable – as of December 31, 2017	1.0	\$ 83.00	4.1	\$ 55.0
Vested and expected to vest as of December 31, 2017	1.1	\$ 88.88	4.4	\$ 55.2

We recorded compensation expense in relation to these stock options of \$2.7 million, \$6.6 million, and \$11.6 million, for the years ended December 31, 2017, 2016, and 2015, respectively.

We use the Black-Scholes option pricing model to value share-based awards and determine the related compensation expense. The following table illustrates the range of assumptions used to compute stock-based compensation expense for awards granted for the year ended December 31, 2015. No stock options were granted in the years ended December 31, 2017 and 2016.

	Year Ended December 31, 2015
Risk-free interest rate	1.06% - 1.57%
Expected dividend yield	—%
Expected option term (years)	3.0 - 5.0
Expected stock volatility	40% - 42%

The risk-free interest rate estimate was based on the U.S. Treasury rates for U.S. Treasury zero-coupon bonds with maturities similar to those of the expected terms of the awards being valued. The expected dividend yield was based on our expectation of not paying dividends in the foreseeable future. We calculated the expected option term primarily based upon the contractual option term, the contractual vesting dates, and historical employee activity. We used company-specific historical and implied volatility information to generate the volatility assumptions.

As of December 31, 2017, there was \$1.0 million of unrecognized stock-based compensation expense related to unvested stock option share-based compensation arrangements granted under our stock award plans. This expense is expected to be recognized over a weighted-average period of approximately 1.0 year. The weighted average fair value of stock options granted during the year ended December 31, 2015 was \$49.29. The intrinsic value of options exercised during the years ended December 31, 2017, 2016, and 2015 was \$17.3 million, \$17.4 million, and \$44.3 million, respectively. The intrinsic value is calculated as the difference between the market value of the stock on the date of purchase and the exercise price of the options.

**Restricted Stock Units**

The majority of restricted stock units granted pursuant to the 2007 Plan and the 2010 Plan vest in either three or four equal annual installments on the anniversaries of the vesting start date. We estimate the fair value of the restricted stock unit awards contingent upon achieving performance conditions and the restricted stock units contingent upon only service conditions based on the fair market value on the grant date, which is equal to the market price of our common stock on the grant date. For awards where the vesting condition is contingent only on service, the fair value is amortized on a straight-line basis over the vesting period. For awards where vesting is subject to a performance condition, expense is estimated and adjusted on a quarterly basis based on the assessment of the probability that the

performance will be met and is amortized over the vesting period.

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The following table presents the restricted stock unit activity for the year ended December 31, 2017:

	Restricted Stock Units with Service-based Vesting Conditions		Restricted Stock Units with Performance-based Vesting Conditions	
	Weighted- Average Shares	Grant Date Fair Value	Weighted- Average Shares	Grant Date Fair Value
Outstanding – January 1, 2017	1.1	\$ 136.88	0.1	\$ 136.83
Granted	0.6	120.56	0.2	117.22
Vested	(0.4)	136.45	—	138.35
Forfeited	(0.3)	131.13	(0.1 )	129.21
Outstanding – as of December 31, 2017	1.0	\$ 128.54	0.2	\$ 124.14
Expected to vest as of December 31, 2017	1.0	\$ 128.97	0.1	\$ 126.97

The following table presents the restricted stock unit activity for the year ended December 31, 2016:

	Restricted Stock Units with Service-based Vesting Conditions		Restricted Stock Units with Performance-based Vesting Conditions	
	Weighted- Average Shares	Grant Date Fair Value	Weighted- Average Shares	Grant Date Fair Value
Outstanding – January 1, 2016	1.1	\$ 135.28	0.1	\$ 155.43
Granted	0.6	130.32	0.1	132.37
Vested	(0.4)	123.14	(0.1 )	145.25
Forfeited	(0.2)	136.97	—	141.75
Outstanding – as of December 31, 2016	1.1	\$ 136.88	0.1	\$ 136.83
Expected to vest as of December 31, 2016	1.0	\$ 125.76	0.1	\$ 126.42

As of December 31, 2017, \$89.7 million of total unrecognized compensation costs related to restricted stock units is expected to be recognized over a weighted average period of 2.6 years. Stock-based compensation expense of \$49.8 million, \$58.1 million, and \$51.0 million was recorded for restricted stock units during the years ended December 31, 2017, 2016, and 2015, respectively. The weighted average fair value of restricted stock units granted during the years ended December 31, 2017, 2016, and 2015 was \$119.90, \$130.71, and \$132.31, respectively. The intrinsic value of vested restricted stock units during the years ended December 31, 2017, 2016, and 2015 was \$52.9 million, \$57.6 million, and \$61.6 million, respectively.

Employee Stock Purchase Plan

Our 2007 Employee Stock Purchase Plan allows employees of athenahealth and its subsidiaries as designated by our Board of Directors to purchase shares of our common stock. The purchase price is equal to 85% of the lower of the closing price of our common stock on (1) the first day of the purchase period or (2) the last day of the purchase period. The expense for the years ended December 31, 2017, 2016, and 2015 was \$1.8 million, \$1.8 million, and \$1.5 million, respectively.



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athenahealth, Inc.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(Amounts in millions, except per share amounts)

## 11. INCOME TAXES

The components of income before income tax provision for the years ended December 31, 2017, 2016, and 2015 were as follows:

	2017	2016	2015
U.S.	\$59.7	\$17.6	\$17.1
Non-U.S.	4.2	3.4	1.8
Total	\$63.9	\$21.0	\$18.9

The components of our income tax provision for the years ended December 31, 2017, 2016, and 2015 were as follows:

	2017	2016	2015
Current Provision:			
Federal	\$(0.5 )	\$(7.8 )	\$(11.8 )
State	(1.3 )	(1.0 )	(0.8 )
Foreign	(1.7 )	(1.1 )	(0.8 )
	(3.5 )	(9.9 )	(13.4 )
Deferred Benefit:			
Federal	(14.9 )	5.3	5.8
State	7.4	4.3	2.5
Foreign	0.2	0.3	0.2
	(7.3 )	9.9	8.5
Total income tax provision	\$(10.8 )	\$—	\$(4.9 )

The components of our deferred income taxes as of December 31, 2017 and 2016 were as follows:

	2017	2016
Deferred tax assets:		
Federal net operating loss carryforward	\$7.1	\$0.6
State net operating loss carryforward	2.2	1.5
Research and development tax credits	41.2	6.6
Deferred rent obligation	7.9	12.4
Stock compensation	19.7	33.1
Other accrued liabilities	9.2	6.0
Deferred revenue	12.8	21.1
Other	1.9	2.4
Total gross deferred tax assets	102.0	83.7
Valuation allowance	(1.2 )	(4.1 )
Total deferred tax assets	100.8	79.6
Deferred tax liabilities:		
Intangible assets	(22.0 )	(31.7)
Capitalized software	(28.2 )	(34.9)
Property and equipment	(8.8 )	(10.8)
Total deferred tax liabilities	(59.0 )	(77.4)
Net deferred tax assets	\$41.8	\$2.2

The federal NOL carryforwards expire at various times through 2036, and the state NOL carryforwards begin to expire in 2019. Our research and development, or R&D, tax credits carryforward is available to offset future federal and state taxes, and the credits expire at various times through 2036.



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athenahealth, Inc.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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On December 22, 2017, President Trump enacted “H.R.1,” formerly known as the “Tax Cuts and Jobs Act” which, starting in 2018, reduces our corporate statutory income tax rate but eliminates or increases certain permanent differences. As of the date of enactment, we have adjusted our deferred tax assets and liabilities for our new statutory rate which resulted in a \$3.0 million credit to our income tax provision for the year ended December 31, 2017. In addition, we have estimated and recorded a \$0.4 million repatriation transition tax related to our foreign operations that increased our income tax provision, and made a significant judgment related to the fact that our current equity arrangements with our covered employees meet the requirements of the transition rule which resulted in minimal adjustments to our deduction estimates for highly compensated employees in the current year.

As discussed in Note 1 – Nature of Operations and Summary of Significant Accounting Policies, we adopted new accounting guidance related to accounting for stock-based compensation on January 1, 2017. During the years ended December 31, 2016, and 2015, we utilized tax attributes to reduce the current tax provision by \$9.0 million, and \$12.9 million, respectively. As of December 31, 2016, we had federal and state NOL carryforwards of approximately \$72.2 million (which was comprised entirely of NOL carryforwards from deductions related to stock-based compensation) and \$50.5 million (which included \$19.2 million of NOL carryforwards from stock-based compensation), respectively, to offset future federal and state taxable income. During the years ended December 31, 2016 and 2015, we recorded excess tax benefits from federal and state tax deductions of \$7.5 million and \$10.3 million, respectively, as a component of additional paid-in capital.

A reconciliation of the federal statutory income tax rate to our effective income tax rate for the years ended December 31, 2017, 2016, and 2015 is as follows:

	2017	2016	2015
Income tax computed at federal statutory tax rate	35 %	35 %	35 %
State taxes, net of federal benefit	4 %	4 %	7 %
Research and development credits	(14)%	(46)%	(32)%
Permanent differences	5 %	7 %	13 %
Tax benefits from stock-based compensation	(3 )%	— %	— %
Impact of enacted tax reform	(4 )%	— %	— %
Valuation allowance	(6 )%	— %	3 %
Effective income tax rate	17 %	— %	26 %

A reconciliation of the beginning and ending amount of uncertain tax benefits is as follows:

	2017	2016	2015
Beginning uncertain tax benefits	\$9.8	\$7.7	\$5.8
Prior year – increases	0.2	0.6	0.5
Current year – decreases	—	(0.6 )	(0.4 )
Current year – increases	2.5	2.1	1.8
Ending uncertain tax benefits	\$12.5	\$9.8	\$7.7

Included in the balance of unrecognized tax benefits at December 31, 2017 are \$11.5 million of tax benefits that, if recognized, would affect the effective tax rate. We anticipate that no material amounts of unrecognized tax benefits will either expire or be settled within 12 months of the reporting date.

There were no interest and penalties included in the tax provision for the years ended December 31, 2017 and December 31, 2015. Interest and penalties included in the tax provision amounted to a credit of \$0.3 million for the year ended December 31, 2016. Accrued interest and penalties amounted to \$1.1 million as of both December 31, 2017 and 2016, respectively.

We are subject to taxation in Federal, various state, and Indian jurisdictions. All carryforward attributes generated in prior years may still be adjusted upon examination by the Internal Revenue Service or other tax authorities if they have been used or will be used in a future period. As of December 31, 2017, federal tax years after 2014, state tax years after 2013, and foreign tax years after 2009 remain open per the statute of limitations by the major taxing jurisdictions to which we are subject.

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## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(Amounts in millions, except per share amounts)

## 12. QUARTERLY FINANCIAL INFORMATION (UNAUDITED)

Selected quarterly financial information follows for the year ended December 31, 2017:

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Year
Revenue:					
Business services	\$278.3	\$293.0	\$295.8	\$321.3	\$1,188.4
Implementation and other	7.1	8.1	8.8	7.9	31.9
Total revenue	285.4	301.1	304.6	329.2	1,220.3
Cost of revenue	144.4	143.8	144.0	146.3	578.5
Gross profit	141.0	157.3	160.6	182.9	641.8
Other operating expenses:					
Selling and marketing	65.7	65.0	61.8	59.7	252.2
Research and development	42.8	42.4	44.8	43.6	173.6
General and administrative	31.4	37.7	35.4	40.9	145.4
Total other operating expenses	139.9	145.1	142.0	144.2	571.2
Operating income	1.1	12.2	18.6	38.7	70.6
Other expense	(1.2 )	(1.7 )	(1.4 )	(2.4 )	(6.7 )
(Loss) income before income tax provision	(0.1 )	10.5	17.2	36.3	63.9
Income tax provision	(1.3 )	(0.6 )	(4.2 )	(4.7 )	(10.8 )
Net (loss) income	\$(1.4 )	\$9.9	\$13.0	\$31.6	\$53.1
Net (loss) income per share – Basic	\$(0.03 )	\$0.25	\$0.33	\$0.79	\$1.33
Net (loss) income per share – Diluted	\$(0.03 )	\$0.24	\$0.32	\$0.78	\$1.31
Weighted average shares used in computing net (loss) income per share:					
Basic	39.6	39.9	39.9	40.0	39.9
Diluted	39.6	40.5	40.7	40.7	40.7

Net income (loss) per share for the four quarters of the fiscal year may not sum to the total for the fiscal year due to the different number of shares outstanding during each period.

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athenahealth, Inc.

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(Amounts in millions, except per share amounts)

Selected quarterly financial information follows for the year ended December 31, 2016:

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Year
Revenue:					
Business services	\$247.5	\$254.1	\$267.1	\$278.9	\$1,047.6
Implementation and other	8.6	7.8	9.6	9.3	35.3
Total revenue	256.1	261.9	276.7	288.2	1,082.9
Cost of revenue	132.4	132.9	134.7	133.5	533.5
Gross profit	123.7	129.0	142.0	154.7	549.4
Other operating expenses:					
Selling and marketing	59.8	68.2	61.5	67.1	256.6
Research and development	30.3	28.8	31.0	44.4	<sup>1</sup> 134.5
General and administrative	33.3	33.3	34.3	30.8	131.7
Total other operating expenses	123.4	130.3	126.8	142.3	522.8
Operating income (loss)	0.3	(1.3 )	15.2	12.4	26.6
Other expense	(1.8 )	(1.5 )	(1.4 )	(0.9 )	(5.6 )
(Loss) income before income tax (provision) benefit	(1.5 )	(2.8 )	13.8	11.5	21.0
Income tax benefit (provision)	0.7	0.9	0.1	(1.7 )	—
Net (loss) income	\$(0.8 )	\$(1.9 )	\$13.9	\$9.8	\$21.0
Net (loss) income per share – Basic	\$(0.02 )	\$(0.05 )	\$0.35	\$0.25	\$0.53
Net (loss) income per share – Diluted	\$(0.02 )	\$(0.05 )	\$0.35	\$0.24	\$0.52
Weighted average shares used in computing net (loss) income per share:					
Basic	39.0	39.3	39.4	39.5	39.3
Diluted	39.0	39.3	40.0	40.1	40.1

Net (loss) income per share for the four quarters of the fiscal year may not sum to the total for the fiscal year due to the different number of shares outstanding during each period.