

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-K**

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

FOR THE FISCAL YEAR ENDED DECEMBER 31, 2019

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 000-27701

HEALTHSTREAM, INC.

(Exact name of registrant as specified in its charter)

Tennessee

*(State or other jurisdiction of
incorporation or organization)*

62-1443555

(I.R.S. Employer Identification No.)

500 11th Avenue North, Suite 1000

Nashville, Tennessee

(Address of principal executive offices)

37203

(Zip Code)

(615) 301-3100

(Registrant's telephone number, including area code)

Securities Registered Pursuant To Section 12(b) Of The Act:

<u>Title of each class</u>	<u>Trading Symbol(s)</u>	<u>Name of each exchange on which registered</u>
Common Stock (Par Value \$0.00)	HSTM	Nasdaq Global Select Market

Securities Registered Pursuant To Section 12(g) Of The Act: None

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

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 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 every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

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

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

Emerging growth company

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

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

The aggregate market value of the Common Stock issued and outstanding and held by non-affiliates of the Registrant, based upon the closing sales price for the Common Stock on the Nasdaq Global Select Market on June 30, 2019 was \$671.1 million. All executive officers and directors of the registrant have been deemed, solely for the purpose of the foregoing calculation, to be "affiliates" of the registrant.

As of February 24, 2020, there were 32,379,741 shares of the Registrant's common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant's definitive Proxy Statement for its 2020 Annual Meeting of Shareholders are incorporated by reference into Part III hereof.

HEALTHSTREAM, INC.

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PART I

This Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934. Such forward-looking statements include, among others, those statements including the words “expects,” “anticipates,” “intends,” “believes,” “may,” “will,” “should,” “continue,” and similar language or the negative of such terms or other comparable terminology. Forward-looking statements involve known and unknown risks, uncertainties, and other factors that may cause our actual results, performance, or achievements to be materially different from future results, performance, or achievements expressed or implied by the forward-looking statements included herein. Factors that might cause or contribute to such differences include, but are not limited to, those discussed in the section Risk Factors in Item 1A of this Annual Report on Form 10-K and elsewhere in this document. In addition, factors that we are not currently aware of, or that we currently deem immaterial, could harm our future operating results. You should carefully review the risks described in other documents HealthStream files from time to time with the Securities and Exchange Commission. You are cautioned not to place undue reliance on forward-looking statements, which speak only as of the date of this Annual Report on Form 10-K. HealthStream undertakes no obligation to publicly release any revisions to the forward-looking statements to reflect future events or circumstances after the date of this document.

Item 1. *Business*

OVERVIEW AND HISTORY

HealthStream, Inc. (HealthStream or the Company) provides workforce and provider solutions for healthcare organizations—all designed to support the people that deliver patient care, which in turn, supports the improvement of business and clinical outcomes. Delivered primarily as Software-as-a-Service (SaaS), our solutions focus on some of the most significant challenges facing the healthcare workforce and healthcare organizations today, including the need to effectively manage, retain, engage, and develop healthcare workforce talent; meet rigorous compliance requirements; and efficiently manage ongoing medical staff credentialing and privileging processes.

With approximately 30 years of experience, HealthStream is recognized as a leading innovator and thought leader in the healthcare industry for its healthcare workforce solutions. Using technology to enhance learning and productivity, HealthStream pioneered the delivery of online learning for hospitals’ required regulatory training as Internet-based training was first introduced. Stemming from that early success, demand for expanded learning solutions led the Company to build what is now a full ecosystem of diverse workforce and clinical-focused applications, courseware, assessments, and talent management programs.

HealthStream believes that the key to quality patient care is—and always has been—the people who deliver care. To that end, the Company’s solutions support the recruiting, retaining, engaging, assessing, developing, credentialing, and privileging of the healthcare workforce, including medical staff who provide patient care in our customers’ organizations.

Headquartered in Nashville, Tennessee, the Company was incorporated in 1990 and began providing its SaaS-based workforce solutions in 1999 and its provider solutions in 2012. Including additional offices in Nashville, Tennessee; Jericho, New York; San Diego, California; Chicago, Illinois; Denver, Colorado; and Boulder, Colorado, HealthStream had 849 full-time and 27 part-time employees as of December 31, 2019.

INDUSTRY BACKGROUND

According to the Centers for Medicare & Medicaid Services (CMS), spending in the healthcare industry reached over \$3.6 trillion in 2018, or 17.7% of the U.S. gross domestic product. Hospital care expenditures in 2018 accounted for approximately 32.7% of the \$3.6 trillion industry. According to the Bureau of Labor Statistics, as of January 2020, approximately 20.1 million professionals are employed in the healthcare segment of the domestic economy, with approximately 5.2 million employed in acute-care hospitals and, according to CMS, approximately 5.3 million employed in healthcare organizations throughout the continuum of care, the primary target markets for our products. (Organizations in the continuum of care employ approximately 1.5 million employees in ambulatory centers, approximately 3.5 million employees in post-acute care facilities, and approximately 300,000 employees in health & human services facilities.)

All of the approximately 5.2 million hospital-based healthcare professionals that work in the nation’s approximately 4,700 acute-care, critical access, and children’s hospitals that are registered with Medicare are required by federal and state mandates and accrediting bodies to complete training in a number of areas. This training includes safety training mandated by both the Occupational Safety and Health Administration (OSHA) and The Joint Commission (an independent, not-for-profit organization that accredits and certifies healthcare organizations and programs in the United States), as well as training on patient information confidentiality required under the Health Insurance Portability and Accountability Act (HIPAA).

In hospitals, staffing issues and personnel shortages have also contributed to the need for facility-based workforce development as well as additional assessment and competency-based training. An ongoing nursing shortage, for example, is resulting in skill gaps and rising costs. By 2028, more than 371,000 new Registered Nurse (RN) jobs are projected to be added to the workforce from 2018, surging from approximately 3.06 million jobs in 2018 to a projected 3.43 million jobs, according to the U.S. Bureau of Labor Statistics. We believe that offering training and education for hospital personnel is increasingly being utilized as a retention and recruitment incentive.

Many healthcare professionals use continuing education to keep abreast of the latest developments as well as meet licensing and certification requirements. Continuing education is required for nurses, emergency medical services personnel, first responder personnel, radiologic personnel, and physicians. Pharmaceutical and medical device companies must also provide their medical industry sales representatives with training mandated for the healthcare industry and training for new products. Such companies also provide support and content for education and training of audiences that use their products in healthcare organizations.

The healthcare education and training industry is highly fragmented, varies significantly in delivery methods (i.e., online products, live events, written materials, and technology-enabled manikins for simulation-based training), and is composed of a wide variety of entities competing for customers. The sheer volume of healthcare information available to satisfy continuing education needs, rapid advances in medical developments, and the time constraints that healthcare professionals face can make it difficult to quickly and efficiently access the continuing education content most relevant to an individual's practice or profession. Historically, healthcare professionals have received continuing education and training through offline publications, such as medical journals or by attending conferences and seminars. In addition, other healthcare workers and pharmaceutical and medical device manufacturers' sales and internal regulatory personnel usually fulfill their training from external vendors or internal training departments. While these approaches satisfy the ongoing education and training requirements, they are typically costly and inconvenient. In addition, live courses are often limited in the breadth of offerings and do not provide a method for tracking training completion. The results of these traditional methods, both from a business and compliance standpoint, are difficult to track and measure.

Provider data management has become more complex and arduous for healthcare organizations. Spurred by The Joint Commission Medical Staff standards and other regulatory requirements, credentialing and privileging has been transformed from a periodic review to continuous, evidence-driven analysis of professional competency and provider performance. This transformation requires ongoing, automatic monitoring of licenses, sanctions, and exclusions, as well as expanding the scope of review at initial credentialing and re-credentialing. In addition, provider enrollment processes have compounded in difficulty. For example, a single provider may need to enroll annually with some 30 to 40 payers, with each payer application often taking two to four hours to complete.

Finally, the hospital industry continues to operate under intense pressure to reduce costs as a result of potential reductions in government reimbursement rates and increased focus on cost containment consistent with participation of patients in managed care programs, among other factors. In addition, many hospitals, as well as pharmaceutical and medical device companies, may continue to experience rising operating costs, coupled with increased pressure to measure and report on the outcomes of the dollars spent on training. Our products and services are designed to meet these needs by reducing healthcare organizations' costs of training while improving learning outcomes, enhancing reporting capabilities, and supporting customers' business objectives.

HEALTHSTREAM'S SOLUTIONS

During the year ended December 31, 2019, HealthStream's products, services, and operations were organized into two business segments—Workforce Solutions and Provider Solutions—that collectively help healthcare organizations meet their ongoing clinical development, talent management, training, education, assessment, competency management, compliance, provider credentialing & privileging management, and provider enrollment needs. HealthStream's solutions are provided to a wide range of customers within the healthcare industry across the continuum of care.

On February 12, 2018, the Company divested its Patient Experience (PX) business to Press Ganey for \$65.2 million in cash (after giving effect to the post-closing working capital adjustment). This sale of the PX business resulted in the divestiture of the Company's patient experience solutions segment.

HealthStream Workforce Solutions — Our workforce development solutions, which are comprised primarily of SaaS, subscription-based products, are used by healthcare organizations to meet a broad range of their clinical development, talent management, training, certification, competency assessment, performance appraisal, and additional needs. Our numerous content libraries allow customers to subscribe to a wide array of courseware, which includes content from leading healthcare

and nursing associations, medical and healthcare publishers, and other content providers. Additionally, medical device companies and other industry partners offer online training support through HealthStream’s platform for their products.

HealthStream’s SaaS-based platform has long been one of the most widely adopted workforce development platforms in healthcare. To facilitate innovation and growth of our ecosystem, HealthStream’s new platform technology, hStream™, was launched in 2018. hStream is the essential technology working behind the scenes that powers activity in the HealthStream ecosystem. The Company’s existing and new customers are gradually upgrading to the hStream platform, which is, all together, anticipated to be a multi-year transition for HealthStream. At December 31, 2019, HealthStream had contracts with customers for approximately 3.15 million subscriptions to hStream, which included an addition of 1.64 million in 2019 alone. The transition to the hStream platform supports our strategic advancement toward a Platform-as-a-Service (PaaS) approach.

Pricing for hStream and HealthStream’s workforce applications is primarily subscription-based, with fees based on the number of subscriptions, solutions provided, and other factors. We offer training, implementation, and account management services to facilitate adoption of our subscription-based solutions. Fees for training are based on the time and efforts of the personnel involved. Implementation fees vary based on the size, scope, and complexity of the project. Our platform and subscription-based solutions are hosted on a combination of private-cloud infrastructure and public-cloud infrastructure, leveraging Amazon Web Services and Azure, which allows authorized personnel access to our services through the Internet, thereby eliminating the need for onsite local implementations of installed workforce development products.

Other Applications on our Platform — HealthStream offers an array of other applications on our platform, each serving a unique function for hospitals and health systems. Each application on our platform has its own value. Examples of individual applications that are offered on our platform include applications for learning, performance appraisal, compensation management, succession planning, competency management, disclosure management, clinical development, simulation-based education, quality management, and industry training.

HealthStream Provider Solutions – Our provider solutions are offered through our business segment that is branded in the marketplace as VerityStream. VerityStream delivers enterprise-class solutions to transform the healthcare provider experience for healthcare organizations and providers. We currently serve approximately 2,500 hospitals and 1,300 outpatient facilities, including ambulatory surgery centers, urgent care facilities, clinics, medical groups, and more. VerityStream resulted from the combination of Sy.Med Development Inc. (acquired in October 2012), HealthLine Systems (acquired in February 2015), Morrisey Associates, Inc. (acquired in August 2016), and CredentialMyDoc (acquired in December 2019). As of December 31, 2019, VerityStream had 256 employees with headquarters in Boulder, Colorado and satellite offices in San Diego, California and Chicago, Illinois, as well as employees located in the Nashville, Tennessee corporate office.

Our legacy products include EchoCredentialing™ and MSOW™, comprehensive platforms that manage medical staff credentialing and privileging processes for hospitals; EchoOneApp™, a provider enrollment platform for medical groups; CredentialMyDoc™, a SaaS solution to credential providers, enroll providers with payers for reimbursement, and apply and maintain privileges, especially in ambulatory care settings; and EchoAccess™, our enterprise class platform to support hospital call centers with physician referral and provider directories functionalities.

In January 2018, we announced the launch of our SaaS-based provider credentialing, privileging, and enrollment solution - Verity, which was rebranded in 2019 as VerityStream. As a SaaS-solution, VerityStream includes an intuitive, modern user experience that delivers a continual stream of platform enhancements, evidence-based content, and curated data. A subscription to this infrastructure provides healthcare organizations with tools to support the provider lifecycle from recruiting, application submission, verification of licensure and other credentials, privileging, appointments by credentialing committees, enrollment, network management, onboarding, and performance evaluation of providers. As of December 31, 2019, more than 200 healthcare organizations had contracted for the VerityStream SaaS platform.

BUSINESS ACQUISITIONS

We acquired Providigm, LLC in January 2019, and we acquired substantially all the assets of CredentialMyDoc in December 2019. For additional information regarding acquisitions, please see Note 8 of the Consolidated Financial Statements and Item 7, Management’s Discussion and Analysis of Financial Condition and Results of Operations, included elsewhere in this report.

CUSTOMERS

We provide our solutions to customers across a broad range of entities within the healthcare industry, including private, not-for-profit, and government entities, as well as pharmaceutical and medical device companies. We derive a substantial portion

of our revenues from a relatively small number of customers, although no single customer represented more than 10 percent of our revenues during 2019, 2018, or 2017. Customers that have purchased or contracted for products and services from HealthStream include CHRISTUS Health; HCA Holdings, Inc.; Community Health Systems, Inc.; McLaren Health Care Corporation; Infirmity Health, and Sutter Health.

SALES AND MARKETING

We market our products and services primarily through our direct sales teams, which are based out of our various office locations as well as remote home office locations. As of December 31, 2019, our Workforce Solutions sales personnel consisted of 143 employees who carried sales quotas, and our Provider Solutions sales personnel consisted of 34 employees who carried sales quotas.

We conduct a variety of marketing programs to promote our products and services, including product catalogs, user groups, trade shows, internet promotion and demonstrations, telemarketing campaigns, public relations, distribution of product-specific literature, direct mail, advertising, and in partnership with third parties. We have marketing teams that are responsible for these initiatives and for working with and supporting our product management and sales teams. At December 31, 2019, our marketing personnel consisted of 29 employees.

OPERATIONS AND TECHNOLOGY

We believe our ability to establish and maintain long-term customer relationships, obtain recurring sales, and develop and maintain new and existing products are dependent on the strength of our operations, customer service, product development and maintenance, training, and other support teams. As of December 31, 2019, our Workforce Solutions operations team consisted of 367 employees associated with customer support, implementation services, training, product management, software development and quality assurance, and project management; and our Provider Solutions operations team consisted of 214 employees associated with implementation services, training, data integration, product management, software development and quality assurance, credentials verification, consulting, and other functions.

Our services are designed to be reliable, secure, and scalable. Our software is a combination of proprietary and commercially available software and operating systems. Our software solutions support hosting and management of content, publication of our websites, execution of courseware, registration and tracking of users, tracking and reporting of physician credentialing and provider enrollment information, and reporting of information for both internal and external use. We designed the platforms that provide our services to allow each component to be independently scaled by adding commercially available hardware and a combination of commercially available and proprietary software components.

Our software applications, servers, and network infrastructure that deliver our services are hosted by a combination of third-party data center providers and cloud-based infrastructure. We maintain fully redundant disaster recovery data centers which are located in geographically separate locations. Our technology equipment is maintained in secure, limited access environments, supported by redundant power, environmental conditioning, and network connectivity, and we follow industry best practices for backup and disaster recovery. Company personnel monitor all servers, networks, and systems on a continuous basis, and we employ enterprise firewall systems and data abstraction to protect our databases, customer information, and courseware library from unauthorized access.

COMPETITION

In addition to the competing healthcare education delivery methods in the industry, we also have direct competitors. In our Workforce Solutions business segment, a number of companies offer competitive learning management products and talent management modules to the healthcare industry. We compete with companies such as Cornerstone OnDemand, Healthcare Source, SABA, Oracle, SAP, Infor, and Workday, who provide their services to multiple industries, including healthcare. We also compete with large medical publishers that have operating units that focus on healthcare, such as Relias Learning, which is owned by Bertelsmann. In our Provider Solutions business segment, we have competition primarily from several large companies, such as Symplr, Verisys, MD-Staff, AMN Healthcare, as well as from a broadening array of smaller companies.

We believe our Workforce Solutions, which include both products and services that facilitate education, training, assessment, and development for healthcare professionals, offer a wide assortment of content, functionality, and applications provided on a single platform over the Internet and provide us with a competitive advantage. In our Provider Solutions business segment, we believe the scope and quality of our products, capability to connect medical staff credentialing with provider enrollment, and innovative new predictive analytics, provide us with a competitive advantage. We believe that the principal competitive factors affecting the marketing of our Workforce and Provider Solutions to the healthcare industry include:

- our technology platform, which combines SaaS-based capabilities and certain PaaS capabilities to capture, track, and report on activities, such as learning, performance, credentialing, and privileging across various modalities, and provides interoperability with external systems such as HRIS and other healthcare-related systems;
- scope and variety of Internet-based workforce development and provider solutions available, including, without limitation, clinical, compliance, resuscitation, revenue cycle, talent management, credentialing, and privileging solutions;
- our singular focus on the healthcare industry and our deep healthcare expertise;
- scope and quality of professional services offered, including implementation, benchmarking, and training;
- competitive pricing, which supports a return on investment to customers when compared to other alternative delivery methods;
- customer service and support;
- effectiveness of sales and marketing efforts; and
- company reputation.

We believe these capabilities provide us with the ability to improve the quality of healthcare by developing the people who deliver care.

GOVERNMENT REGULATION OF THE INTERNET AND THE HEALTHCARE INDUSTRY

Regulation of the Internet and the Privacy and Security of Personal Information

The laws and regulations that govern our business may change rapidly. The following are some of the evolving areas of law that are relevant to our business:

- *Privacy and Security Laws.* Federal, state, and foreign privacy and security laws and regulations restricting the collection, use, retention, deletion, security, and disclosure of personal information limit our ability to collect information or use and disclose the information in our databases or derive from other sources to generate revenues. It may be costly to implement security or other measures designed to comply with new legislation or changes to existing laws.
- *Content Regulation.* Both foreign and domestic governments have adopted and proposed laws governing content and materials transmitted over the Internet. These include laws relating to obscenity, indecency, libel, and defamation. We could be liable if content created, stored, or delivered by us is determined to be in violation of these regulations.
- *Information Security Accountability Regulation.* As a business associate of certain of our customers, we are required to report certain breaches of protected health information to our customers, who must in turn notify affected individuals, the U.S. Department of Health and Human Services (HHS) and/or other governmental agencies, and, in certain situations, the media. In addition, we are subject to certain state laws that relate to privacy or the reporting of security breaches. For example, California law requires notification of security breaches involving personal information and medical information. We may incur costs to comply with these privacy and security requirements. Because there is little guidance related to many of these laws, it is difficult to estimate the cost of our compliance with these laws. Further, Congress has considered bills that would require companies to engage independent third parties to audit the companies' computer information security. If the Company experiences a breach of security or if one of the Company's customers is required to report a breach of security by the Company, the Company's business could be negatively impacted.
- *Sales and Use Tax.* Through December 31, 2019, we collected sales, use, or other taxes on taxable transactions in states in which we have employees or have a significant level of sales activity. While HealthStream believes that this approach is appropriate, other states or foreign jurisdictions may seek to impose tax collection obligations on companies like us that engage in online commerce. If they do, these obligations could limit the growth of electronic commerce in general and adversely impact our business.

Laws and regulations directly applicable to content regulation, e-commerce, Internet communications, and the privacy and security of personal information are becoming more prevalent. Congress continues to consider laws regarding Internet taxation. The dynamic nature of this regulatory environment increases the uncertainty regarding the marketplace impact of

such regulation. The enactment of any additional laws or regulations may increase our cost of conducting business or otherwise harm our business, financial condition, and operating results.

Regulation of Education, Training, and Other Services for Healthcare Professionals

Occupational Safety and Health Administration. OSHA regulations require employers to provide training to employees to minimize the risk of injury from various potential workplace hazards. Employers in the healthcare industry are required to provide training with respect to various topics, including, but not limited to, blood borne pathogens exposure control, laboratory safety, and tuberculosis infection control. OSHA regulations require employers to keep records of their employees' completion of training with respect to these workplace hazards.

The Joint Commission. The Joint Commission accreditation and certification standards require employers in the healthcare industry to provide certain workplace safety and patient interaction training to employees. Training required by The Joint Commission may include programs on infection control, patient bill of rights, radiation safety, and incident reporting. Healthcare organizations are required to provide and document training on these topics to receive accreditation from The Joint Commission. In addition, The Joint Commission imposes continuing education requirements on physicians that relate to each physician's specific staff appointments.

Health Insurance Portability and Accountability Act. HIPAA regulations restrict how certain organizations (known as Covered Entities), including most healthcare providers and health plans, use and disclose certain individually identifiable healthcare information. HIPAA regulations also require these organizations to provide reasonable and appropriate safeguards to protect the privacy, integrity and confidentiality of individually identifiable healthcare information, whether in paper, oral, or electronic form. Covered Entities are required to establish, maintain, and provide training with regard to their policies and procedures for protecting the integrity and confidentiality of individually identifiable healthcare information and must document training on these topics to support their compliance. Certain HIPAA privacy and security requirements apply to entities (known as Business Associates) that handle individually identifiable healthcare information on behalf of Covered Entities or other Business Associates. Covered Entities, Business Associates, and their subcontractors may be directly subject to criminal and civil sanctions for violations of HIPAA privacy and security standards.

The American Nurses Credentialing Center (ANCC). ANCC, a subsidiary of the American Nurses Association (ANA), provides individuals and organizations throughout the nursing profession with the resources they need to achieve practice excellence. ANCC's internationally renowned credentialing programs certify nurses in specialty practice areas; recognize healthcare organizations for promoting safe, positive work environments through the Magnet Recognition Program® and the Pathway to Excellence® Program; and accredit providers of continuing nursing education. In addition, ANCC's Institute for Credentialing Innovation® offers an array of informational and educational services and products to support its core credentialing programs. ANCC certification exams validate nurses' skills, knowledge, and abilities. More than a quarter million nurses have been certified by ANCC since 1990. More than 80,000 advanced practice nurses are currently certified by ANCC. The ANCC Magnet Recognition Program recognizes healthcare organizations that provide the very best in nursing care and professionalism in nursing practice. The program also provides a vehicle for disseminating best practices and strategies among nursing systems. The ANCC Magnet Recognition Program is a highly regarded standard for nursing excellence. The Pathway to Excellence Program recognizes the essential elements of a high standard nursing practice environment. The designation is earned by healthcare organizations that create work environments where nurses can develop professionally. The award substantiates the professional satisfaction of nurses and identifies best places to work.

Continuing Nursing Education (CNE). State nurse practice laws authorize a state's board of nursing to establish CNE requirements for professional nurses to maintain valid licensure. CNE requirements vary widely from state to state, with reporting generally on a bi-annual basis. In some states, the CNE requirement only applies to re-licensure of advance practice nurses, while in other states, additional CNEs may be required of this category of nurses. Board certifications (e.g., Certified Nurse Operating Room (CNOR) – certification of perioperative nursing) also require CNE hours/credits, with certain percentages required in specific categories based on the certification type. Failure to obtain the requisite and type of CNE could result in non-renewal of the license or certification. The ANCC Commission on Accreditation is responsible for accrediting or approving organizations to award ANCC nursing continuing professional development (NCPD) credit (contract hours) to activities for a national audience of nurses. State boards of nursing approve individual CNE activities or CE providers that offer CNE activities primarily for nurses within the state. ANCC NCPD credit for online activities is accepted by all state boards of nursing. Our HealthStream CNE Provider Unit is accredited as a provider of NCPD by ANCC. We are also approved by the California Board of Registered Nursing and the Florida Board of Nursing.

Continuing Medical Education (CME). State licensing boards, professional organizations, and employers require physicians to certify that they have accumulated a minimum number of CME hours to maintain their licenses. Generally, each state's

medical practice laws authorize the state's board of medicine to establish and track CME requirements. Forty-eight state medical licensing boards currently have CME requirements, as well as Puerto Rico, Guam, and the U.S. Virgin Islands. The number of CME hours required by each state ranges from 15 to 50 hours per year. Other sources of CME requirements are state medical societies and practice specialty boards. The failure to obtain the requisite amount and type of CME could result in non-renewal of the physician's license to practice medicine and/or membership in a medical or practice specialty society. The American Medical Association (AMA) classifies CME activities as either Category 1, which includes formal CME activities, or Category 2, which includes self-designated credit for informal activities that meet certain requirements. CME providers that certify educational activities can only designate those activities for *AMA PRA Category 1 Credit*[™]. Most boards of medical examiners nationwide that require CME participation specify *AMA PRA Category 1 Credit*[™]. Only institutions and organizations accredited to provide CME can designate an activity for *AMA PRA Category 1 Credit*[™]. The Accreditation Council for Continuing Medical Education (ACCME) is responsible for awarding accreditation status to state medical societies, medical schools, and other institutions and organizations that provide CME activities for a national audience of physicians. State medical societies, operating under the aegis of the ACCME, accredit institutions and organizations that provide CME activities primarily for physicians within the state or bordering states. We are recognized as an accredited provider of CME for physicians by the ACCME.

Centers for Medicare & Medicaid Services (CMS). CMS has summarized its quality strategy vision as “better, smarter, healthier.” The agency is focused on using incentives to improve care, changing how care is delivered, including through improved coordination across healthcare settings and increased attention to population health, and tying payment to value through new payment models. Value-based purchasing (VBP), which links payment more directly to the quality of care provided, is a strategy that can help to transform the current payment system by rewarding providers for delivering high quality, efficient clinical care. Through a number of public reporting programs, demonstration projects, pilot programs, and other initiatives, some voluntary and some mandatory, CMS has launched VBP initiatives in various settings, including hospitals, physician offices, nursing homes, home health services, and dialysis facilities. Since 2017, CMS has focused on its comprehensive deregulatory initiative, “Meaningful Measures,” which identifies priorities for quality measurement and improvement. The framework is intended to improve patient outcomes while also reducing burdens on providers.

Promoting Interoperability Programs (formerly the Medicare and Medicaid Electronic Health Records (EHR) Incentive Programs). CMS renamed the Medicare and Medicaid EHR Incentive Programs to the Promoting Interoperability Programs (The Interoperability Programs) to increase focus on the interoperability of and improving patient access to health information. The Interoperability Programs continue to encourage eligible professionals, eligible hospitals, and critical access hospitals (CAHs) to adopt EHR technology by imposing payment reductions for failure to demonstrate meaningful use of certified EHR technology. By putting into action and meaningfully using an EHR system, providers may reap benefits beyond financial incentives—such as reduction in errors, availability of records and data, reminders and alerts, clinical decision support, and e-prescribing/refill automation.

Allied Disciplines. Various allied health professionals are required to obtain continuing education to maintain their licenses. For example, emergency medical services personnel may be required to attain up to 20 continuing education hours per year, all or a portion of which can be fulfilled online. These requirements vary by state and depend on the professional classification of the individual.

Regulation of Educational Program Sponsorship and Support

There are a variety of laws and regulations that affect the relationships between our medical device and pharmaceutical customers and the users of our products and services, including the sponsorship and support of educational programs. For example, the Physician Payment Sunshine Act (Sunshine Act) requires manufacturers of drugs, biological devices, and medical devices covered by Medicare, Medicaid, or the Children's Health Insurance Program to report annually to CMS payments and other transfers of value, including educational programs, given by such manufacturers to physicians and teaching hospitals, with limited exceptions. CMS regulations require manufacturers to report the physician's name, business address, and national provider identifier as well as other information including the value, date, form, and nature of what is offered. CMS publishes the information on its website. Manufacturers that do not meet the reporting obligations are subject to significant monetary penalties.

Further, the Office of Inspector General (OIG) has issued Compliance Program Guidance for Pharmaceutical Manufacturers and for the Durable Medical Equipment, Prosthetics, Orthotics, and Supply Industry (collectively, the Guidelines). The Guidelines address compliance risks raised by the support of continuing educational activities by pharmaceutical and medical device companies. The Guidelines have affected and may continue to affect the type and extent of commercial support we receive for our continuing education activities. The trade associations for the pharmaceutical and medical device industries (PhRMA and AdvaMed, respectively) have also promulgated their own codes of ethics that further restrict the interactions between industry and health care professionals. In addition, the AMA has established its own code of ethics

regarding Gifts to Physicians from Industry to provide standards of conduct for the medical profession. We follow the rules and guidelines provided by ACCME, ANCC, and other continuing education accrediting bodies to ensure that our continuing education programming is free from commercial bias and consistent with the Guidelines.

The U.S. Food and Drug Administration (FDA) and the Federal Trade Commission (FTC)

Current FDA and FTC rules and enforcement actions and regulatory policies, or those that the FDA or the FTC may develop in the future, could have a material adverse effect on our ability to provide existing or future applications or services to our end users or obtain the necessary corporate sponsorship to do so. The FDA and the FTC regulate the form, content, and dissemination of labeling, advertising, and promotional materials, including direct-to-consumer prescription drug and medical device advertising, prepared by, or for, pharmaceutical, biotechnology, or medical device companies. The FTC regulates over-the-counter drug advertising and, in some cases, medical device advertising. Generally, regulated companies must limit their advertising and promotional materials to discussions of the FDA-approved indications. Therefore, any truthful or untruthful information that promotes the use of pharmaceutical or medical device products that is presented with our services is subject to the FDA and FTC requirements and regulatory oversight including criminal, civil and administrative actions. We believe that banner advertisements, sponsorship links, and any educational programs that lack independent editorial control that we may present with our services could be subject to FDA or FTC regulation. While the FDA and the FTC place the principal burden of compliance with advertising and promotional regulations on the advertiser, if the FDA or FTC finds that any regulated information presented with our services violates FDA or FTC regulations, they may take regulatory action against us or the advertiser or sponsor of that information. In addition, the FDA may adopt new regulatory policies that more tightly regulate the format and content of promotional information on the Internet.

INTELLECTUAL PROPERTY AND OTHER PROPRIETARY RIGHTS

To protect our proprietary rights, we rely generally on copyright, trademark, and trade secret laws; confidentiality agreements, contracts, and procedures with employees, consultants and other third parties; contractual provisions in license agreements with consultants, vendors, and customers; and use measures designed to control access to our software, documentation, and other proprietary information. We own federal trademark and service mark registrations for several marks, including, without limitation “HEALTHSTREAM”, “HEALTHSTREAM LEARNING CENTER”, “HEALTHSTREAM EPORTFOLIO”, “KNOWLEDGEQ”, and “ONESOURCE.” We also have obtained registration of the “HEALTHSTREAM” mark in certain other countries. Applications for several trademarks are currently pending. However, there can be no assurance that we will be successful in obtaining registration of trademarks for which we have applied.

The courseware we license to our customers is developed through a combination of license agreements with publishers and authors, assignments and work-for-hire arrangements with third parties, and development by employees. We require publishers, authors, and other third parties to represent and warrant that their content does not infringe on or misappropriate any third-party intellectual property rights and that they have the right to provide their content and have obtained all third-party consents necessary to do so. Our publishers, authors, and other third parties also agree to indemnify us against certain liability we might sustain due to the content they provide.

If a third party asserts a claim that we or our third-party partners have infringed its patents or other intellectual property right, we may be required to redesign or discontinue products that we currently offer or enter into royalty or licensing agreements. In addition, we license technologies from third parties for incorporation into our services. Licensing agreements with these third parties may not be available on terms acceptable to us, if at all. Additionally, despite the steps we have taken to protect our intellectual property and proprietary rights, our efforts may not be adequate. Third parties may infringe or misappropriate our intellectual property, and such violations of our intellectual property are difficult to detect and police. Competitors may also independently develop technologies that are substantially equivalent or superior to the technologies we employ in our products or services. If we are unable to safeguard our proprietary rights adequately, our competitors could offer similar services, potentially significantly harming our competitive position and decreasing our revenues.

We hold inbound licenses for certain intellectual property that is used internally, and in some cases, utilized in HealthStream’s products or services. While it may be necessary in the future to seek or renew licenses relating to various aspects of our products and services, we believe, based upon past experience and industry practice, such licenses generally can be obtained on commercially reasonable terms. We believe our operations and products and services are not materially dependent on any single license or other agreement with any third party.

AVAILABLE INFORMATION

The Company files reports with the SEC, including annual reports on Form 10-K, quarterly reports on Form 10-Q, and other reports from time to time. The SEC maintains an Internet site at <http://www.sec.gov> that contains the reports, proxy, and

other filings made by us electronically. Our website address is www.healthstream.com. Please note that our website address is provided as an inactive textual reference only. We make available, free of charge through our website, our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, all amendments to those reports, and other filings made by us with the SEC, as soon as reasonably practicable after such material is electronically filed with or furnished to the SEC. The information provided on our website is not part of this report and is not incorporated by reference herein.

OUR EMPLOYEES

As of December 31, 2019, we employed 849 full-time and 27 part-time persons. Our success will depend in large part upon our ability to attract and retain qualified employees. We face competition in this regard from other companies, but we believe that we maintain good relations with our employees. We are not subject to any collective bargaining agreements.

INFORMATION ABOUT OUR EXECUTIVE OFFICERS

The following is a brief summary of the business experience of each of the executive officers of the Company. Executive officers of the Company are elected by the Board of Directors and serve at the pleasure of the Board of Directors. The following table sets forth certain information regarding the executive officers of the Company:

<u>Name</u>	<u>Age</u>	<u>Position</u>
Robert A. Frist, Jr.	52	Chief Executive Officer and Chairman of the Board of Directors
J. Edward Pearson	57	President and Chief Operating Officer
Michael Sousa	51	Senior Vice President and President, VerityStream
Scott A. Roberts	43	Senior Vice President and Chief Financial Officer
Jeffrey D. Cunningham	53	Senior Vice President and Chief Technology Officer
Michael M. Collier	44	Senior Vice President, Corporate Development and General Counsel
Trisha L. Coady	44	Senior Vice President and General Manager, Clinical Solutions
M. Scott McQuigg	52	Senior Vice President, hStream Solutions

Robert A. Frist, Jr., one of our co-founders, has served as our chief executive officer and chairman of the board of directors since 1990 and served as our president since 2001. On May 15, 2018, following the appointment of Mr. Pearson as the president of the Company, Mr. Frist no longer served in such position. Mr. Frist is the company's chief operating decision maker. He graduated with a Bachelor of Science in Business with concentrations in Finance, Economics, and Marketing from Trinity University.

J. Edward Pearson joined the Company in June 2006 as senior vice president and was promoted to chief operating officer in 2011 and to president on May 15, 2018. He earned a Bachelor of Business Administration in Accounting from Middle Tennessee State University.

Michael Sousa joined the Company in October 2004 and served as senior vice president of sales from January 2010 to June 2014. In June 2014, he was promoted to senior vice president of business development. In February 2015, he was named president of Echo, Inc. (now known as VerityStream), HealthStream's Provider Solutions business segment, while continuing to serve as a senior vice president of the Company. He earned a Bachelor of Science degree from Boston College and a Master of Business Administration from Boston University.

Scott A. Roberts joined the Company in January 2002 and served as vice president of accounting and finance beginning in January 2015, following service in multiple positions to which he was promoted. Thereafter, Mr. Roberts was appointed as interim chief financial officer in February 2019 and was appointed as chief financial officer and senior vice president of the Company in September 2019. He earned a Bachelor of Business Administration degree from Middle Tennessee State University.

Jeffrey D. Cunningham joined the Company in July 2017 as senior vice president and chief technology officer. Prior to joining the Company, he founded and served as chief technology officer and chief strategy officer for Informatics Corporation of America for twelve years. He earned a Bachelor of Science in Computer Science from University of North Texas.

Michael M. Collier joined the Company in August 2011 as vice president and general counsel, began serving as the vice president of business development and general counsel shortly thereafter, and was promoted to senior vice president of corporate development and general counsel in July 2017. Mr. Collier also serves as the Company's Corporate Secretary. He graduated with bachelors and masters degrees in Philosophy and Religion from University of Tennessee-Knoxville and earned a Juris Doctorate (J.D.) from University of California, Berkeley – School of Law.

Trisha L. Coady joined the Company in January 2014 and served as associate vice president and subsequently vice president and general manager of clinical development solutions from June 2015 to November 2018. In November 2018, she was promoted to senior vice president and general manager of clinical solutions. She earned a Science in Nursing degree from Université de Moncton.

M. Scott McQuigg joined the Company in January 2019 as senior vice president of hStream solutions. Prior to joining the Company, he co-founded and served as chief executive officer for GoNoodle for thirteen years. Before this role, he co-founded and served as chief executive officer of HealthLeaders.

Item 1A. Risk Factors

We believe that the risks and uncertainties described below are the significant risks facing the Company as of the date of this Annual Report on Form 10-K. Our business, reputation, financial condition, results of operations, and/or prospects could be materially and adversely affected by the occurrence of any of the following risks and uncertainties. Additional risks or uncertainties not presently known to us, or that we currently deem immaterial, also may adversely affect our business, reputation, financial condition, results of operations, and prospects. Therefore, the risk factors below should not be considered a complete list of potential risks we may face. The trading price of our common stock could also decline due to the occurrence of any of the following risks, as well as risks and uncertainties not presently known to us, or that we currently deem immaterial.

Risks Related to Our Business Model

We may be unable to effectively execute our growth strategy which could have an adverse effect on our business and competitive position in the industry.

Our business strategy includes increasing our market share and presence through sales to new customers, additional sales to existing customers, introductions of new products and services, participation in our ecosystem, interoperability and integration with our platform, and maintaining strong relationships with our existing customers. Risks that we may encounter in executing our growth strategy include:

- expenses, delays, and difficulties in identifying and developing new products or services and integrating such new products or services into our existing organization;
- inability to leverage or evolve our customer and partner facing technology platform;
- inability to leverage our operational and financial systems and processes sufficiently to support our growth;
- inability to generate sufficient revenue from our products to offset investment costs;
- inability to effectively identify, manage, and exploit existing and emerging market opportunities;
- inability to maintain our existing customer relationships;
- inability to identify, attract, and retain partners;
- increased competition from new and existing competitors;
- lengthy sales cycles, or customers delaying purchasing decisions or payments due to economic conditions;
- reduced spending by customers within our target markets;
- the loss of a significant customer, including through acquisitions or consolidations;
- a negative change in the financial condition or creditworthiness of our customers;
- failure of the market for our products and services to grow to a sufficient size or at a sufficient rate; and
- inability to hire sufficient number of qualified employees to execute and support the growth of the Company.

If any of these risks are realized, our business, and our competitive position in the industry, could suffer.

Unfavorable conditions in our industry or the U.S. economy, or reductions in information technology spending, could limit our ability to grow our business and negatively affect our operating results.

Our operating results may vary based on the impact of changes in our industry or the United States economy on us or our clients. The revenue growth and potential profitability of our business depends on demand for workforce and provider solutions for healthcare providers. We sell our products and services to large, mid-sized and small organizations whose businesses fluctuate based on general economic and business conditions. In addition, a portion of our revenue is attributable to the number of users of our products at each of our clients, which in turn is influenced by the employment and hiring patterns of our clients and potential clients. To the extent that economic uncertainty or weak economic conditions cause our clients and potential clients to freeze or reduce their headcount, demand for our products may be negatively affected. Historically, economic downturns have resulted in overall reductions in spending by some healthcare providers as well as pressure from clients and potential clients for extended billing terms. If economic conditions deteriorate, our clients and potential clients may elect to decrease their workforce development and provider solutions budgets by deferring or reconsidering purchases, which would limit our ability to grow our business and negatively affect our operating results. In addition, while we do not currently expect that our financial results will be significantly and adversely affected by the coronavirus that was first detected in Wuhan, China in December 2019, there continue to be significant uncertainties associated with the coronavirus, including with respect to the ultimate geographic spread of the virus, the severity of the disease, the duration of the outbreak, and actions that may be taken by Chinese or other governmental authorities to contain the coronavirus or to treat its impact, and the extent to which the coronavirus outbreak may impact our financial results, including as the result of its possible impact on the economy, including without limitation the healthcare sector, is not certain. There is also uncertainty surrounding U.S. presidential and congressional elections in 2020 and the impact on existing and future healthcare legislation. While we cannot predict the outcome of the elections or any resulting legislative changes, such changes could have a material impact on our business.

We may be unable to effectively identify, complete or integrate the operations of acquisitions, joint ventures, collaborative arrangements, or other strategic investments, which would inhibit our ability to execute upon our growth strategy.

As part of our growth strategy, we actively review possible acquisitions, joint ventures, collaborative arrangements, or strategic investments that complement or enhance our business. However, we may be unable to source or complete future acquisitions, joint ventures, collaborative arrangements, or other strategic investments on acceptable terms, or at all. In addition, if we finance acquisitions, joint ventures, collaborative arrangements, or other strategic initiatives by issuing equity securities, our existing shareholders may be diluted, which could affect the market price of our stock. As a result, if we fail to properly evaluate and execute acquisitions, joint ventures, collaborative arrangements, or strategic investments, our performance or prospects may be seriously harmed. Risks that we may encounter in implementing our acquisition, joint venture, collaborative arrangement, or strategic investment strategies include:

- expenses, delays, or difficulties in identifying and integrating acquired companies or joint venture operations, collaborative arrangements, or other strategic investments into our organization and to otherwise realize expected synergies;
- the possibility that we may become responsible for substantial contingent or unanticipated liabilities as the result of an acquisition, joint venture, collaborative arrangement, or other strategic investment;
- inability to retain personnel associated with acquired companies, joint ventures, collaborative arrangements or other strategic investments;
- loss of material customers and other key business relations associated with acquired companies, joint ventures, collaborative arrangements, or other strategic investments;
- diversion of management's attention from other initiatives and/or day-to-day operations to effectively execute our growth strategy;
- the incorporation of products associated with acquired companies, joint ventures, collaborative arrangements, or other strategic investments into our product lines;
- the increasing demands on our operational and informational technology systems which may arise from any such acquired companies or joint venture operations, collaborative arrangements, or other strategic investments;
- potentially insufficient internal controls over financial activities or financial reporting at any such acquired company that could impact us on a consolidated basis;
- the financial performance of acquired entities, joint ventures, collaborative arrangements, or other strategic investments may have a negative impact on our financial performance; and
- an inability to generate sufficient revenue, profit, and cash flow from acquisitions, joint ventures, collaborative arrangements, or other strategic investments to offset our investment costs.

Moreover, although we conduct what we believe to be a prudent level of investigation regarding the operating, financial, and information security conditions of acquired companies, joint ventures, collaborative arrangements, or other strategic investments, an unavoidable level of risk remains regarding the operating performance, financial condition, information security, and potential liabilities of these businesses, and we may not be able to fully assess these risks until a transaction has been completed.

Our ability to accurately forecast our financial performance for certain products and services may be hindered by customer scheduling.

While the revenue we receive from particular products and services in our subscription business may be predictable during the term of the applicable contract, the performance of our subscription business may become more subject to fluctuations between quarterly periods as our solution offerings diversify and become more sophisticated. Certain project-based products, such as consulting, content development, and professional services, are subject to the customers' involvement in the provision of the product or service. The timing and magnitude of these project-based product and service contracts may vary widely from quarter to quarter and year to year, and thus may affect our ability to accurately forecast our financial performance. In addition, some products can require significant implementation lead times and resources and may require a level of change management efforts from our clients, which may also impact our ability to accurately forecast our financial performance. Additionally, as we expand our revenue generating model such that third parties may pay network connection fees based on sales they make, our ability to forecast revenue from such arrangements may not be predictable.

Our ability to accurately forecast our financial performance may be affected by lengthy and widely varying sales cycles.

The period from our initial contact with a potential customer and their first purchase of our solution typically ranges from three to nine months, and in some cases may be significantly longer. The range in the sales cycle can be impacted by multiple factors, including an increasing trend towards more formal request for proposal processes and more competition within our industry, as well as formal budget timelines which impact timing of purchases by target customers. New products, including those that may compete with or replace our former product offerings, tend to have a longer and more unpredictable revenue ramp period because of varying customer adoption rates. As a result of these factors, we have only limited ability to forecast the timing and type of initial sales. This, in turn, makes it more difficult to forecast our financial performance. Additionally, as we expand our revenue generating model such that third parties may pay network connection fees based on sales they make, our ability to forecast revenue from such arrangements may not be predictable.

We may not be able to maintain our competitive position against current and potential competitors, especially those with significantly greater financial, technical, marketing, or other resources.

Many of our competitors and potential competitors have longer operating histories and significantly greater financial, technical, marketing, or other resources than we do. We encounter direct competition from both large and small companies focused on providing workforce and provider solutions to the healthcare industry. Given the profile and growth of the healthcare industry and the ongoing need for training, simulation, credentialing, and other information products and services, it is likely that additional competitors will emerge. Additionally, mergers of or other strategic transactions by our competitors could weaken our competitive position. Moreover, our lack of market diversification resulting from our concentration on the healthcare industry may make us susceptible to losing market share to our competitors who also offer solutions, and in some cases a more robust suite of solutions, to a cross-section of industries. These companies may be able to respond more quickly than we can to new or changing opportunities, technologies, standards or customer requirements. Further, most of our customer agreements are for terms ranging from one to five years, with no obligation to renew. The terms of these agreements may enable customers to more easily shift to one of our competitors.

Expanding our business model such that third-parties may pay network connection fees in exchange for the ability to deliver their products through our technology platform and have them featured as part of our ecosystem may result in unpredictability to and/or harm to the operational and financial performance of our business.

Historically, the Company has marketed and sold products and services through our own sales team and for delivery through our technology platform. More recently, the Company began offering third-parties the ability to utilize their sales teams to market and sell their third-party products and have such products delivered through the Company's technology platform, provided such third-parties pay a network connectivity fee when such products are sold to customers in our network. Given that these third parties are responsible for their products and the marketing and selling thereof, the Company may not always be able to ensure the operational, financial, or security-related performance or impact of products controlled by a third-party. While we have contractual protections with third-parties regarding their products, including but not limited to service levels, information security, confidentiality, data rights, and indemnification against certain breaches, these may not be sufficient to ensure the predictability or performance of such products, or potential negative impacts related thereto.

The failure to maintain and strengthen our relationships with ecosystem partners or significant changes in the terms of the agreements we have with them may have an adverse impact on our ability to successfully market, sell, and deliver certain product and service offerings.

We have entered into contracts with ecosystem partners, including content, application, infrastructure, technology, and retail channel vendors. Our ability to increase the sales of our products and services depends in part upon maintaining and strengthening relationships with these current and future ecosystem partners. Most of these contracts are on a non-exclusive basis. Certain ecosystem partners may offer multiple products and services, including, in some instances, products or services which may compete with other products and services we offer. Moreover, under contracts with some of our ecosystem partners, we may be bound by provisions that restrict our ability to market and sell our products and services to certain potential customers. The success of these contractual arrangements will depend in part upon the ecosystem partners' own competitive, marketing, and strategic considerations, including the relative advantages for such ecosystem partners in using alternative products being developed and marketed by them or our competitors, rather than our products and services.

We cannot guarantee that we will be able to maintain and strengthen our relationships with ecosystem partners, that we will be successful in effectively integrating such partners' products and technology, including without limitation through our emerging PaaS strategy, with, into, or through our own, or that such relationships will be successful in generating additional revenue. If any of these ecosystem partners have negative experiences with our products and services, or seek to amend or terminate the financial or other terms of the contracts or arrangements we have with them, we may need to increase our organizational focus on the types of services and solutions they sell and alter our development, integration, and/or distribution strategies, which may divert our planned efforts and resources from other projects.

We could also be subject to claims and liability as a result of the activities, products, or services of these ecosystem partners and/or our acts or omissions with regard to these ecosystem partners. Even if these claims do not result in liability to us, investigating and defending these claims could be expensive, time-consuming, divert our attention, and result in suspension of or interference with certain offerings to our clients and/or adverse publicity that could harm our business.

We may not be able to retain distribution rights from our ecosystem partners, which could adversely affect our business and results of operations.

Most of our agreements with ecosystem partners are for initial terms of three or more years. These partners may choose not to renew their agreements with us or may terminate their agreements early if we do not fulfill our contractual obligations. If our partners terminate or fail to renew their agreements with us on as favorable terms, such as a reduction in our revenue share arrangement, it could result in a reduction in the number of courses and solutions we are able to distribute, declines in the number of subscribers to our platforms, and decreased revenues. Most of our agreements with our ecosystem partners are non-exclusive, and our competitors offer, or could offer, solutions that are similar to or the same as those we offer. If our current partners offer or otherwise make available their products and services to users or our competitors on more favorable terms than those offered to us, or increase our license fees, our competitive position, revenue, and our profit margins and prospects could be harmed.

We may not be able to develop new products and services, or enhancements to our existing products and services, or be able to achieve widespread acceptance of new products, services or features, or keep pace with technological developments.

Our growth strategy depends in part on our ability to generate revenue growth through sales to new customers as well as increasing sales of additional subscriptions and other products and services to existing customers. Our identification of additional features, content, products, and services may not result in timely development of complementary products. In addition, the success of certain new products and services may be dependent on continued growth in our customer base. Furthermore, we are not able to accurately predict the volume or speed with which existing and new customers may adopt such new products and services. Because healthcare technology continues to change and evolve, we may be unable to accurately predict and develop new products, features, content, and other products to address the needs of the healthcare industry. Further, the new products, services, and enhancements we develop may introduce significant defects into or otherwise negatively impact our technology platform. While all new products and services are subject to testing and quality control, all software and software-based services are subject to errors and malfunctions. If we release new products, services, and/or enhancements with bugs, defects, or errors or that cause bugs, defects, or errors in existing products, it could result in lost revenues and/or reduced ability to meet contractual obligations and would be detrimental to our business and reputation. If new products, features, or content are not accepted or integrated by new or existing customers, we may not be able to recover the cost of this development, and our financial performance will be harmed. Continued growth of our customer population is dependent on our ability to continue to provide relevant products and services in a timely manner. The success of our business will depend on our ability to continue providing our products and services as well as enhancing our content, product, and service offerings that address the needs of healthcare organizations.

We may be unable to continue to license our third-party software, on which a portion of our product and service offerings rely, or we may experience errors in this software, which could increase our costs and decrease our revenue.

We use technology components in some of our products that have been licensed from third parties. Future licenses to these technologies may not be available to us on commercially reasonable terms, or at all. The loss of or inability to obtain or maintain any of these licenses could result in delays in the introduction of new products and services or could force us to discontinue offering portions of solutions until equivalent technology, if available, is identified, licensed, and integrated. The operation of our products would be impaired if errors occur in third party technology or content that we incorporate, and we may incur additional costs to repair or replace the defective technology or content. It may be difficult for us to correct any errors in third party products because the products are not within our control. Accordingly, our revenue could decrease, and our costs could increase in the event of any errors in this technology. Furthermore, we may become subject to legal claims related to licensed technology based on product liability, infringement of intellectual property, or other legal theories. Even if these claims do not result in liability to us, investigating and defending these claims could be expensive and time-consuming, and could result in suspension of or interference with certain offerings to our clients and/or adverse publicity that could harm our business.

Financial Risks

A significant portion of our revenue is generated from a relatively small number of customers.

We derive a substantial portion of our revenues from a relatively small number of customers. A termination or material modification of our agreements with any of our significant customers or a failure of these customers to renew their contracts on favorable terms, or at all, could have an adverse effect on our business.

A significant portion of our business is subject to renewal. Therefore, renewals have a significant impact on our revenue and operating results.

For the year ended December 31, 2019, approximately 95% of our net revenue was derived from SaaS-based subscriptions and software licensing agreements. Our product and service contracts typically range from one to five years in length, and customers are not obligated to renew their contract with us after their contract term expires; in fact, some customers have elected not to renew their contract. In addition, our customers may renew at a lower pricing or activity level. Our customers' renewals may decline or fluctuate as a result of a number of factors, including but not limited to, their dissatisfaction with our service, a dissipation or cessation of their need for one or more of our products or services, pricing, or competitive product offerings. If we are unable to renew a substantial portion of the contracts that are up for renewal or maintain our pricing, our results of operations and financial condition could be adversely affected.

Failure to adequately expand and optimize our direct sales infrastructure will impede our growth.

We will need to continue to expand and optimize our sales infrastructure in order to grow our customer base and our business. Identifying and recruiting qualified personnel and training them in our sales methodology, our sales systems, and the use of our software requires significant time, expense, and attention. It can take significant time before our sales representatives are fully trained and productive. Our business may be adversely affected if our efforts to expand and train our direct sales teams do not generate a corresponding increase in revenues. In particular, if we are unable to hire, develop, and retain talented sales personnel or if new direct sales personnel are unable to achieve desired productivity levels in a reasonable period of time, we may not be able to realize the expected benefits of this investment or increase our revenues.

We may be unable to accurately predict the timing of revenue recognition from sales activity as it is often dependent on achieving certain events or performance milestones, and this inability could impact our operating results.

Our ability to recognize revenue is dependent upon several factors in order for us to implement customers on our subscription-based platform and platform applications. If customers do not provide us with the information required to complete implementations in a timely manner, our ability to recognize revenue may be delayed, which could adversely impact our operating results. Some products, including several in our Provider Solutions segment, can require significant implementation lead times and the rate at which customer orders move from backlog to revenue generation in connection with these products may significantly affect the timing of revenue recognition.

Because we recognize revenue from subscriptions for our products and services over the term of the subscription period, downturns or upturns in sales may not be immediately reflected in our operating results.

During the year ended December 31, 2019, we recognized approximately 95% of our revenue from customers monthly over the terms of their subscription or licensing agreements, which generally have contract terms ranging from one to five years. As a result, much of the revenue we report in each quarter is related to subscription or licensing agreements entered into during previous quarters. Consequently, a decline in new or renewed subscription or licensing agreements in any one quarter will not necessarily be fully reflected in the revenue in that quarter and will negatively affect our revenue in future quarters. In addition, we may be unable to adjust our cost structure to reflect this reduced revenue. Accordingly, the effect of significant downturns in sales and market acceptance of our products and services may not be fully reflected in our results of operations until future periods. Additionally, our subscription model also makes it difficult for us to rapidly increase our revenue through additional sales in any period, as revenue from new customers must be recognized over the applicable subscription term.

We may not be able to meet our strategic business objectives unless we obtain additional financing, which may not be available to us on favorable terms, or at all.

We may need to raise additional funds for various purposes, including to:

- develop new, or enhance existing, products, services, and technology;
- respond to competitive pressures;
- finance working capital requirements;
- acquire or invest in complementary businesses, technologies, content, or products; or
- otherwise effectively execute our growth strategy.

At December 31, 2019, we had approximately \$172.9 million in cash, cash equivalents, and marketable securities. We also have up to \$50.0 million of availability under our Revolving Credit Facility, subject to certain covenants, which expires in November 2020.

We actively review possible business acquisitions to complement or enhance our products, services, and technology platforms. We may not have adequate cash and investments or availability under our Revolving Credit Facility to consummate one or more of these acquisitions. We cannot assure you that if we need additional financing, it will be available on terms favorable to us, or at all. If adequate funds are not available or are not available on acceptable terms, our ability to fund expansion, take advantage of available opportunities, develop or enhance services or products, or otherwise respond to competitive pressures would be significantly limited. If we raise additional funds by issuing equity or convertible debt securities, the percentage ownership of our existing shareholders may be reduced.

Goodwill, identifiable intangible assets, and long-lived assets recorded on our balance sheet may be subject to impairment losses that could reduce our reported assets and earnings.

There are inherent uncertainties in the estimates, judgments, and assumptions used in assessing recoverability of goodwill, intangible assets, and long-lived assets. Economic, legal, regulatory, competitive, reputational, contractual, and other factors could result in future declines in the operating results of our business units or market values that do not support the carrying value of goodwill, identifiable intangible assets, and long-lived assets. If the value of our goodwill, intangible assets, or long-lived assets is impaired, accounting principles require us to reduce their carrying value and report an impairment charge, which would reduce our reported assets and earnings for the period in which an impairment is recognized.

We may be affected by healthcare reform efforts and other changes in the healthcare industry that impact us and our clients.

Our clients are concentrated in the healthcare industry, which is subject to changing regulatory, economic, and political conditions. In the past several years, we have experienced an increase in bankruptcies among our customers. This decrease in creditworthiness among certain of our customers along with other economic challenges facing the healthcare sector caused us to record bad debt expense of \$0.2 million, \$1.0 million and \$1.6 million in 2019, 2018, and 2017, respectively. Any continuation or escalation of this development could result in our inability to collect amounts owed from existing clients and decrease our ability to gain new clients, which could adversely impact our revenue, results of operations, and ability to execute on our growth strategy.

The U.S. Congress and certain state legislatures have passed or are considering laws and regulations intended to result in major changes to the U.S. healthcare system. The most prominent of these reform efforts, the Patient Protection and Affordable Care Act, as amended by the Healthcare and Education Reconciliation Act of 2010 (collectively, Affordable Care Act), was designed to increase access to affordable health insurance for U.S. citizens and improve quality of care, but it also has reduced government program spending and imposed operating costs and changes on many of our clients.

Efforts by the presidential administration and certain members of Congress to repeal or make significant changes to the Affordable Care Act, its implementation, and/or its interpretation have cast considerable uncertainty on the future of the law. For example, final rules issued in 2018 expand the availability of association health plans and allow the sale of short-term, limited-duration health plans, neither of which are required to cover all the essential health benefits mandated by the Affordable Care Act. Effective January 1, 2019, the financial penalty associated with the individual mandate was eliminated as part of the tax reform legislation which was enacted in December 2017. These changes may impact the number of individuals that elect to purchase health insurance or the scope of such coverage, if purchased. Because the penalty associated with the individual mandate was eliminated, a federal judge in Texas ruled in December 2018 that the mandate was unconstitutional and determined that the rest of the Affordable Care Act was therefore invalid. In December 2019, the Fifth Circuit Court of Appeals upheld this decision with respect to the individual mandate but remanded for further consideration the issue of how this affects the rest of the law. Pending this appeals process, the law remains in place pending appeal. There is uncertainty regarding whether, when, and how the Affordable Care Act will be further changed, the ultimate impact of court challenges, how the law will be interpreted and implemented, and the impact of other initiatives intended to reform healthcare delivery, coverage, and/or financial systems. For example, some members of Congress have proposed significantly expanding the coverage of government-funded programs. Any such legal or regulatory developments, as well as other healthcare-related or other developments that adversely impact the business or financial condition of our clients, could reduce the amount of business we receive from such clients and thus have an adverse effect on our results of operations.

Some of the recent changes in the healthcare industry have driven consolidation, particularly among health insurance providers. Other industry participants, such as large employer groups and their affiliates, may also introduce financial or delivery system reforms or otherwise intensify competitive pressures. These developments could adversely affect us or our customers and therefore have an adverse effect on our results of operations.

We may discover weaknesses in our internal controls over financial reporting, which may adversely affect investor confidence in the accuracy and completeness of our financial reports and consequently the market price of our securities.

Section 404 of the Sarbanes-Oxley Act of 2002 requires our management to report on and requires our independent public accounting firm to attest to, the effectiveness of our internal controls over financial reporting. The rules governing the standards to be met are complex and may require significant process review, documentation and testing, as well as remediation efforts for any identified deficiencies. This process of review, documentation, testing, and remediation may result in increased expenses and require significant attention from management and other internal and external resources. These requirements may also extend to acquired entities and our efforts to integrate those operations into our system of internal controls. Any material weaknesses identified during this process may preclude us from asserting the effectiveness of our internal controls. This may negatively affect our stock price if we cannot effectively remediate the issues identified in a timely manner.

Changes in accounting standards issued by the Financial Accounting Standards Board, or FASB, could adversely affect our balance sheet, revenue, and results of operations, and could require a significant expenditure of time, attention and resources, especially by senior management.

Our accounting and financial reporting policies conform to GAAP, which are periodically revised and/or expanded. The application of accounting principles is also subject to varying interpretations over time. Accordingly, we are required to adopt new or revised accounting standards or comply with revised interpretations that are issued from time to time by various parties, including accounting standard setters and those who interpret the standards, such as the FASB and the SEC and our independent registered public accounting firm. Changes to regulations concerning revenue recognition could require us to alter our current revenue accounting practices and cause us to either defer revenue into a future period or to recognize lower revenue in a current period. Likewise, changes to regulations concerning expense recognition could require us to alter our current expense accounting practices and cause us to defer recognition of expense into a future period or to recognize increased expenses in a current period. Such changes could also cause us to alter the manner in which we contract for, sell, and incentivize sales of products and services. Changes to either revenue recognition or expense recognition accounting practices could affect our financial results.

Risks Related to Operations

Our operating margins could be affected if our ongoing refinement to pricing models for our products and services is not accepted by our customers and the market.

We continue to make changes in the pricing of our product and service offerings so as to increase revenue and meet the needs of our customers. We cannot predict whether the current pricing of our products and services, or any ongoing refinements we make, will be accepted by our existing customer base or by prospective customers. If our customers and potential customers decide not to accept our current or future pricing or product and service offerings, it could have an adverse effect on our business and results of operations. Additionally, ecosystem partners establish the price for some of the products we market and sell, and we do not have control over such price setting or customer acceptance thereof or reaction thereto.

We may be unable to adequately develop our systems, processes, and support in a manner that will enable us to meet the demand for our services.

We have provided our online products and services for a significant period of time and continue to expand our ability to provide our solutions on both a subscription and transactional basis over the Internet or otherwise. Our future success will depend on our ability to effectively develop and maintain our infrastructure, including procurement of additional hardware and software, integrate and interoperate with third party systems, and to implement the services, including customer support, necessary to meet the demand for our products and services. Our inability from time to time to successfully develop the necessary systems and implement the necessary services on a timely basis may result in our customers experiencing delays, interruptions, and/or errors in their service. Such delays or interruptions may cause customers to become dissatisfied with our service and move to competing providers of workforce development and provider solutions services. If this happens, our reputation, results of operations, and financial condition could be adversely affected.

Our business operations could be significantly disrupted if we lose members of, or fail to attract and integrate new members to, our management team.

Our future performance is substantially dependent on the continued services of our management team and our ability to attract, retain, and motivate them. The loss of the services of any of our officers or senior managers, or the inability to attract additional officers or senior managers as appropriate, could harm our business, as we may not be able to find suitable replacements. We do not have employment agreements with any of our key personnel, other than our chief executive officer, and we do not maintain any “key person” life insurance policies.

We may not be able to attract, hire, and retain a sufficient number of qualified employees and, as a result, we may not be able to effectively execute our growth strategy or maintain the quality of our services.

Our future success will depend on our ability to attract, train, motivate, and retain other highly skilled technical, managerial, marketing, sales, and customer support personnel. Competition for certain personnel is intense, especially for software developers, web designers, user experience and interaction designers, and sales personnel, and we may be unable to successfully attract sufficiently qualified personnel. We have experienced in the past, and continue to experience, difficulty hiring qualified personnel in a timely manner for these positions, and we may not be able to fill positions in desired geographic areas or at all. The pool of qualified technical personnel, in particular, is limited in Nashville, Tennessee, where our headquarters are located. Similar challenges exist within our Provider Solutions segment in our locations in San Diego, California, and Boulder, Colorado. Many of the companies with which we compete for experienced personnel have greater resources than we have and some of these companies may offer more lucrative compensation packages. We anticipate needing to continue to maintain or increase the size of our staff to support our anticipated growth, without compromising the quality of our offerings or customer service. Our inability to locate, attract, hire, integrate and retain qualified personnel in sufficient numbers may reduce the quality of our services and impair our ability to grow and adversely impact our financial performance.

We may not be able to upgrade our hardware and software technology infrastructure quickly enough to effectively meet demand for our services or our operational needs.

We must continue to obtain reasonably priced, commercially available hardware, operating software, and hosting services, as well as continue to enhance our software and systems to accommodate the increased use of our platform, the increased content in our library, the expanding amount and type of data we store on behalf of our customers, and the resulting increase in operational demands on our business. Decisions about hardware and software enhancements are based in part on estimated forecasts of the growth in demand for our services. This growth in demand for our services is difficult to forecast and the potential audience for our services is widespread and dynamic. If we are unable to increase the data storage and processing capacity of our systems at least as fast as the growth in demand, our customers may encounter delays or disruptions in their

service. Unscheduled downtime or reduced response time of our platforms could harm our business and could discourage current and potential customers from using or continuing to use our services and reduce future revenue. If we are unable to acquire, update, or enhance our technology infrastructure and systems quickly enough to effectively meet increased operational demands on our business, that may also have an adverse effect on our results of operations or financial condition. Further, our applications necessarily must integrate with a variety of systems and technologies. As we develop our platforms and rely on ever changing and improving technologies, we may be impeded by our customers' and ecosystem partners' inability to adopt new technologies and technology standards upon which new platform enhancements may be based.

Our network infrastructure and computer systems and software may fail.

An unexpected event (including but not limited to a cyber-security incident, telecommunications failure, fire, earthquake, or other catastrophic loss) at our Internet service providers' facilities, at our on-site data center facilities, or our public-cloud infrastructure providers, could cause the loss of critical data and prevent us from offering our products and services for an unknown period of time. System downtime could negatively affect our reputation and ability to sell our products and services and may expose us to significant third-party claims. Our cyber liability and business interruption insurance may not adequately compensate us for losses that may occur. In addition, we rely on third parties to securely store our archived data, house our infrastructure and network systems, and connect us to the Internet. While our service providers have planned for certain contingencies, the failure by any of these third parties to provide these services satisfactorily and our inability to find suitable replacements would impair our ability to access archives and operate our systems and software, and our customers may encounter delays. Such disruptions could harm our reputation and cause customers to become dissatisfied and possibly take their business to a competing provider, which would adversely affect our financial performance.

A data breach or security incident could result in a loss of confidential data, give rise to remediation and other expenses, expose us to liability under HIPAA, the Health Information Technology for Economic and Clinical Health Act (HITECH), foreign data privacy regulations, federal and state privacy laws, consumer protection laws, common law theories or other laws, subject us to litigation and federal and state governmental inquiries, damage our reputation, and otherwise could adversely impact our business.

There are a variety of other state, national, foreign, and international laws and regulations that apply to the collection, use, retention, protection, security, disclosure, transfer, and other processing of personal data. California has passed the California Consumer Privacy Act of 2018 (CCPA), which took effect January 1, 2020. The CCPA applies broadly to information that identifies or is associated with any California household or individual, and compliance with the CCPA requires that we implement several operational changes, including processes to respond to individuals' data access and deletion requests. In addition, many foreign data privacy regulations (including the General Data Protection Regulation (GDPR), which became effective in the European Union on May 25, 2018, and China's Cybersecurity Law which became effective in 2017) can be more stringent than those in the United States. These laws and regulations are rapidly evolving and changing and could have an adverse effect on our operations. Companies' obligations and requirements under these laws and regulations are subject to uncertainty in how they may be interpreted by government authorities and regulators. The costs of compliance with, and the other burdens imposed by, these and other laws or regulatory actions may increase our operational costs, affect our customers' willingness to permit us to use and store personal data, prevent us from selling our products or services, and/or affect our ability to invest in or jointly develop products. We may also face audits or investigations by one or more domestic or foreign government agencies relating to our compliance with these regulations.

We collect and store sensitive information, including intellectual property, individually identifiable health information, provider credentialing and privileging data, and other personally identifiable information, on our networks. The secure maintenance of this information is critical to our business operations. As a result, the continued development and enhancement of controls, processes, and practices designed to protect our information systems from attack, damage, or unauthorized access remain a priority for us. If the security measures that we use to protect customer or personal information are ineffective, we may lose users of our services, which could reduce our revenue, tarnish our reputation, and subject us to significant liability. In addition, if our subcontractors or subprocessors fail to use adequate security or data protection processes or use personal data in an unpermitted or improper manner, we may be liable for certain losses and may damage our reputation.

We have implemented multiple layers of security measures to protect confidential data that we collect and store through technology, processes, and our people, and our defenses are monitored and routinely tested internally and by external parties. We rely, in part, on security and authentication technology licensed from third parties. With this technology, we perform real-time credit card authorization and verification, as well as the encryption of other selected secure customer data. We cannot predict whether these security measures could be circumvented by new technological developments. Further, the audit processes, penetration and vulnerability testing, and controls used within our production platforms, may not be sufficient to identify and prevent errors or deliberate misuse. In addition, our software, databases, and servers may be vulnerable to computer viruses, physical or electronic attacks, and similar disruptions. We may be at increased risk because we outsource certain services or functions to, or have systems that interface with, third parties. For example, third party IT vendors may not provide us with fixes or updates to hardware or software in a manner as to avoid an unauthorized loss or

disclosure or to address a known vulnerability, which may subject us to known threats or downtime as a result of those delays. Third party vendors that store or have access to our data may not have effective controls, processes, or practices to protect our information from attack, damage, or unauthorized access. A breach or attack affecting any of these third parties could harm our business. We cannot assure that we can prevent all security breaches.

Despite these efforts, a data breach or security incident could result from a variety of circumstances and events, including third-party action, system errors or downtime, employee negligence or error, malfeasance, failures during the process of upgrading or replacing software, databases, or components thereof, power outages, hardware failures, telecommunication failures, user errors, catastrophic events, or threats from malicious persons and groups, new vulnerabilities, and advanced new attacks against information systems. Data incidents could result in interruptions, delays, loss, access, misappropriation, and disclosure or corruption of data which could damage our reputation and could otherwise adversely impact our business. There can be no assurance that we will not be subject to data incidents that bypass our security measures, result in loss of confidential information, or dispute our information systems or business. In addition, data incidents could expose us and our customers to liability under privacy, security, and consumer protection laws, such as HIPAA, CCPA and foreign data privacy regulations, or litigation under these or other laws, including common law theories, and subject us to federal and state governmental inquiries or enforcement, especially if a large number of individuals are affected or if the compromised information is highly sensitive. Like many other organizations, we have experienced data incidents from time to time in the course of our business and handled these incidents in accordance with our internal policies and understanding of the applicable laws. We may need to spend significant resources to protect against security breaches or to alleviate problems caused by any breaches.

Furthermore, we have acquired a number of companies, products, services, and technologies over the years. Although we devote significant resources to address any security issues with respect to such acquisitions, we still may inherit additional risks when we integrate those companies within HealthStream. Moreover, if a high-profile security breach occurs with respect to an industry peer, our customers and potential customers may lose trust in the security of our solutions in general.

As threats to confidential information continue to evolve, we may be required to expend significant additional resources to continue to modify or enhance our internal processes, governance, protective measures, or to investigate and remediate any security vulnerabilities. The occurrence of a data incident and the resulting potential costs and liabilities could have an adverse effect on our financial position and results of operations and harm our business reputation.

We may experience errors or omissions in our software products or processes, including those that deliver provider credentialing, privileging, and payer enrollment services for our hospitals and medical practice customers and those that administer and report on hospital performance, and these errors could result in action taken against us that could harm our business.

Hospitals and medical practices use our credentialing, privileging, and payer enrollment software to manage, validate, and maintain their providers' credentials and authorization to practice in a particular facility and to maintain authorization to perform care covered by insurance providers. In some instances, we rely on sources outside the Company for information that we use in our credentialing and privileging products. If errors or omissions occur that inaccurately validate or invalidate the credentials of a provider, or improperly deny or authorize a provider to practice in a hospital or medical practice, these errors or omissions could result in litigation brought against us either by our customers, the provider, or other interested parties. For example, an important element in a malpractice case brought against a hospital or other provider could be the validation of proper credentialing for the provider, and any errors or omissions in our products that provide these services could subject us to claims. Further, a list of providers' privileges may be made available to the general public by hospitals and medical practices, and errors in credentialing and privileging may result in damage to the hospital, medical practice, or provider.

We may be required to indemnify against such claims, and defending against any such claims could be costly and time-consuming and could negatively affect our business.

The expiration of our legacy agreements with Laerdal could adversely affect our business and future results of operations.

Our legacy agreements with Laerdal (Legacy Agreements) for the HeartCode and Resuscitation Quality Improvement (RQI) products expired pursuant to their terms on December 31, 2018 and were not renewed. Revenues associated with sales of HeartCode and RQI products pursuant to the Legacy Agreements have been significant in recent years, although margins on such products have been lower than HealthStream's average margin. Revenues from these products were \$58.9 million in 2019 and are expected to decline to approximately \$36.0 million in 2020 (with sequential declines anticipated in each

quarter of 2020) as we conclude the fulfillment of HeartCode and RQI purchases made prior to December 31, 2018 and will be approximately zero beginning with the first quarter of 2021.

While we have entered into agreements to market, sell, and deliver new resuscitation programs to our customers (i.e., other than HeartCode and RQI), including through our collaboration with the American Red Cross which was announced in January 2019, there is no assurance that we will be successful in efforts to market, sell, or deliver such products. To the extent we are not successful in these efforts and new resuscitation programs do not generate revenue and/or earnings in a manner that supplants the impact of the Legacy Agreements, our revenue and results of operations will be adversely affected.

Risks Related to Government Regulation, Content and Intellectual Property

Government regulation may subject us to investigation, litigation, or liability or require us to change the way we do business.

The laws and regulations that govern our business change rapidly. Evolving areas of law that are relevant to our business include privacy and security laws, proposed encryption laws, content regulation, information security accountability regulation, sales and use tax laws, and regulations and attempts to regulate activities on the Internet. For example, we are directly subject to certain requirements of the HIPAA privacy and security regulations. In addition, we are required through contracts with our customers known as “business associate agreements” to protect the privacy and security of certain personal and health related information. Further, government laws and regulations, such as the Affordable Care Act, that directly affect our customers, can have an indirect impact on our business.

We may lose sales from existing or potential customers, or incur significant expenses, if states are successful in imposing sales and use taxes on our services to a greater degree than is currently the case or we inherit potential states and use tax compliance issues in connection with acquisitions we may make from time to time. A successful assertion by one or more states that we should collect sales or uses taxes on the sale of our services to a greater degree than is our current practice could result in substantial tax liabilities for past sales, decrease our ability to compete on pricing with other vendors, and 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 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.

The rapidly evolving and uncertain regulatory and technology environment could require us to change how we do business or incur additional costs. It may be difficult to predict how changes to these laws and regulations might affect our business. Our current and past privacy and security practices, including any breaches of protected health information or other data, could be subject to review or other investigation by various state and federal regulatory authorities or could become the subject of future litigation.

Failure to comply with applicable laws and regulations, including those governing privacy and security, could subject us to civil and criminal penalties, subject us to contractual penalties (including termination of our customer agreements), adversely affect our ability to retain clients and attract new clients, damage our reputation, or otherwise have a detrimental impact on our business.

Any reduction or change in the regulation of continuing education and training in the healthcare industry may adversely affect our business.

A portion of our business model is dependent in part on required training and continuing education for healthcare professionals and other healthcare workers resulting from regulations of state and federal agencies, state licensing boards, and professional organizations. Any change in these regulations that reduce the requirements for continuing education and training for the healthcare industry could harm our business. In addition, a portion of our business with pharmaceutical and medical device manufacturers and hospitals is predicated on our ability to maintain accreditation status with organizations such as the ACCME and ANCC. The failure to maintain status as an accredited provider could have a detrimental effect on our business.

We may be liable to third parties for content that is sold or made available by us.

We may be liable to third parties for the content sold or made available by us if the text, graphics, software, or other content therein violates copyright, trademark, or other intellectual property rights, if our ecosystem partners violate their contractual obligations to others by providing content that we sell or make available, or if the content is inaccurate, incomplete, or does not conform to accepted standards of care in the healthcare profession. Further, we may be liable to these ecosystem partners

if we allow access or release and lose control of their intellectual property stored on our platform either due to security issues or through improper release to customers who have not paid for access to such intellectual property. We attempt to minimize these types of liabilities by requiring representations and warranties relating to our intellectual property partners' ownership of the rights to distribute as well as the accuracy of their intellectual property. We also take necessary measures to review this intellectual property ourselves. Although our agreements with our ecosystem partners in most instances contain provisions providing for indemnification by the ecosystem partners in the event of inaccurate intellectual property, our ecosystem partners may not have the financial resources to meet these indemnification obligations. Alleged liability could harm our business by damaging our reputation, requiring us to incur legal costs in defense, exposing us to awards of damages and costs, and diverting management's attention away from our business.

Protection of certain intellectual property may be difficult and costly, and our inability to protect our intellectual property could reduce the value of our products and services.

Despite our efforts to protect our intellectual property rights, as well as the intellectual property rights of our ecosystem partners, a third party could, without authorization, copy or otherwise misappropriate our content, information from our databases, or other intellectual property, including that of our third-party ecosystem partners. Our agreements with employees, consultants, and others who participate in development activities could be breached and result in our trade secrets becoming known. Alternatively, competitors and other third parties may independently develop or create content or systems that do not infringe our intellectual property rights. We may not have adequate remedies for such breaches or protections against such competitor developments. In addition, the laws of some foreign countries do not protect our proprietary rights to the same extent as the laws of the United States, and effective intellectual property protection may not be available in those jurisdictions.

Our business could be harmed if unauthorized parties infringe upon or misappropriate our intellectual property, proprietary systems, content, platform, services, or other information or the intellectual property of our ecosystem partners. Our efforts to protect our intellectual property through copyright, trademarks, and other controls, as well as our efforts to protect the intellectual property of our ecosystem partners, may not be adequate. For instance, we may not be able to secure trademark or service mark registrations for marks in the United States or in foreign countries, or to secure patents for our proprietary products and services, and even if we are successful in obtaining patent and/or trademark registrations, these registrations may be opposed or invalidated by a third party. We also have certain contractual obligations to protect the intellectual property of our ecosystem partners and could be required to indemnify such ecosystem partners if we do not adequately provide such protections.

There has been substantial litigation in the software services and healthcare technology industries regarding intellectual property assets, particularly patents. Third parties may claim infringement by us with respect to current and future products, trademarks, or other proprietary rights, and we may counterclaim against such third parties in such actions. Any such claims or counterclaims could be time-consuming, result in costly litigation, divert management's attention, cause product release delays, require us to redesign our products, restrict our use of the intellectual property subject to such claim, or require us to enter into royalty or licensing agreements, any of which could have an adverse effect upon our business, financial condition, and operating results. Such royalty and licensing agreements may not be available on terms acceptable to us, if at all.

We may be liable for infringing the intellectual property rights of others.

Our competitors may develop similar intellectual property, duplicate our products and/or services, or design around any patents or other intellectual property rights we hold. Litigation may be necessary to enforce our intellectual property rights or to determine the validity and scope of the patents, intellectual property, or other proprietary rights of third parties, which could be time consuming and costly and have an adverse effect on our business and financial condition. Intellectual property infringement claims could be made against us and our ecosystem partners, especially as the number of our competitors grows. These claims, even if not meritorious, could be expensive and divert our attention from operating our company and result in a temporary inability to use the intellectual property subject to such claim. In addition, if we, our ecosystem partners, and/or customers become liable to third parties for infringing their intellectual property rights, we could be required to pay a substantial damage award and develop comparable non-infringing intellectual property, to obtain a license, or to cease providing the content or services that contain the infringing intellectual property. We may be unable to develop non-infringing intellectual property or obtain a license on commercially reasonable terms, if at all.

We use open source software in our products, which could subject us to litigation or other actions.

We use open source software in our products and may use more open source software in the future. From time to time, there have been claims challenging the ownership of open source software against companies that incorporate open source software into their products. As a result, we could be subject to suits by parties claiming ownership of what we believe to be open source software. Litigation could be costly for us to defend, have a negative effect on our operating results and financial condition or require us to devote additional research and development resources to change our products. In addition, if we were to combine our proprietary software products with open source software in a certain manner, we could, under certain of the open source licenses, be required to release the source code of our proprietary software products. If we inappropriately use open source software, we may be required to re-engineer our products, discontinue the sale of our products, or take other remedial actions.

Other Risks

It may be difficult for a third party to acquire our company, and this could depress our stock price.

Tennessee corporate law and our charter and bylaws contain provisions that could delay, defer, or prevent a change in control of our company or our management. These provisions could also discourage proxy contests and make it more difficult for you and other shareholders to elect directors and take other corporate actions. These provisions:

- authorize us to issue "blank check" preferred stock, which is preferred stock that can be created and issued by the board of directors, without prior shareholder approval, with rights senior to those of common stock;
- provide for a staggered board of directors comprised of three classes such that it would take three successive annual meetings to replace all directors;
- prohibit shareholder action by written consent; and
- establish advance notice requirements for submitting nominations for election to the board of directors and for proposing matters that can be acted upon by shareholders at a meeting.

These provisions, either alone or in combination with each other, give our current directors a substantial ability to influence the outcome of a proposed acquisition of the Company. These provisions would apply even if an acquisition or other significant corporate transaction was considered beneficial by some of our shareholders. If a change in control or change in management is delayed or prevented by these provisions, the market price of our securities could decline. As a result, these provisions could limit the price that investors are willing to pay in the future for shares of our common stock.

Item 1B. *Unresolved Staff Comments*

None.

Item 2. *Properties*

Our principal office is located in Nashville, Tennessee, which is primarily used to support our workforce solutions operations and corporate functions. Our lease for approximately 92,000 square feet at this location will end in October 2031. As of December 31, 2019, we leased other facilities in Nashville, Tennessee; Jericho, New York; San Diego, California; Chicago, Illinois; Denver, Colorado; and Boulder, Colorado.

Item 3. *Legal Proceedings*

None.

Item 4. *Mine Safety Disclosures*

Not applicable.

PART II

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

Our common stock is traded on the Nasdaq Global Select Market under the symbol "HSTM". Our common stock began trading on the Nasdaq National Market on April 14, 2000.

As of February 21, 2020, the Company had a total of 8,698 shareholders, including 1,018 registered holders and 7,680 beneficial holders.

DIVIDEND POLICY

In our history, we have only declared and paid a dividend one time. In connection with the proceeds from divestiture of the Patient Experience business unit in 2018, we declared a \$1.00 per common share special cash dividend, which was paid on April 3, 2018 to shareholders of record on March 6, 2018. We do not anticipate paying normal cash dividends in the future as we intend to retain earnings for use in the operation of our business.

See the table labeled Securities Authorized for Issuance Under Equity Compensation Plans to be contained in our 2020 Proxy Statement, incorporated by reference in Part III, Item 12 of this Annual Report on Form 10-K.

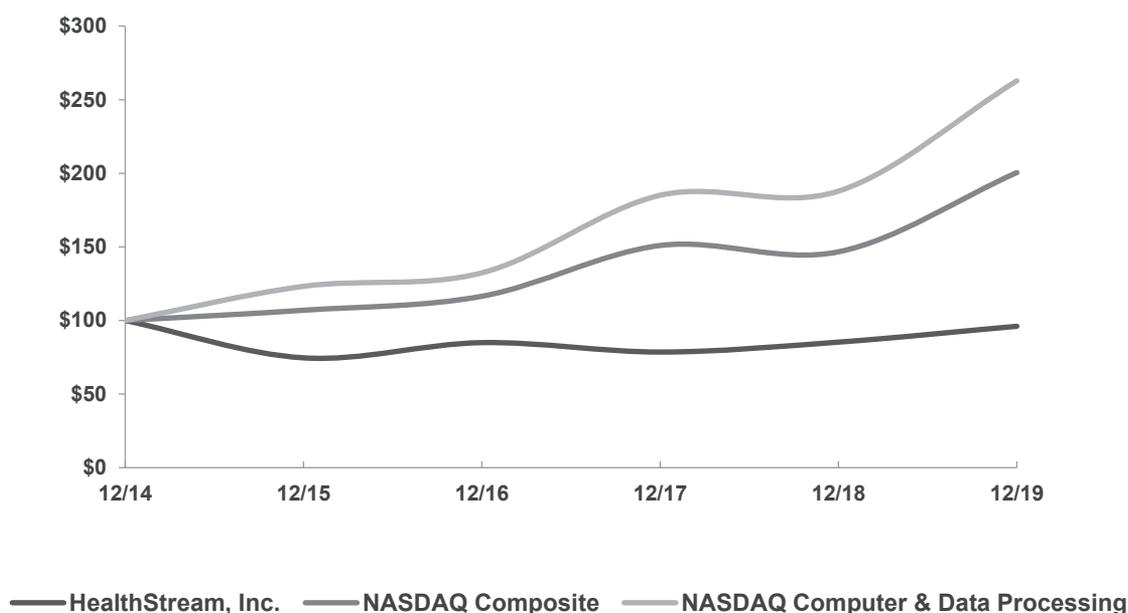
STOCK PERFORMANCE GRAPH

The graph below matches HealthStream, Inc.'s cumulative five-year total shareholder return on common stock with the cumulative total returns of the NASDAQ Composite index and the NASDAQ Computer & Data Processing index. The graph tracks the performance of a \$100 investment in our common stock and in each index (with the reinvestment of all dividends) from 12/31/2014 to 12/31/2019.

The comparisons in the graph below are based on historical data and are not necessarily indicative of future performance of our common stock.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN*

Among HealthStream, Inc., the NASDAQ Composite Index
and the NASDAQ Computer & Data Processing Index



*\$100 invested on 12/31/14 in stock or index, including reinvestment of dividends.
Fiscal year ending December 31.

	12/14	12/15	12/16	12/17	12/18	12/19
HealthStream, Inc.	100.00	74.63	84.97	78.56	85.31	96.08
NASDAQ Composite	100.00	106.96	116.45	150.96	146.67	200.49
NASDAQ Computer & Data Processing	100.00	123.21	132.37	185.07	187.89	262.83

The stock price performance included in this graph is not necessarily indicative of future stock price performance.

RECENT SALES OF UNREGISTERED SECURITIES

None.

ISSUER PURCHASES OF EQUITY SECURITIES

None.

Item 6. Selected Financial Data

The selected statement of income and balance sheet data for the five years prior to December 31, 2019 is derived from our audited Consolidated Financial Statements. You should read the following selected financial data in conjunction with our Consolidated Financial Statements and the notes to those statements and Management's Discussion and Analysis of Financial Condition and Results of Operations included elsewhere in this report.

In February 2018, HealthStream divested its PX business to Press Ganey. The results of operations for the PX are presented as discontinued operations within the Consolidated Statement of Income data set forth below. Additionally, on January 1, 2018, HealthStream adopted Accounting Standards Update (ASU) 2014-09, *Revenue from Contracts with Customers (Topic 606)* and all the related amendments and guidance (collectively, ASC 606), using the modified retrospective method with the cumulative effect of initially applying the guidance recognized upon adoption. On January 1, 2019, HealthStream adopted ASC 842, *Leases* using the modified retrospective method. The financial information below for the periods prior to adoption of these standards has not been restated and continues to be reported under the revenue recognition and leases standards which were in effect for those periods (ASC 605 and ASC 840, respectively). See Note 1 of the Notes to the Consolidated Financial Statements, included elsewhere in this report, for further information.

In addition, HealthStream completed several acquisitions during the five years prior to December 31, 2019, including the acquisitions of HealthLine Systems, Inc. on March 16, 2015, Performance Management Services, Inc. on June 30, 2016, Nursing Registry Consultants Corporation on July 25, 2016, Morrisey Associates, Inc. on August 8, 2016, Providigm, LLC on January 10, 2019, and CredentialMyDoc on December 16, 2019. The results of operations for these acquired companies are included within our Consolidated Statement of Income data effective from the respective dates of acquisition. As a result of these factors, the annual results presented below are not comparable. The operating results for any single year are not necessarily indicative of the results to be expected in the future.

	Year Ended December 31, (in thousands, except per share data)				
	2019	2018	2017	2016	2015
STATEMENT OF INCOME DATA:					
Revenues, net	\$254,112	\$231,616	\$214,899	\$192,124	\$174,809
Total operating costs and expenses	239,392	216,125	205,492	184,953	161,641
Operating income	14,720	15,491	9,407	7,171	13,168
Income from continuing operations	14,196	13,251	8,838	4,791	8,273
Income from discontinued operations	1,574	18,966	1,166	(1,036)	348
Net income	15,770	32,217	10,004	3,755	8,621
PER SHARE DATA (DILUTED):					
Net income from continuing operations	\$ 0.44	\$ 0.41	\$ 0.27	\$ 0.15	\$ 0.27
Net income (loss) from discontinued operations	0.05	0.59	0.04	(0.03)	0.01
Net income	0.49	1.00	0.31	0.12	0.28
Weighted average shares of common stock outstanding	32,428	32,335	32,196	32,068	30,436
Dividends declared	—	1.00	—	—	—
BALANCE SHEET DATA:					
Cash and cash equivalents	\$131,538	\$134,321	\$ 84,768	\$ 49,634	\$ 82,010
Marketable securities	41,328	34,497	46,350	53,540	66,976
Accounts receivable, net	27,650	38,124	36,691	40,340	29,654
Goodwill and intangible assets	162,277	145,522	154,641	163,321	113,895
Working capital	119,387	134,581	98,662	82,467	120,459
Total assets	489,544	441,948	411,119	396,000	379,569
Deferred revenue – current and noncurrent	67,429	68,929	71,225	72,115	63,034
Operating lease liability, non-current	30,733	—	—	—	—
Shareholders' equity	338,168	318,947	300,170	286,108	280,320

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

The following discussion of the financial condition and results of operations of HealthStream should be read in conjunction with Selected Financial Data and HealthStream's Consolidated Financial Statements and related notes thereto included elsewhere in this report. This discussion contains forward-looking statements that involve risks and uncertainties. HealthStream's actual results may differ significantly from the results discussed and those anticipated in these forward-looking statements as a result of many factors, including but not limited to the risks described under Risk Factors and elsewhere in this report, as well as additional risks or uncertainties not presently known to us or that we currently deem immaterial.

The following discussion addresses our 2019 and 2018 results and year-to-year comparisons between 2019 and 2018. A discussion of 2017 results and year-to-year comparisons between 2018 and 2017 can be found in our Annual Report on Form 10-K for the fiscal year ended December 31, 2018, filed with the SEC on February 25, 2019, under Part II, Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations.

OVERVIEW

HealthStream provides workforce development and provider solutions for healthcare organizations—all designed to support the people that deliver patient care, which in turn, supports the improvement of business and clinical outcomes. Workforce Solutions products are used by healthcare organizations to meet a broad range of their clinical development, talent management, training, certification, competency assessment, and performance appraisal needs. Provider Solutions products are used by healthcare organizations for provider credentialing, privileging, and enrollment needs. HealthStream's customers include healthcare organizations, pharmaceutical and medical device companies, and other participants in the healthcare industry.

On February 12, 2018, the Company divested its PX business to Press Ganey for \$65.2 million in cash (after giving effect to the post-closing working capital adjustment). Prior to the disposition of the PX business, our patient experience solutions products provided our customers information about patients' experiences and how to improve them, workforce engagement, physician relations, and community perceptions of their services. The historical financial results of the PX business for

periods prior to the closing of the disposition of the PX business on February 12, 2018 are reflected in the Company's Consolidated Financial Statements as discontinued operations. This sale of the PX business resulted in the Company's divestiture of the patient experience solutions business segment.

Revenues for the year ended December 31, 2019 were \$254.1 million, compared to \$231.6 million for the year ended December 31, 2018, an increase of 10%. Operating income decreased by 5% to \$14.7 million for 2019, compared to \$15.5 million for 2018, and was negatively impacted by the approximately \$2.2 million expense associated with the June 2019 stock grant to employees in connection with the contribution of stock by our CEO to the Company to enable such stock grants. Income from continuing operations increased by 7% to \$14.2 million for 2019, compared to \$13.3 million for 2018. Earnings per share (EPS) from continuing operations were \$0.44 per share (diluted) for 2019, compared to \$0.41 per share (diluted) for 2018. Net income decreased to \$15.8 million for 2019, compared to \$32.2 million for 2018, which decrease was primarily driven by the \$19.0 million gain, net of tax, recorded on the sale of the PX business in 2018. Earnings per share were \$0.49 per share (diluted) for 2019, compared to \$1.00 per share (diluted) for 2018. Revenues from Workforce Solutions grew by 10%, or \$18.5 million, and revenues from Provider Solutions grew by 10%, or \$4.0 million. As of December 31, 2019, the Company had approximately 3.15 million contracted subscriptions to hStream™, our Platform-as-a-Service technology. As of December 31, 2019, cash and investment balances approximated \$172.9 million, and the Company maintained full availability under its \$50.0 million revolving credit facility.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

Revenue Recognition

Revenues are recognized when control of the promised goods or services is transferred to the customer in an amount that reflects the consideration the Company expects to be entitled in exchange for transferring those goods or services.

Revenue is recognized based on the following five step model:

- Identification of the contract with a customer
- Identification of the performance obligations in the contract
- Determination of the transaction price
- Allocation of the transaction price to the performance obligations in the contract
- Recognition of revenue when, or as, the Company satisfies a performance obligation

Subscription services revenues primarily consist of fees in consideration of providing customers access to one or more of our SaaS-based solutions and/or courseware subscriptions, as well as fees related to licensing agreements, all of which include routine customer support and technology enhancements. Revenue is generally recognized over time during the contract term beginning when the service is made available to the customer. Subscription contracts are generally non-cancelable, one to five years in length, and billed annually, semi-annually, quarterly, or monthly in advance.

Professional services revenues primarily consist of fees for implementation services, consulting, custom courseware development, and training. The majority of our professional services contracts are billed in advance based on a fixed price basis, and revenue is recognized over time as the services are performed. For both subscription services and professional services, the time between billing the customer and when performance obligations are satisfied is generally not significant.

Our contracts with customers often contain promises for multiple goods and services. For these contracts, the Company accounts for the promised goods and services in its contracts as separate performance obligations if they are distinct. The contract price, which represents transaction price, is allocated to the separate performance obligations on a relative standalone selling price basis. We generally determine standalone selling prices based on the standard list price for each product, taking into consideration certain factors, including contract length and the number of subscriptions within the contract.

We receive payments from customers based on billing schedules established in our contracts. Accounts receivable - unbilled represent contract assets related to our conditional right to consideration where performance has occurred under the contract. Accounts receivable are primarily comprised of trade receivables that are recorded at the invoice amount, net of an allowance for doubtful accounts, when the right to consideration becomes unconditional.

Deferred revenue represents contract liabilities that are recorded when cash payments are received or are due in advance of our satisfaction of performance obligations.

Accounting for Income Taxes

The Company accounts for income taxes using the asset and liability method, whereby deferred tax assets and liabilities are determined based on the temporary differences between the financial statement and tax bases of assets and liabilities measured at tax rates that will be in effect for the year in which the differences are expected to affect taxable income. Management evaluates all available evidence, both positive and negative, to determine whether, based on the weight of that evidence, a valuation allowance is needed. We assess the realizability of our deferred tax assets, and to the extent that we believe a recovery is not likely, we establish a valuation allowance to reduce the deferred tax asset to the amount we estimate will be recoverable. As of December 31, 2019, the Company established a valuation allowance of \$64,000 for the portion of its deferred tax assets that are not more likely than not expected to be realized.

Software Development Costs

Capitalized software development includes costs to develop, acquire, and maintain our products and applications, including our SaaS-based workforce development and provider solutions platform products, which are accounted for as internal use software. For internal use software development, once planning is completed and the software development process begins, internal costs and payments to third parties associated with the software development efforts are capitalized when the life expectancy is greater than one year and the anticipated cash flows are expected to exceed the cost of the related asset. During 2019 and 2018, we capitalized \$14.1 million and \$11.9 million, respectively, for software development and content. Such amounts are included in the accompanying Consolidated Balance Sheets under the caption capitalized software development. The Company amortizes capitalized software development costs over their expected life of generally three years using the straight-line method. Capitalized software development costs are subject to a periodic impairment review in accordance with our impairment review policy.

Goodwill, Intangibles, and Other Long-lived Assets

Goodwill represents the excess of purchase price in a business combination over the fair value of the net identifiable assets acquired. We evaluate goodwill for impairment at the reporting unit level by assessing whether it is more likely than not that the fair value of a reporting unit exceeds its carrying value. If this assessment concludes that it is more likely than not that the fair value of a reporting unit exceeds its carrying value, then goodwill is not considered impaired and no further impairment testing is required. Conversely, if the assessment concludes that it is more likely than not that the fair value of a reporting unit is less than its carrying value, a goodwill impairment test is performed to compare the fair value of the reporting unit to its carrying value. The Company determines fair value of the reporting units using both income and market-based models. Our models contain significant assumptions and accounting estimates about discount rates, future cash flows, and terminal values that could materially affect our operating results or financial position if they were to change significantly in the future and could result in an impairment. We perform our goodwill impairment assessment whenever events or changes in facts or circumstances indicate that impairment may exist and during the fourth quarter each year. Intangible assets and other long-lived assets are also reviewed for events or changes in facts and circumstances, both internally and externally, which may indicate an impairment is present. We measure any impairment using observable market values or discounted future cash flows from the related long-lived assets. The cash flow estimates and discount rates incorporate management's best estimates, using appropriate and customary assumptions and projections at the date of evaluation.

Allowance for Doubtful Accounts

The Company estimates its allowance for doubtful accounts to include accounts that may become uncollectible in the future, along with using a specific identification method in which management considers the facts and circumstances surrounding each potentially uncollectible receivable. Uncollectible receivables are written-off in the period management believes it has exhausted its ability to collect payment from the customer. Bad debt expense is recorded when events or circumstances indicate an additional allowance is required. Our allowance for doubtful accounts totaled \$0.8 million and \$1.2 million as of December 31, 2019 and 2018, respectively.

RESULTS OF OPERATIONS

Revenues and Expense Components

The following descriptions of the components of revenues and expenses apply to the comparison of results of operations.

Revenues, net. Revenues for our Workforce Solutions business segment primarily consist of the following products and services: provision of services through our SaaS-based platform, authoring tools, a variety of content subscriptions, competency and performance appraisal tools, implementation and consulting services, content development, training, and a variety of other educational activities to serve professionals that work within healthcare organizations. Revenues for our Provider Solutions business segment are generated from our proprietary software and SaaS-based applications to help facilitate provider credentialing, privileging, call center, and enrollment administration for healthcare organizations.

Cost of Revenues (excluding depreciation and amortization). Cost of revenues (excluding depreciation and amortization) consists primarily of salaries and employee benefits, stock based compensation, employee travel and lodging, materials, contract labor, hosting costs, and other direct expenses associated with revenues, as well as royalties paid by us to content providers based on a percentage of revenues. Personnel costs within cost of revenues are associated with individuals that facilitate product delivery, provide services, handle customer support calls or inquiries, manage the technology infrastructure for our applications, manage content, and provide training or implementation services.

Product Development. Product development consists primarily of salaries and employee benefits, contract labor, stock based compensation, costs associated with the development of new software feature enhancements, new products, and costs associated with maintaining and developing our products. Personnel costs within product development include our systems teams, application development, quality assurance teams, product managers, and other personnel associated with software and product development.

Sales and Marketing. Sales and marketing consist primarily of salaries and employee benefits, commissions, stock based compensation, employee travel and lodging, advertising, trade shows, customer conferences, promotions, and related marketing costs. Personnel costs within sales and marketing include our sales teams and marketing personnel.

Other General and Administrative Expenses. Other general and administrative expenses consist primarily of salaries and employee benefits, stock based compensation, employee travel and lodging, facility expenses, office expenses, fees for professional services, business development and acquisition related costs, third party software licensing for internal use, and other operational expenses. Personnel costs within general and administrative expenses include individuals associated with normal corporate functions (accounting, legal, business development, human resources, administrative, internal information systems, and executive management).

Depreciation and Amortization. Depreciation and amortization consist of fixed asset depreciation, amortization of intangibles considered to have definite lives, and amortization of capitalized software development.

Other Income (Expense), Net. The primary component of other income is interest income related to interest earned on cash, cash equivalents, and investments in marketable securities. The primary component of other expense is interest expense related to our revolving credit facility. In addition, the income or loss attributed to equity method investments and fair value adjustments related to non-marketable equity investments is included in this category.

2019 Compared to 2018

Revenues, net. Revenues increased approximately \$22.5 million, or 10%, to \$254.1 million for 2019 from \$231.6 million for 2018. A comparison of revenues by business segment is as follows (in thousands):

Revenues by Business Segment:	Year Ended December 31,		Percentage Change
	2019	2018	
Workforce Solutions	\$ 208,599	\$ 190,139	10%
Provider Solutions	45,513	41,477	10%
Total revenues, net	\$ 254,112	\$ 231,616	10%
% of Revenues			
Workforce Solutions	82%	82%	
Provider Solutions	18%	18%	

Revenues for Workforce Solutions, which are primarily subscription-based, increased \$18.5 million, or 10%, to \$208.6 million for 2019 from \$190.1 million for 2018. Revenues in 2019 were positively impacted by higher revenues from our legacy resuscitation products, which were \$58.9 million for 2019 compared to \$54.6 million for 2018, and growth in platform and content subscriptions. The acquisition of Providigm, LLC in January 2019 also added \$6.9 million of revenue to 2019. At December 31, 2019, the Company had 3.15 million contracted subscriptions to hStream™, our Platform-as-a-Service technology as compared to 1.51 million contracted subscriptions at December 31, 2018.

Revenues for Provider Solutions increased \$4.0 million, or 10%, to \$45.5 million for 2019 from \$41.5 million for 2018. Revenue growth in 2019 was primarily a result of new VerityStream subscriptions and professional services for client implementations.

Cost of Revenues (excluding depreciation and amortization). Cost of revenues increased \$7.9 million, or 8%, to \$103.9 million for 2019 from \$96.0 million for 2018. Cost of revenues as a percentage of revenues was 41% of revenues for both 2019 and 2018.

Cost of revenues for Workforce Solutions increased \$6.2 million to \$88.6 million and approximated 42% and 43% of revenues for Workforce Solutions for 2019 and 2018, respectively. The increase in expense primarily resulted from increased royalties paid by us resulting from growth in content subscription revenues, additions to personnel during 2019, operating expenses associated with the Providigm business acquired in January 2019, and stock based compensation related to the stock awards granted during the three months ended June 30, 2019 in connection with the contribution of stock by our chief executive officer to enable such grants. Cost of revenues for Provider Solutions increased \$1.7 million to \$15.3 million and approximated 34% and 33% of Provider Solutions revenues for 2019 and 2018, respectively. The increase is primarily associated with additions to personnel and increased hosting costs.

Product Development. Product development expenses increased \$3.4 million, or 13%, to \$29.1 million for 2019 from \$25.7 million for 2018. Product development expenses as a percentage of revenues were 11% of revenues for both 2019 and 2018.

Product development expenses for Workforce Solutions increased \$3.0 million to \$23.9 million and approximated 11% of revenues for Workforce Solutions for both 2019 and 2018. The increase is primarily due to additions to personnel during 2019, the Providigm acquisition, and stock based compensation related to the stock awards granted during the three months ended June 30, 2019 as noted above. Product development expenses for Provider Solutions increased \$0.4 million to \$5.2 million and approximated 11% and 12% of revenues for Provider Solutions for 2019 and 2018, respectively. The increase is primarily due to additions to personnel during 2019 as well as stock based compensation related to the stock awards granted during the three months ended June 30, 2019 as noted above.

Sales and Marketing. Sales and marketing expenses, including personnel costs, increased \$2.2 million, or 6%, to \$37.9 million for 2019 from \$35.7 million for 2018. Sales and marketing expenses were 15% of revenues for both 2019 and 2018.

Sales and marketing expenses for Workforce Solutions increased \$2.2 million to \$30.6 million and approximated 15% of revenues for Workforce Solutions for both 2019 and 2018. The increase is primarily due to higher sales commissions consistent with the increase in revenues, stock based compensation related to the stock awards granted during the three months ended June 30, 2019 as noted above, and sales and marketing expense associated with the Providigm business acquired in January 2019. Sales and marketing expenses for Provider Solutions increased \$0.1 million to \$6.2 million and approximated 14% and 15% of revenues for Provider Solutions for 2019 and 2018, respectively. The increase in expense is primarily due to higher marketing expenses. The unallocated corporate portion of sales and marketing expenses decreased by \$48,000 to \$1.1 million for 2019.

Other General and Administrative Expenses. Other general and administrative expenses increased \$6.2 million, or 18%, to \$40.6 million for 2019 from \$34.4 million for 2018. Other general and administrative expenses as a percentage of revenues were 16% and 15% of revenues for 2019 and 2018, respectively.

Other general and administrative expenses for Workforce Solutions increased \$4.7 million to \$14.4 million and approximated 7% and 5% of revenues for Workforce Solutions for 2019 and 2018, respectively. The increase is primarily due to higher personnel costs, increased software expenses, higher facilities expense, and the Providigm acquisition. Other general and administrative expenses for Provider Solutions decreased \$1.0 million to \$3.6 million and approximated 8% and 11% of revenues for Provider Solutions for 2019 and 2018, respectively. The decrease is primarily due to a reduction in contract labor and a reduction in facilities expense. The unallocated corporate portion of other general and administrative expenses increased approximately \$2.5 million to \$22.6 million over 2018, primarily due to increases to personnel, software expense, other administrative costs, and stock based compensation related to the stock awards granted during the three months ended June 30, 2019 as noted above.

Depreciation and Amortization. Depreciation and amortization increased \$3.7 million, or 15%, to \$27.9 million for 2019 from \$24.2 million for 2018. The increase resulted from higher depreciation of property and equipment related to the relocation to our new corporate headquarters, higher amortization of capitalized software development, and amortization of intangibles following our acquisitions of Providigm and CredentialMyDoc in January 2019 and December 2019, respectively.

Other Income, Net. Other income, net was \$3.2 million for 2019 compared to \$1.1 million for 2018. The increase is due to the \$1.3 million decline in the carrying value of non-marketable equity investments recorded in 2018 coupled with higher interest income from cash and investments in marketable securities.

Income Tax Provision. The Company recorded a provision for income taxes of \$3.7 million for 2019 compared to \$3.3 million for 2018. The Company's effective tax rate was 21% for 2019 compared to 20% for 2018. The increase in income tax expense during 2019 is primarily attributable to the increase in pre-tax income in 2019.

Income from Continuing Operations. Income from continuing operations was \$14.2 million for 2019 compared to \$13.3 million for 2018. Earnings per diluted share from continuing operations were \$0.44 and \$0.41 per share for 2019 and 2018, respectively.

Income from Discontinued Operations. On February 12, 2018, the Company divested its PX business to Press Ganey for \$65.2 million in cash (after giving effect to the post-closing working capital adjustment), resulting in a gain, net of tax, of \$1.6 million in 2019 and \$19.0 million in 2018.

Net Income. Net income decreased approximately \$16.4 million, or 51%, to \$15.8 million for 2019 compared to \$32.2 million for 2018. The decrease resulted primarily from the gain on the sale of the PX business in 2018 as noted above. Earnings per diluted share were \$0.49 per share for 2019, compared to \$1.00 per share for 2018.

Adjusted EBITDA (a non-GAAP financial measure which we define as net income before interest, income taxes, stock based compensation, depreciation and amortization, and changes in fair value of non-marketable equity investments) from continuing operations increased 13% to \$46.9 million for 2019 compared to \$41.5 million for 2018.

Adjusted EBITDA decreased 31% to \$48.9 million for 2019 compared to \$71.1 million for 2018. The decrease resulted primarily from the gain on the sale of the PX business in 2018 as noted above. See Reconciliation of Non-GAAP Financial Measures below for our reconciliation of this calculation to measures under US GAAP.

Other Developments

Our legacy agreements with Laerdal (the "Legacy Agreements") for the HeartCode and Resuscitation Quality Improvement ("RQI") products expired pursuant to their terms on December 31, 2018. Revenues associated with sales of HeartCode and RQI products pursuant to the Legacy Agreements have been significant in recent years, although margins on such products have been lower than HealthStream's average margin. Revenue generated by HeartCode and RQI products pursuant to the Legacy Agreements was \$58.9 million and \$54.6 million in 2019 and 2018, respectively. In 2020, we expect the revenue from these products generated pursuant to the Legacy Agreements to be approximately \$36 million, with quarterly revenues in 2020 anticipated to be as follows: approximately \$11.0 million in the first quarter, approximately \$10.5 million in the second quarter, approximately \$8.5 million in the third quarter, and approximately \$6.0 million in the fourth quarter. We also continue to expect revenue from HeartCode and RQI products sold pursuant to the Legacy Agreements to be approximately zero in the first quarter of 2021.

On December 6, 2018, we announced a new agreement with RQI Partners, a joint venture between Laerdal and the American Heart Association. This agreement with RQI Partners was not an extension or renewal of the expired Legacy Agreements with Laerdal and should not be construed as such. Under our agreement with RQI Partners, HealthStream will neither market nor sell HeartCode or RQI. Our RQI Partners agreement provides for continuity of service for customers that desire to purchase HeartCode or RQI from RQI Partners after December 31, 2018 and receive it via the HealthStream Learning Center. RQI Partners will remit a fee to us when new sales of HeartCode and RQI are delivered via the HealthStream Learning Center. This fee will not be sufficient to supplant the revenue runout associated with the Legacy Agreements, and no material revenues have been recognized under this agreement through December 31, 2019.

We remain actively engaged in efforts to broaden the scope and utilization of our simulation-related offerings to include a range of clinical competencies that extend beyond resuscitation, and we intend to bring to market a broadened scope of simulation-based offerings, including resuscitation programs. On January 17, 2019, as part of a seven-year collaboration agreement with the American Red Cross which spans to 2026, we announced the launch of the American Red Cross Resuscitation Suite. We are actively engaged in efforts to market, sell, and deliver our new resuscitation offering, which includes the American Red Cross Resuscitation Suite and validation of skills through a technology enabled Innosonian manikin. A growing number of customers have been implemented on our new resuscitation offering and the solution is gaining acceptance in the market. We believe our efforts to market, sell, and deliver the American Red Cross Resuscitation Suite, along with efforts to bring additional simulation-related offerings to market, have the potential to give rise to

additional and higher margin opportunities than those that existed under the Legacy Agreements. However, there is no assurance that we will be successful in these efforts, and to the extent that new simulation-based or other solutions do not generate revenue and/or earnings in a manner that supplants the impact of the Legacy Agreements, our revenue and results of operations may be adversely affected.

Reconciliation of Non-GAAP Financial Measures

This report contains certain non-GAAP financial measures, including non-GAAP net income, non-GAAP operating income, adjusted EBITDA from continuing operations, and adjusted EBITDA, which are used by management in analyzing our financial results and ongoing operational performance.

In order to better assess the Company's financial results, management believes that net income before interest, income taxes, stock based compensation, depreciation and amortization, and changes in fair value of non-marketable equity investments ("adjusted EBITDA") is a useful measure for evaluating the operating performance of the Company because adjusted EBITDA reflects net income adjusted for certain non-cash and/or non-operating items. Management also believes that adjusted EBITDA from continuing operations is a useful measure for evaluating the operating performance of the Company because such measure excludes the results of operations of the PX business that we no longer own and the gain on sale in connection with the sale of such business in February 2018 and thus reflects the Company's ongoing business operations and assists in comparing the Company's results of operations between periods. We also believe that adjusted EBITDA and adjusted EBITDA from continuing operations are useful to many investors to assess the Company's ongoing results from current operations. Adjusted EBITDA and adjusted EBITDA from continuing operations are non-GAAP financial measures and should not be considered as measures of financial performance under GAAP. Because adjusted EBITDA and adjusted EBITDA from continuing operations are not measurements determined in accordance with GAAP, such non-GAAP financial measures are susceptible to varying calculations. Accordingly, adjusted EBITDA and adjusted EBITDA from continuing operations, as presented, may not be comparable to other similarly titled measures of other companies.

These non-GAAP financial measures should not be considered as a substitute for, or superior to, measures of financial performance which are prepared in accordance with US GAAP and may be different from non-GAAP financial measures used by other companies and have limitations as analytical tools.

A reconciliation of adjusted EBITDA and adjusted EBITDA from continuing operations to the most directly comparable GAAP measures is set forth below (in thousands).

	2019	2018	2017
GAAP income from continuing operations	\$ 14,196	\$ 13,251	\$ 8,838
Interest income	(3,272)	(2,444)	(870)
Interest expense	102	130	132
Income tax provision	3,733	3,324	1,302
Stock based compensation expense	4,244	1,777	1,736
Depreciation and amortization	27,869	24,231	24,047
Change in fair value of non-marketable equity investments	—	1,271	—
Adjusted EBITDA from continuing operations	<u>\$ 46,872</u>	<u>\$ 41,540</u>	<u>\$ 35,185</u>
GAAP net income	\$ 15,770	\$ 32,217	\$ 10,004
Interest income	(3,272)	(2,444)	(870)
Interest expense	102	130	131
Income tax provision	4,212	13,783	529
Stock based compensation expense	4,244	1,686	1,852
Depreciation and amortization	27,869	24,412	26,283
Change in fair value of non-marketable equity investments	—	1,271	—
Adjusted EBITDA	<u>\$ 48,925</u>	<u>\$ 71,055</u>	<u>\$ 37,929</u>

FINANCIAL OUTLOOK FOR 2020

The Company provides projections and other forward-looking information in this Financial Outlook for 2020 section within Management's Discussion and Analysis of Financial Condition and Results of Operations. This section contains many forward-looking statements, particularly relating to the Company's future financial performance. These forward-looking statements are estimates based on information currently available to the Company, are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995, and are subject to the precautionary statements set forth in the introduction in Part I of this Annual Report on Form 10-K and the risks and uncertainties described in Item 1A, Risk Factors and elsewhere in this report, as well as additional risks or uncertainties not presently known by us, or that we currently deem immaterial. Actual results are likely to differ, and in the past have differed, materially from those forecast by the Company, depending on the outcome of various factors, including, but not limited to, those set forth in Item 1A, Risk Factors.

We are providing 2020 financial guidance as set forth below:

	Full-Year 2020 Guidance			
Revenue				
Workforce Solutions	\$	197.0	-	\$ 203.0 million
Provider Solutions		50.5	-	52.5 million
Consolidated	\$	247.5	-	\$ 255.5 million
Operating Income	\$	12.0	-	\$ 14.5 million
Capital Expenditures	\$	24.0	-	\$ 26.0 million
Annual Effective Income Tax Rate		23	-	25 percent

Our 2020 Workforce Solutions revenue guidance includes anticipated revenues of approximately \$36.0 million from our legacy resuscitation products, representing a decline of \$23.0 million from 2019. We expect the quarterly revenues from the legacy products to be as follows: approximately \$11.0 million in first quarter, approximately \$10.5 million in second quarter, approximately \$8.5 million in third quarter, approximately \$6.0 million in fourth quarter, and approximately zero thereafter. Our Provider Solutions revenue guidance includes approximately \$1.5 million from the recently acquired CredentialMyDoc business.

Our operating income guidance of \$12.0 million to \$14.5 million is impacted by the anticipated reduction in legacy resuscitation revenues noted above coupled with an anticipated operating loss of \$1.0 million related to the CredentialMyDoc acquisition. Also included in operating income guidance is a one-time favorable contractual adjustment of \$3.4 million to royalties expense resulting from our resolution of a mutual disagreement relating to various elements of a past partnership, which adjustment will be recorded in the first quarter of 2020.

SELECTED QUARTERLY OPERATING RESULTS

The following tables set forth selected statements of income data for each of the four quarters in the periods ended December 31, 2019 and December 31, 2018, respectively. The information for each quarter has been prepared on the same basis as the audited statements included in other parts of this report and, in our opinion, includes all adjustments, consisting of only normal recurring adjustments, necessary for a fair presentation of the results of operations for these periods. You should read this information in conjunction with HealthStream's Consolidated Financial Statements and related notes thereto.

included elsewhere in this report. The operating results for any quarter are not necessarily indicative of the results to be expected in the future. Revenues from our subscription-based products are recognized ratably over the subscription term.

	Quarter Ended			
	March 31, 2019	June 30, 2019	September 30, 2019	December 31, 2019
(In thousands, except per share data)				
STATEMENT OF INCOME DATA:				
Revenues, net	\$ 65,187	\$ 63,781	\$ 62,450	\$ 62,695
Total operating costs and expenses	59,818	61,513	58,702	59,358
Operating income	5,369	2,268	3,748	3,337
Income from continuing operations	4,780	2,401	3,461	3,554
Income from discontinued operations	1,194	—	251	129
Net income	\$ 5,974	\$ 2,401	\$ 3,712	\$ 3,683
Net income per share - diluted ⁽¹⁾ :				
Continuing operations	\$ 0.15	\$ 0.07	\$ 0.11	\$ 0.11
Discontinued operations	0.03	—	—	—
Net income per share - diluted	\$ 0.18	\$ 0.07	\$ 0.11	\$ 0.11
Weighted average shares of common stock outstanding - diluted	32,377	32,434	32,437	32,465

	Quarter Ended			
	March 31, 2018	June 30, 2018	September 30, 2018	December 31, 2018
(In thousands, except per share data)				
STATEMENT OF INCOME DATA:				
Revenues, net	\$ 54,858	\$ 57,008	\$ 59,925	\$ 59,825
Total operating costs and expenses	51,128	52,744	55,264	56,988
Operating income	3,730	4,264	4,661	2,837
Income from continuing operations	3,629	3,656	3,036	2,931
Income (loss) from discontinued operations	20,217	(1,111)	—	(141)
Net income	\$ 23,846	\$ 2,545	\$ 3,036	\$ 2,790
Net income per share - diluted ⁽¹⁾ :				
Continuing operations	\$ 0.11	\$ 0.11	\$ 0.09	\$ 0.09
Discontinued operations	0.63	(0.03)	—	—
Net income per share - diluted	\$ 0.74	\$ 0.08	\$ 0.09	\$ 0.09
Weighted average shares of common stock outstanding - diluted	32,132	32,378	32,415	32,416

(1) – Due to the nature of interim earnings per share calculations, the sum of quarterly earnings per share amounts may not equal the reported earnings per share for the full year.

Liquidity and Capital Resources

Net cash provided by operating activities from continuing operations was \$65.7 million during 2019 compared to \$44.3 million during 2018, an increase of 48%. The number of days sales outstanding (DSO) was 47 days for 2019 compared to 59 days for 2018. The Company calculates DSO by dividing the average accounts receivable balance (excluding unbilled and other receivables) by average daily revenues for the year. The improvement in DSO resulted from improved collections during the year. The Company's primary sources of cash were receipts generated from the sales of our products and services. The primary uses of cash to fund operations included personnel expenses, sales commissions, royalty payments, payments for contract labor and other direct expenses associated with delivery of our products and services, and general corporate expenses.

Net cash used in investing activities was approximately \$67.5 million during 2019, while \$36.7 million of cash was provided by investing activities during 2018. During 2019, the Company acquired two businesses, Providigm and CredentialMyDoc, for a combined \$27.0 million, invested in marketable securities of \$87.3 million, purchased property and equipment of \$22.0 million, made payments for capitalized software development of \$14.5 million, and invested \$3.3 million in non-marketable equity investments. These uses of cash were partially offset by \$80.6 million in maturities of marketable securities and \$6.1 million in proceeds from the sale of its PX business segment. During 2018, the Company received net proceeds from the sale of the PX business of \$44.0 million and had maturities of marketable securities of \$69.0 million. These sources of cash were partially offset by \$57.1 million in purchases of marketable securities, \$11.3 million spent for capitalized software development, \$7.2 million for purchases of property and equipment, and \$0.8 million in non-marketable equity investments.

Cash used in financing activities was \$0.9 million during 2019 compared to \$30.3 million during 2018. The primary uses of cash during 2019 were \$1.0 million for payments of payroll taxes from stock based compensation, \$58,000 for payments of cash dividends, and \$38,000 for payment of an earn-out related to a prior acquisition. During 2019, the primary source of cash from financing activities resulted from \$0.2 million from the exercise of employee stock options. During 2018, the primary uses of cash were \$32.4 million for payments of cash dividends, \$0.3 million for payments of payroll taxes from stock based compensation, \$100,000 for payment of debt issue costs, and \$38,000 for payment of an earn-out related to a prior acquisition. During 2018, the primary source of cash from financing activities resulted from \$2.6 million from the exercise of employee stock options.

Our balance sheet reflects positive working capital of \$119.4 million at December 31, 2019 compared to \$134.6 million at December 31, 2018. The decrease in working capital was primarily due to a reduction in accounts receivable from the prior year. The Company's primary source of liquidity is \$172.9 million of cash and cash equivalents and marketable securities. The Company also has a \$50.0 million revolving credit facility loan agreement, all of which was available at December 31, 2019. For additional information regarding our revolving credit facility, see Note 14 to the Company's Consolidated Financial Statements included elsewhere in this report.

We believe that our existing cash and cash equivalents, marketable securities, cash generated from operations, and available borrowings under our revolving credit facility will be sufficient to meet anticipated working capital needs, new product development, and capital expenditures for at least the next 12 months.

The Company's growth strategy includes acquiring businesses that provide complementary products and services. It is anticipated that future acquisitions, if any, would be effected through cash consideration, stock consideration, or a combination of both. The issuance of our stock as consideration for an acquisition or to raise additional capital could have a dilutive effect on earnings per share and could adversely affect our stock price. The revolving credit facility contains financial covenants and availability calculations designed to set a maximum leverage ratio of outstanding debt to consolidated EBITDA (as defined in our credit facility) and an interest coverage ratio of consolidated EBITDA to interest expense. Therefore, the maximum borrowings against the revolving credit facility would be dependent on the covenant values at the time of borrowing. As of December 31, 2019, the Company was in compliance with all covenants. There can be no assurance that amounts available for borrowing under our revolving credit facility will be sufficient to consummate any possible acquisitions, and we cannot assure you that if we need additional financing that it will be available on terms favorable to us, or at all. Failure to generate sufficient cash flow from operations or raise additional capital when required in sufficient amounts and on terms acceptable to us could harm our business, financial condition, and results of operations.

Contractual Obligations

The following table presents a summary of future anticipated payments due by the Company under contractual obligations with firm minimum commitments as of December 31, 2019 (in thousands):

	Payments due by period				Total
	Less than 1 year	1-3 years	3-5 years	More than 5 years	
Operating leases	\$ 4,749	\$ 8,715	\$ 8,041	\$ 24,593	\$ 46,098
Purchase obligations	4,061	3,919	—	—	7,980
Total	<u>\$ 8,810</u>	<u>\$ 12,634</u>	<u>\$ 8,041</u>	<u>\$ 24,593</u>	<u>\$ 54,078</u>

^(a) Refer to Note 15 to the Company's Consolidated Financial Statements included elsewhere in this report for additional information regarding operating leases.

^(b) Represents non-cancelable contractual obligations primarily related to information technology assets and our revolving credit facility, which is described further in Note 14 to the Company's Consolidated Financial Statements included elsewhere in this report. The amounts included above represent the non-cancelable portion of agreements or the minimum cancellation fee.

Recent Accounting Pronouncements

In June 2016, the FASB issued ASU 2016-03, *Financial Instruments—Credit Losses (ASC 326): Measurement of Credit Losses on Financial Instruments*, which amends guidance on reporting credit losses for assets held at amortized cost basis and available for sale debt securities. For assets held at amortized cost basis, ASC 326 eliminates the probable initial recognition threshold in current GAAP and, instead, requires an entity to reflect its current estimate of all expected credit losses. The Company adopted this ASU on January 1, 2020, and the effect of adoption on the Company's consolidated financial statements and related disclosures is not expected to be material.

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

The Company is exposed to market risk from changes in interest rates. We do not have any material foreign currency exchange rate risk or commodity price risk. As of December 31, 2019, the Company had no outstanding debt. We may become subject to interest rate market risk associated with any future borrowings under our revolving credit facility. The interest rate under the revolving credit facility varies depending on the interest rate option selected by the Company plus a margin determined in accordance with a pricing grid. We are exposed to market risk with respect to our cash and investment balances, which approximated \$172.9 million at December 31, 2019. Assuming a hypothetical 10% decrease in interest rates, interest income from cash and investments would decrease on an annualized basis by approximately \$310,000.

The Company's investment policy and strategy is focused on investing in highly rated securities, with the objective of minimizing the potential risk of principal loss. The Company's policy limits the amount of credit exposure to any single issuer and sets limits on the average portfolio maturity.

The above market risk discussion and the estimated amounts presented are forward-looking statements of market risk assuming the occurrence of certain adverse market conditions. Actual results in the future may differ materially from those projected as a result of actual developments in the market.

Item 8. Financial Statements and Supplementary Data

**HEALTHSTREAM, INC.
INDEX TO CONSOLIDATED FINANCIAL STATEMENTS**

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The supplementary financial information required by this Item 8 is included in Item 7 under the caption Selected Quarterly Operating Results.

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of HealthStream, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of HealthStream, Inc. (the Company) as of December 31, 2019 and December 31, 2018, the related consolidated statements of income, comprehensive income, shareholders' equity, and cash flows for each of the three years in the period ended December 31, 2019, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2019, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 26, 2020, expressed an unqualified opinion thereon.

Adoption of New Accounting Standard

As discussed in Note 1 to the consolidated financial statements, the Company changed its method for recognizing revenue in 2018 due to the adoption of Accounting Standards Update No. 2014-09, *Revenue from Contracts with Customers*, as amended.

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 include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

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

Revenue Recognition

Description of the Matter

As described in Note 1 of the consolidated financial statements, the Company recognizes revenue when control of the promised goods or services is transferred to the customer in an amount that reflects the consideration the Company expects to be entitled in exchange for transferring those goods or services. The Company's contracts with customers often contain promises for multiple goods and services. The Company accounts for the promised goods and services in its contracts as separate performance obligations if they are distinct. The transaction price is then allocated to the separate performance obligations on a relative standalone selling price basis.

Auditing the Company's accounting for revenue recognition was challenging due to the judgment and effort required to analyze the Company's contracts to determine whether promised goods and services are distinct performance obligations and to determine standalone selling prices used to allocate the transaction price to those performance obligations.

*How We
Addressed the
Matter in Our
Audit*

We obtained an understanding, evaluated the design and tested the operating effectiveness of controls over the Company's process to identify and evaluate performance obligations and determine the standalone selling prices used to allocate the transaction price to those performance obligations.

Among other procedures to evaluate management's identification and determination of the distinct performance obligations, we obtained an understanding of the Company's various product and service offerings and tested the application of the revenue recognition accounting requirements to determine which performance obligations were distinct. To test management's determination of relative standalone selling price for each performance obligation, we performed audit procedures that included, among others, assessing the methodology applied and testing the data underlying the Company's calculations. We inspected a sample of customer contracts to assess management's treatment of significant terms and tested the amounts recognized as revenue or recorded in deferred revenue.

Valuation – Business Combinations

*Description of the
Matter*

During 2019, the Company completed its acquisitions of Providigm, LLC (Providigm) for consideration of \$18.0 million and CredentialMyDoc for consideration of \$9.0 million, as disclosed in Note 8 to the consolidated financial statements. Both transactions were accounted for as business combinations. The Company recorded definite-lived intangible assets of \$6.0 million for Providigm and \$4.3 million for CredentialMyDoc, primarily consisting of customer relationships and developed technology.

Auditing the Company's accounting for its acquisitions of Providigm and CredentialMyDoc was challenging due to the estimation uncertainty in the Company's determination of the fair value of the customer relationships and developed technology. The estimation uncertainty was primarily due to the sensitivity of the respective fair values to the underlying significant assumptions. The fair value estimate of the customer relationships intangible assets included significant assumptions in the prospective financial information (including revenue growth, customer attrition and EBITDA margin) and the discount rates. The fair value estimate of the developed technology intangible assets included significant assumptions such as the estimate of employee hours that would be needed to recreate the software. These significant assumptions are forward looking and could be affected by future economic and market conditions.

*How We
Addressed the
Matter in Our
Audit*

We tested the Company's controls over its accounting for the acquisitions. Our tests included controls over the estimation process supporting the fair value estimates of the customer relationships and developed technology intangible assets, including management's review of the significant assumptions discussed above.

To test the estimated fair values of the customer relationships and developed technology intangible assets, we performed audit procedures that included, among others, evaluating the Company's selection of the valuation methodologies, testing the significant assumptions and the completeness and accuracy of the underlying data. For example, we compared the significant assumptions in the prospective financial information to current industry trends, as well as to the historical performance of the acquired business and a similar business segment of the Company. To test the number of employee hours that would be needed to recreate the developed technology, we performed inquiries with appropriate non-financial personnel, including IT department management, to corroborate management's assumptions. We also performed sensitivity analyses to evaluate the changes in the fair value of the intangible assets that would result from the changes in significant assumptions. We involved our valuation specialists to assist with our evaluation of the methodologies used by the Company and the evaluation of the discount rates by comparing them against discount rate ranges that were independently developed using publicly available market data for comparable entities.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 1998.
Nashville, Tennessee
February 26, 2020

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of HealthStream, Inc.

Opinion on the Internal Control Over Financial Reporting

We have audited HealthStream, Inc.'s internal control over financial reporting as of December 31, 2019, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, HealthStream, Inc. (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of HealthStream, Inc. as of December 31, 2019 and 2018, and the related consolidated statements of income, comprehensive income, shareholders' equity, and cash flows for each of the three years in the period ended December 31, 2019, and the related notes and our report dated February 26, 2020, expressed an unqualified opinion thereon.

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 the respect to the Company in accordance with 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/ Ernst & Young LLP

Nashville, Tennessee

February 26, 2020

HEALTHSTREAM, INC.
CONSOLIDATED BALANCE SHEETS
(In thousands)

	December 31, 2019	December 31, 2018
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 131,538	\$ 134,321
Marketable securities	41,328	34,497
Accounts receivable, net of allowance for doubtful accounts of \$843 and \$1,161 at December 31, 2019 and 2018, respectively	27,650	38,124
Accounts receivable - unbilled	2,726	2,880
Prepaid royalties, net of amortization	11,898	13,596
Other prepaid expenses and other current assets	9,432	18,016
Total current assets	224,572	241,434
Property and equipment, net of accumulated depreciation of \$19,291 and \$20,827 at December 31, 2019 and 2018, respectively	26,065	15,866
Capitalized software development, net of accumulated amortization of \$57,768 and \$46,757 at December 31, 2019 and 2018, respectively	21,445	18,352
Operating lease right of use assets, net	29,615	—
Goodwill	102,196	86,144
Customer-related intangibles, net of accumulated amortization of \$29,760 and \$23,245 at December 31, 2019 and 2018, respectively	52,554	53,469
Other intangible assets, net of accumulated amortization of \$12,735 and \$9,663 at December 31, 2019 and 2018, respectively	7,527	5,909
Deferred tax assets	269	145
Deferred commissions	17,645	16,470
Non-marketable equity investments	6,782	3,376
Other assets	874	783
Total assets	<u>\$ 489,544</u>	<u>\$ 441,948</u>
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 4,810	\$ 8,497
Accrued royalties	16,736	15,756
Accrued liabilities	18,128	16,540
Deferred revenue	65,511	66,061
Total current liabilities	105,185	106,854
Deferred tax liabilities	13,183	11,068
Deferred revenue, non-current	1,918	2,868
Operating lease liability, non-current	30,733	-
Other long-term liabilities	357	2,211
Commitments and contingencies		
Shareholders' equity:		
Common stock, no par value, 75,000 shares authorized; 32,379 and 32,325 shares issued and outstanding at December 31, 2019 and 2018, respectively	290,021	286,597
Retained earnings	48,143	32,373
Accumulated other comprehensive income (loss)	4	(23)
Total shareholders' equity	338,168	318,947
Total liabilities and shareholders' equity	<u>\$ 489,544</u>	<u>\$ 441,948</u>

See accompanying notes to the Consolidated Financial Statements.

HEALTHSTREAM, INC.
CONSOLIDATED STATEMENTS OF INCOME
(In thousands, except per share data)

	Year Ended December 31,		
	2019	2018	2017
Revenues, net	\$ 254,112	\$ 231,616	\$ 214,899
Operating costs and expenses:			
Cost of revenues (excluding depreciation and amortization)	103,890	96,014	87,208
Product development	29,109	25,735	24,148
Sales and marketing	37,945	35,698	38,606
Other general and administrative expenses	40,579	34,447	31,483
Depreciation and amortization	27,869	24,231	24,047
Total operating costs and expenses	239,392	216,125	205,492
Operating income	14,720	15,491	9,407
Other income, net	3,209	1,084	733
Income from continuing operations before income tax provision	17,929	16,575	10,140
Income tax provision	3,733	3,324	1,302
Income from continuing operations	14,196	13,251	8,838
Discontinued operations			
(Loss) income from discontinued operations before income tax provision	—	(64)	393
Gain on sale of discontinued operations	2,053	29,489	—
Income tax provision (benefit)	479	10,459	(773)
Income from discontinued operations	1,574	18,966	1,166
Net income	<u>\$ 15,770</u>	<u>\$ 32,217</u>	<u>\$ 10,004</u>
Net income per share – basic:			
Continuing operations	\$ 0.44	\$ 0.41	\$ 0.27
Discontinued operations	0.05	0.59	0.04
Net income per share - basic	<u>\$ 0.49</u>	<u>\$ 1.00</u>	<u>\$ 0.31</u>
Net income per share - diluted:			
Continuing operations	\$ 0.44	\$ 0.41	\$ 0.27
Discontinued operations	0.05	0.59	0.04
Net income per share - diluted	<u>\$ 0.49</u>	<u>\$ 1.00</u>	<u>\$ 0.31</u>
Weighted average shares of common stock outstanding:			
Basic	32,372	32,264	31,861
Diluted	32,428	32,335	32,196
Dividends declared per share	<u>\$ —</u>	<u>\$ 1.00</u>	<u>\$ —</u>

See accompanying notes to the Consolidated Financial Statements.

HEALTHSTREAM, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(In thousands)

	Year Ended December 31,		
	2019	2018	2017
Net income	\$ 15,770	\$ 32,217	\$ 10,004
Other comprehensive income, net of taxes:			
Unrealized gain on marketable securities	27	15	13
Total other comprehensive income	27	15	13
Comprehensive income	<u>\$ 15,797</u>	<u>\$ 32,232</u>	<u>\$ 10,017</u>

See accompanying notes to the Consolidated Financial Statements.

HEALTHSTREAM, INC.
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
(In thousands)

	Common Stock		Retained Earnings	Accumulated Other Comprehensive (Loss)/Income	Total Shareholders' Equity
	Shares	Amount			
Balance at December 31, 2016	31,748	\$ 280,813	\$ 5,346	\$ (51)	\$ 286,108
Cumulative effect of accounting change	—	—	2,192	—	2,192
Net income	—	—	10,004	—	10,004
Comprehensive income	—	—	—	13	13
Stock based compensation	—	1,852	—	—	1,852
Common stock issued under stock plans, net of shares withheld for employee taxes	160	1	—	—	1
Balance at December 31, 2017	31,908	282,666	17,542	(38)	300,170
Cumulative effect of accounting change	—	—	15,132	—	15,132
Net income	—	—	32,217	—	32,217
Comprehensive income	—	—	—	15	15
Dividends declared on common stock (\$1.00 per share)	—	—	(32,518)	—	(32,518)
Stock based compensation	—	1,686	—	—	1,686
Common stock issued under stock plans, net of shares withheld for employee taxes	417	2,245	—	—	2,245
Balance at December 31, 2018	32,325	286,597	32,373	(23)	318,947
Net income	—	—	15,770	—	15,770
Comprehensive income	—	—	—	27	27
Stock donated to Company (held in treasury)	(86)	—	—	—	—
Stock based compensation	—	4,244	—	—	4,244
Common stock issued under stock plans, net of shares withheld for employee taxes	140	(820)	—	—	(820)
Balance at December 31, 2019	<u>32,379</u>	<u>\$ 290,021</u>	<u>\$ 48,143</u>	<u>\$ 4</u>	<u>\$ 338,168</u>

See accompanying notes to the Consolidated Financial Statements.

HEALTHSTREAM, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)

	Year Ended December 31,		
	2019	2018	2017
OPERATING ACTIVITIES:			
Net income	\$ 15,770	\$ 32,217	\$ 10,004
Income from discontinued operations	(1,574)	(18,966)	(1,166)
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	27,869	24,231	24,047
Stock based compensation	4,244	1,777	1,736
Amortization of deferred commissions	8,305	7,659	—
Provision for doubtful accounts	211	1,033	1,568
Deferred income taxes	2,167	3,017	(2,144)
(Gain) loss on equity method investments	(64)	(42)	5
Change in fair value of non-marketable equity investments	—	1,271	—
Other	(72)	(9)	409
Changes in operating assets and liabilities:			
Accounts and unbilled receivables	11,605	(4,050)	1,125
Prepaid royalties	1,698	1,639	2,046
Other prepaid expenses and other current assets	4,862	(3,938)	(25)
Deferred commissions	(9,479)	(11,577)	—
Other assets	(42)	(30)	(201)
Accounts payable and accrued expenses	1,098	2,008	5,784
Accrued royalties	979	2,907	(32)
Deferred revenue	(1,920)	5,103	(552)
Net cash provided by continuing operating activities	65,657	44,250	42,604
Net cash (used in) provided by discontinued operating activities	—	(1,004)	4,108
Net cash provided by operating activities	65,657	43,246	46,712
INVESTING ACTIVITIES:			
Business combinations, net of cash acquired	(27,018)	—	—
Proceeds from sale of discontinued operations, net of tax	6,070	44,049	—
Proceeds from maturities of marketable securities	80,589	68,992	90,073
Purchases of marketable securities	(87,328)	(57,085)	(83,279)
Proceeds from sale of property and equipment	15	—	—
Payments to acquire non-marketable equity investments	(3,342)	(833)	(500)
Payments associated with capitalized software development	(14,513)	(11,284)	(9,597)
Purchases of property and equipment	(21,997)	(7,166)	(5,515)
Net cash (used in) provided by continuing investing activities	(67,524)	36,673	(8,818)
Net cash used in discontinued investing activities	—	(115)	(2,761)
Net cash (used in) provided by investing activities	(67,524)	36,558	(11,579)
FINANCING ACTIVITIES:			
Proceeds from exercise of stock options	214	2,582	413
Taxes paid related to net settlement of equity awards	(1,034)	(338)	(412)
Payment of earn-out related to prior acquisitions	(38)	(38)	—
Payment of debt issue costs	—	(100)	—
Payment of cash dividends	(58)	(32,357)	—
Net cash (used in) provided by financing activities	(916)	(30,251)	1
Net (decrease) increase in cash and cash equivalents	(2,783)	49,553	35,134
Cash and cash equivalents at beginning of period	134,321	84,768	49,634
Cash and cash equivalents at end of period	<u>\$ 131,538</u>	<u>\$ 134,321</u>	<u>\$ 84,768</u>
SUPPLEMENTAL CASH FLOW INFORMATION:			
Interest paid	<u>\$ 101</u>	<u>\$ 117</u>	<u>\$ 101</u>
Income taxes paid	<u>\$ 630</u>	<u>\$ 16,513</u>	<u>\$ 638</u>
Non-cash additions to property and equipment	<u>\$ 31</u>	<u>\$ 1,013</u>	<u>\$ —</u>

See accompanying notes to the Consolidated Financial Statements.

HEALTHSTREAM, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Reporting Entity and Segments

HealthStream, Inc. (the Company) was incorporated in 1990 as a Tennessee corporation and is headquartered in Nashville, Tennessee. As of December 31, 2019, the Company operated in two segments: Workforce Solutions and Provider Solutions. Workforce Solutions products help meet the ongoing training, certification, assessment, and development needs of the healthcare workforce; they are delivered via a software-as-a-service (SaaS) model and are sold on a subscription basis. Provider Solutions products offer healthcare organizations software applications for administering and tracking provider credentialing, privileging, call center, and enrollment activities.

On February 12, 2018, the Company divested its Patient Experience (PX) business to Press Ganey Associates (Press Ganey) for \$65.2 million in cash (after giving effect to the post-closing working capital adjustment). This sale of the PX business resulted in the divestiture of the Company's patient experience solutions business segment. The results of operations for PX are presented as discontinued operations within the Notes to Consolidated Financial Statements herein.

Recently Adopted Accounting Standards

In February 2016, the FASB issued ASU 2016-02, *Leases (ASC 842)*, which, among other things, requires an entity to recognize a right-of-use asset and a lease liability on the balance sheet for substantially all leases, including operating leases. The Company adopted ASC 842 effective January 1, 2019 utilizing the modified retrospective approach such that prior year financial statements were not recast under the new standard. Adoption of this standard resulted in changes to the Company's Consolidated Balance Sheets and accounting policies for leases but did not have an impact on the Consolidated Statements of Income or Cash Flows. See Note 15 for additional information regarding the new standard and its impact on the Company's financial statements.

Recognition of Revenue

Revenues are recognized when control of the promised goods or services is transferred to the customer in an amount that reflects the consideration the Company expects to be entitled in exchange for transferring those goods or services. The Company adopted ASU 2014-09, *Revenue from Contracts with Customer* (referred to as Accounting Standards Codification (ASC) Topic 606 or ASC 606) effective as of January 1, 2018 utilizing the modified retrospective approach. This accounting standard required changes to the Company's accounting policies for revenue recognition, trade and other receivables, and deferred commissions.

Revenue is recognized based on the following five step model:

- Identification of the contract with a customer
- Identification of the performance obligations in the contract
- Determination of the transaction price
- Allocation of the transaction price to the performance obligations in the contract
- Recognition of revenue when, or as, the Company satisfies a performance obligation

Subscription revenues primarily consist of fees in consideration of providing customers access to one or more of our SaaS-based solutions and/or courseware subscriptions, as well as fees related to licensing agreements, all of which include routine customer support and technology enhancements. Revenue is generally recognized over time during the contract term beginning when the service is made available to the customer. Subscription contracts are generally non-cancelable, one to five years in length, and billed annually, semi-annually, quarterly, or monthly in advance.

Professional services revenues primarily consist of fees for implementation services, consulting, custom courseware development, and training. The majority of our professional services contracts are billed in advance based on a fixed price basis, and revenue is recognized over time as the services are performed. For both subscription services and professional services, the time between billing the customer and when performance obligations are satisfied is generally not significant.

Our contracts with customers often contain promises for multiple goods and services. For these contracts, the Company accounts for the promised goods and services in its contracts as separate performance obligations if they are distinct. The contract price, which represents transaction price, is allocated to the separate performance obligations on a relative standalone selling price basis. We generally determine standalone selling prices based on the standard list price for each product, taking into consideration certain factors, including contract length and the number of subscriptions within the contract.

We receive payments from customers based on billing schedules established in our contracts. Accounts receivable - unbilled represent contract assets related to our conditional right to consideration for subscription and professional services contracts where performance has occurred under the contract. Accounts receivable are primarily comprised of trade receivables that are recorded at the invoice amount, net of an allowance for doubtful accounts, when the right to consideration becomes unconditional.

Deferred revenue represents contract liabilities that are recorded when cash payments are received or are due in advance of our satisfaction of performance obligations.

Principles of Consolidation

The Consolidated Financial Statements include the accounts of the Company and its wholly owned subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation.

Use of Estimates

The Consolidated Financial Statements are prepared in accordance with U.S. generally accepted accounting principles. These accounting principles require management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates and such differences could be material to the Consolidated Financial Statements.

Cash Equivalents

The Company considers cash equivalents to be unrestricted, highly liquid investments with initial maturities of less than three months.

Marketable Securities

Marketable securities are classified as available for sale and are stated at fair market value, with the unrealized gains and losses, net of tax, reported in other accumulated comprehensive income (loss) on the accompanying Consolidated Balance Sheets. Realized gains and losses and declines in market value judged to be other than temporary on investments in marketable securities are included in other income, net on the accompanying Consolidated Statements of Income. The cost of securities sold is based on the specific identification method. Interest and dividends on securities classified as available for sale are included in other income, net on the accompanying Consolidated Statements of Income. Premiums and discounts are amortized over the life of the related available for sale security as an adjustment to the yield using the effective interest method.

Deferred Commissions

Deferred commissions represent incremental costs to acquire contracts with customers, such as the initial sales commission payment, which are capitalized and amortized consistent with the transfer of the goods or services to the customer over the expected period of benefit. Capitalized contract costs are included under the caption deferred commissions in the accompanying Consolidated Balance Sheet. The expected period of benefit is the contract term, except when the capitalized commission is expected to provide economic benefit to the Company for a period longer than the contract term, such as for new customer or incremental sales where renewals are expected and renewal commissions are not commensurate with initial commissions. Non-commensurate commissions are amortized over the greater of the contract term or technological obsolescence period of three years.

Prepaid Royalties

Prepaid royalties represent advance payments to royalty partners under revenue sharing arrangements for which the Company sells and delivers such partner products to its customers. Royalties are typically paid in advance at the commencement of the subscription period or periodically throughout the subscription period, such as in quarterly, bi-annual, or annual installments. Royalty payments are amortized over the term of the underlying subscription contracts, which generally range from one to five years, in order to match the direct royalty costs to the same period the subscription revenue is recognized. Amortization of royalties is included under the caption cost of revenues (excluding depreciation and amortization) in the accompanying Consolidated Statements of Income.

Allowance for Doubtful Accounts

The Company estimates its allowance for doubtful accounts to include accounts that may become uncollectible in the future, along with using a specific identification method in which management considers the facts and circumstances surrounding each potentially uncollectible receivable. Uncollectible receivables are written-off in the period management believes it has exhausted its ability to collect payment from the customer. Bad debt expense is recorded when events or circumstances indicate an additional allowance is required.

Changes in the allowance for doubtful accounts and the amounts charged to bad debt expense for the years ended December 31 were as follows (in thousands):

	Allowance Balance at Beginning of Period	Charged to Costs and Expenses	Write-offs	Allowance Balance at End of Period
2019	\$ 1,161	\$ 211	\$ (529)	\$ 843
2018	1,979	1,033	(1,851)	1,161
2017	839	1,568	(428)	1,979

Capitalized Software Development

Capitalized software development is stated on the basis of cost and is presented net of accumulated amortization. The Company capitalizes costs incurred during the software development phase for projects when such costs are material. These assets are generally amortized using the straight-line method over three years. The Company capitalized \$14.1 million and \$11.9 million during 2019 and 2018, respectively. Amortization of capitalized software development was \$11.0 million, \$9.6 million, and \$8.9 million during 2019, 2018, and 2017, respectively. Maintenance and operating costs are expensed as incurred. As of December 31, 2019 and 2018, there were no capitalized software development costs for external computer software developed for resale.

Fair Value Measurements

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in the principal or most advantageous market in an orderly transaction between market participants at the measurement date. The fair value hierarchy prioritizes the inputs to valuation techniques used in measuring fair value. There are three levels to the fair value hierarchy based on the reliability of inputs, as follows:

Level 1 – Observable inputs that reflect quoted prices (unadjusted) for identical assets or liabilities in active markets.

Level 2 – Inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly or indirectly.

Level 3 – Unobservable inputs in which little or no market data exists, therefore requiring the Company to develop its own assumptions.

The Company evaluates assets and liabilities subject to fair value measurements on a recurring basis to determine the appropriate level at which to classify them for each reporting period. This determination requires significant judgments to be made by the Company. At December 31, 2019 and 2018, our assets measured at fair value on a recurring basis consisted of marketable securities, which are classified as available for sale (see Note 4 – Marketable Securities).

Property and Equipment

Property and equipment are stated on the basis of cost. Depreciation is provided on the straight-line method over the following estimated useful lives, except for assets under financing leases and leasehold improvements, which are amortized over the shorter of the estimated useful life or their respective lease term.

	Years
Furniture and fixtures	5 - 7
Equipment	3

Goodwill and Intangible Assets

Goodwill represents the excess of purchase price in a business combination over the fair value of the net identifiable assets acquired, including intangible assets. The Company estimates fair values of intangible assets using the income and cost methods, which are based on management's estimates and assumptions. The carrying amount of our goodwill is evaluated for impairment at least annually during the fourth quarter and whenever events or changes in facts or circumstances indicate that impairment may exist. In accordance with ASC 350, *Intangibles – Goodwill and Other*, companies may opt to first assess qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount. A qualitative assessment includes factors such as financial performance, industry and market metrics, and other factors affecting the reporting unit. If this assessment concludes that it is more likely than not that the fair value of a reporting unit exceeds its carrying value, then goodwill is not considered impaired and no further impairment testing is required. Conversely, if the qualitative assessment concludes that it is more likely than not that the fair value of a reporting unit is less than its carrying value, we must then compare the fair value of the reporting unit to its carrying value. The Company determines fair value of the reporting units using both income and market-based models. These models require the use of various assumptions relating to cash flow projections, growth rates, discount rates, and terminal value calculations. There were no goodwill impairments identified or recorded for the years ended December 31, 2019, 2018, or 2017.

As of December 31, 2019, intangible assets include customer relationships, internally developed technology, non-competition agreements, and trade names. These intangible assets are considered to have definite useful lives and are being amortized on a straight-line basis over periods ranging between three and thirteen years. The weighted average amortization period for definite lived intangible assets as of December 31, 2019 was 11.0 years. Intangible assets are reviewed for impairment whenever events or changes in facts or circumstances indicate that the carrying amount of the assets may not be recoverable. There were no intangible asset impairments identified or recorded for the years ended December 31, 2019, 2018, or 2017.

Long-Lived Assets

Long-lived assets to be held for use are reviewed for events or changes in facts and circumstances, both internally and externally, which may indicate that an impairment of long-lived assets held for use is present. The Company measures any impairment using observable market values or discounted future cash flows from the related long-lived assets. The cash flow estimates and discount rates incorporate management's best estimates, using appropriate and customary assumptions and projections at the date of evaluation. Management periodically evaluates whether the carrying value of long-lived assets, including intangible assets, property and equipment, capitalized software development, deferred commissions, and other assets will be recoverable. There were no long-lived asset impairments identified or recorded for the years ended December 31, 2019, 2018, or 2017.

Non-Marketable Equity Investments

Non-marketable equity investments are accounted for using the equity method when the Company can exercise significant influence over the investee. Investments for which the Company is not able to exercise significant influence over the investee are accounted for using the measurement alternative for equity investments that do not have readily determinable fair values. ASU 2016-01, *Financial Instruments – Overall (Subtopic 825-10)*, became effective for the Company as of January 1, 2018 and requires equity investments (except those accounted for under the equity method of accounting or those that result in consolidation of the investee) to be measured at fair value with changes in fair value recognized in net income. The fair value of non-marketable equity investments is not estimated if there are no identified events or changes in circumstances that may have a significant adverse effect on the fair value of the investment. The proportionate share of income or loss from equity method investments and any changes in fair value of investments accounted for using the measurement alternative are recorded under the caption other income, net in the accompanying Consolidated Statements of Income.

Financial Instruments

The Company has various financial instruments, including cash and cash equivalents, accounts receivable, accounts receivable-unbilled, accounts payable, accrued liabilities, and deferred revenue. The carrying amounts of these financial instruments approximate fair value because of the short-term maturity or short-term nature of such instruments. The Company also has marketable securities, which are recorded at approximate fair value based on quoted market prices or alternative pricing sources (see Note 4 – Marketable Securities).

Advertising

The Company expenses the costs of advertising as incurred. Advertising expense for the years ended December 31, 2019, 2018, and 2017 was \$765,000, \$721,000, and \$868,000, respectively, and is included under the caption sales and marketing expense in the accompanying Consolidated Statements of Income.

Shipping and Handling Costs

Shipping and handling costs that are associated with our products and services are included under the caption cost of revenues (excluding depreciation and amortization) in the accompanying Consolidated Statements of Income.

Income Taxes

Income taxes are accounted for using the asset and liability method, whereby deferred tax assets and liabilities are determined based on the temporary differences between the financial statement and tax bases of assets and liabilities measured at tax rates that will be in effect for the year in which the differences are expected to affect taxable income. Management evaluates all available evidence, both positive and negative, to determine whether, based on the weight of that evidence, a valuation allowance is needed. Future realization of the tax benefit of an existing deductible temporary difference or carryforward ultimately depends on the existence of sufficient taxable income of the appropriate character within the carryback or carryforward period available under the tax law. There are four possible sources of taxable income that may be available under the tax law to realize a tax benefit for deductible temporary differences and carryforwards: 1) future reversals of existing taxable temporary differences, 2) future taxable income exclusive of reversing temporary differences and carryforwards, 3) taxable income in prior carryback year(s) if carryback is permitted under the tax law, and 4) tax-planning strategies that would, if necessary, be implemented to realize deductible temporary differences or carryforwards prior to their expiration. Management reviews the realizability of its deferred tax assets each reporting period to identify whether any significant changes in circumstances or assumptions have occurred that could materially affect the realizability of deferred tax assets. As of December 31, 2019, the Company had established a valuation allowance of \$64,000 for the portion of its net deferred tax assets that are not more likely than not expected to be realized. The Company accounts for income tax uncertainties using a more-likely-than-not recognition threshold based on the technical merits of the tax position taken. Tax positions that meet the more-likely-than-not recognition threshold are measured in order to determine the tax benefit to be recognized in the financial statements.

Earnings per Share

Basic earnings per share is computed by dividing the net income available to common shareholders for the period by the weighted average number of common shares outstanding during the period. Diluted earnings per share is computed by dividing the net income for the period by the weighted average number of common and common equivalent shares outstanding during the period. Common equivalent shares are composed of incremental common shares issuable upon the exercise of stock options and restricted share units subject to vesting. The dilutive effect of common equivalent shares is included in diluted earnings per share by application of the treasury stock method. Common equivalent shares that have an anti-dilutive effect on diluted net income per share were excluded from the calculation of diluted weighted average shares outstanding for the years ended December 31, 2019, 2018, and 2017.

Concentrations of Credit Risk and Significant Customers

The Company's credit risks relate primarily to cash and cash equivalents, marketable securities, and accounts receivable. The Company places its temporary excess cash investments in high quality, short-term money market instruments. At times, such investments may be in excess of the FDIC insurance limits. Marketable securities consist primarily of investment grade corporate debt securities and government sponsored enterprise debt securities.

The Company sells its products and services to various companies in the healthcare industry that are primarily located in the United States. Customer credit worthiness evaluations are performed on an as-needed basis, and the Company generally requires no collateral from customers. An allowance for doubtful accounts is maintained for potentially uncollectible accounts receivable. The Company did not have any single customer representing over 10% of net revenues or accounts receivable during 2019, 2018, or 2017.

Stock Based Compensation

As of December 31, 2019, the Company maintained two stock based compensation plans under which awards are outstanding, as described in Note 11. The Company accounts for stock based compensation using the fair-value based method for costs related to share-based payments, including stock options and restricted share units. The Company uses the Black Scholes option pricing model for calculating the fair value of option awards issued under its stock based compensation plan. The Company measures compensation cost of restricted share units based on the closing fair market value of the Company's stock on the date of grant. Stock based compensation cost is measured at the grant date, based on the fair value of the award that is ultimately expected to vest, and is recognized as an expense over the requisite service period. The Company recognizes tax benefits from stock based compensation if an excess tax benefit is realized. Excess tax benefits are reflected in the Consolidated Statements of Income as a component of the provision for income taxes when realized.

Recently Issued Accounting Pronouncements Not Yet Adopted

In June 2016, the FASB issued ASU 2016-03, *Financial Instruments—Credit Losses (ASC 326): Measurement of Credit Losses on Financial Instruments*, which amends guidance on reporting credit losses for assets held at amortized cost basis and available for sale debt securities. For assets held at amortized cost basis, ASC 326 eliminates the probable initial recognition threshold in current GAAP and, instead, requires an entity to reflect its current estimate of all expected credit losses. The Company adopted this ASU on January 1, 2020 and the effect of adoption on the Company's consolidated financial statements and related disclosures is not expected to be material.

2. SHAREHOLDERS' EQUITY

Common Stock

The Company is authorized to issue up to 75 million shares of common stock. The number of common shares issued and outstanding as of December 31, 2019 and 2018 was 32.4 million and 32.3 million, respectively.

Preferred Stock

The Company is authorized to issue up to 10 million shares of preferred stock in one or more series, having the relative voting powers, designations, preferences, rights and qualifications, limitations or restrictions, and other terms as the Board of Directors may fix in providing for the issuance of such series, without any vote or action of the shareholders.

3. EARNINGS PER SHARE

The following table sets forth the computation of basic and diluted earnings per share for the three years ended December 31, 2019 (in thousands, except per share amounts):

	Year Ended December 31,		
	2019	2018	2017
Numerator:			
Income from continuing operations	\$ 14,196	\$ 13,251	\$ 8,838
Income from discontinued operations	1,574	18,966	1,166
Net income	<u>\$ 15,770</u>	<u>\$ 32,217</u>	<u>\$ 10,004</u>
Denominator:			
Weighted-average shares outstanding	32,372	32,264	31,861
Effect of dilutive shares	56	71	335
Weighted-average diluted shares	<u>32,428</u>	<u>32,335</u>	<u>32,196</u>
Earnings per share – basic:			
Continuing operations	\$ 0.44	\$ 0.41	\$ 0.27
Discontinued operations	0.05	0.59	0.04
Earnings per share - basic	<u>\$ 0.49</u>	<u>\$ 1.00</u>	<u>\$ 0.31</u>
Earnings per share – diluted:			
Continuing operations	\$ 0.44	\$ 0.41	\$ 0.27
Discontinued operations	0.05	0.59	0.04
Earnings per share - diluted	<u>\$ 0.49</u>	<u>\$ 1.00</u>	<u>\$ 0.31</u>

Potentially dilutive shares representing 93,000, 91,000, and 58,000 shares of common stock for the years ended December 31, 2019, 2018, and 2017, respectively, were excluded from the calculation of diluted earnings per share because their effect would have been anti-dilutive.

4. MARKETABLE SECURITIES

At December 31, 2019 and 2018, the fair value of marketable securities, which were all classified as available for sale, included the following (in thousands):

	December 31, 2019			
	Adjusted Cost	Unrealized Gains	Unrealized Losses	Fair Value
Level 2:				
Corporate debt securities	\$ 37,325	\$ 7	\$ (5)	\$ 37,327
Government-sponsored enterprise debt securities	4,001	—	—	4,001
Total	<u>\$ 41,326</u>	<u>\$ 7</u>	<u>\$ (5)</u>	<u>\$ 41,328</u>

	December 31, 2018			
	Adjusted Cost	Unrealized Gains	Unrealized Losses	Fair Value
Level 2:				
Corporate debt securities	\$ 31,521	\$ —	\$ (23)	\$ 31,498
Government-sponsored enterprise debt securities	2,999	—	—	2,999
Total	<u>\$ 34,520</u>	<u>—</u>	<u>(23)</u>	<u>\$ 34,497</u>

The carrying amounts of the marketable securities reported in the Consolidated Balance Sheets approximate fair value based on quoted market prices or alternative pricing sources and models utilizing market observable inputs. As of December 31, 2019, the Company does not consider any of its marketable securities to be other than temporarily impaired. During the years ended December 31, 2019 and 2018, the Company did not reclassify any items out of accumulated other comprehensive income to net income. All investments in marketable securities are classified as a current asset on the Consolidated Balance Sheet because the underlying securities mature within one year from the balance sheet date.

5. REVENUE RECOGNITION AND SALES COMMISSIONS

Revenue Recognition

Revenues are recognized when control of the promised goods or services is transferred to the customer in an amount that reflects the consideration the Company expects to be entitled in exchange for transferring those goods or services.

The following table represents revenues included in continuing operations disaggregated by revenue source for the years ended December 31, 2019 and 2018 (in thousands). Sales taxes are excluded from revenues.

Business Segments	Year Ended December 31, 2019		
	Workforce Solutions	Provider Solutions	Consolidated
Subscription services	\$ 202,479	\$ 38,022	\$ 240,501
Professional services	6,120	7,491	13,611
Total revenues, net	<u>\$ 208,599</u>	<u>\$ 45,513</u>	<u>\$ 254,112</u>

Business Segments	Year Ended December 31, 2018		
	Workforce Solutions	Provider Solutions	Consolidated
Subscription services	\$ 184,926	\$ 35,542	\$ 220,468
Professional services	5,213	5,935	11,148
Total revenues, net	<u>\$ 190,139</u>	<u>\$ 41,477</u>	<u>\$ 231,616</u>

For the years ended December 31, 2019 and 2018, the Company recognized \$0.2 million and \$1.0 million, respectively, in impairment losses on receivables and contract assets arising from the Company's contracts with customers.

During the years ended December 31, 2019 and 2018, we recognized revenues of \$64.7 million and \$63.7 million from amounts included in deferred revenue at the beginning of the respective period. As of December 31, 2019, \$433 million of revenue is expected to be recognized from remaining performance obligations under contracts with customers. We expect

to recognize revenue on approximately 47% of these remaining performance obligations over the 12 months ending December 31, 2020, with the remaining amounts recognized thereafter.

Sales Commissions

Sales commissions earned by our sales force are considered incremental and recoverable costs of obtaining a contract with a customer. The Company's sales commission plans for 2018 and 2019 included multiple payments, including an initial payment in the period a customer contract is obtained and subsequent payments either 15 or 27 months after the initial payment. Under ASC 606, costs to acquire contracts with customers, such as the initial sales commission payment, are capitalized in the period a customer contract is obtained and are amortized consistent with the transfer of the goods or services to the customer over the expected period of benefit, whereas subsequent sales commission payments which require a substantive service condition of the employee are expensed ratably through the payment date. The capitalized contract cost is included in deferred commissions in the accompanying Consolidated Balance Sheets. The Company recorded amortization of deferred commissions of \$8.3 million and \$7.7 million for the years ended December 31, 2019 and 2018, which is included in sales and marketing expenses in the accompanying Consolidated Statements of Income.

6. PROPERTY AND EQUIPMENT

Property and equipment consist of the following (in thousands):

	December 31,	
	2019	2018
Equipment	\$ 25,199	\$ 21,129
Leasehold improvements	14,909	11,572
Furniture and fixtures	5,248	3,992
Gross property and equipment	45,356	36,693
Accumulated depreciation and amortization	(19,291)	(20,827)
Property and equipment, net	<u>\$ 26,065</u>	<u>\$ 15,866</u>

Depreciation of property and equipment totaled \$7.3 million, \$5.5 million, and \$5.9 million for the years ended December 31, 2019, 2018, and 2017, respectively.

7. GOODWILL AND INTANGIBLE ASSETS

The changes in the carrying amount of goodwill for the years ended December 31, 2019 and 2018 are as follows (in thousands):

	Workforce Solutions	Provider Solutions	Total
Balance at January 1, 2019	\$ 16,381	\$ 69,763	\$ 86,144
Acquisition of Providigm, LLC	11,395	—	11,395
Acquisition of CredentialMyDoc	—	4,657	4,657
Balance at December 31, 2019	<u>\$ 27,776</u>	<u>\$ 74,420</u>	<u>\$ 102,196</u>
	Workforce Solutions	Provider Solutions	Total
Balance at January 1, 2018	\$ 16,381	\$ 69,763	\$ 86,144
Changes in carrying amount	—	—	—
Balance at December 31, 2018	<u>\$ 16,381</u>	<u>\$ 69,763</u>	<u>\$ 86,144</u>

During the year ended December 31, 2019, the Company recorded \$11.4 million of goodwill in relation to the January 2019 acquisition of Providigm, LLC as well as \$4.7 million of goodwill in relation to the December 2019 acquisition of CredentialMyDoc.

Intangible assets other than goodwill are considered to have finite useful lives. Customer-related intangibles consist of customer relationships and are amortized over their estimated useful lives ranging from five to thirteen years. Other intangible assets include technology, non-competition agreements, and trade names and are amortized over their estimated

useful lives ranging from three to nine years. Amortization of intangible assets was \$9.6 million, \$9.1 million, and \$9.2 million for the years ended December 31, 2019, 2018, and 2017, respectively.

Identifiable intangible assets are comprised of the following (in thousands):

	As of December 31, 2019			As of December 31, 2018		
	Gross Amount	Accumulated Amortization	Net	Gross Amount	Accumulated Amortization	Net
Customer related	\$ 82,314	\$ (29,760)	\$ 52,554	\$ 76,714	\$ (23,245)	\$ 53,469
Other	20,262	(12,735)	7,527	15,572	(9,663)	5,909
Total	<u>\$102,576</u>	<u>\$ (42,495)</u>	<u>\$ 60,081</u>	<u>\$ 92,286</u>	<u>\$ (32,908)</u>	<u>\$ 59,378</u>

The expected future annual amortization expense for the years ending December 31, is as follows (in thousands):

2020	\$	9,683
2021		8,914
2022		7,835
2023		7,186
2024		5,679
Thereafter		20,784
Total	<u>\$</u>	<u>60,081</u>

8. BUSINESS COMBINATIONS

Providigm, LLC

On January 10, 2019, the Company acquired the outstanding equity of Providigm, LLC (Providigm), a Denver, Colorado based company focusing on quality assurance and performance improvement in healthcare, primarily serving skilled nursing facilities. The Company acquired Providigm to add its comprehensive quality management system, known as abaqis®, to its product portfolio and gain customers in the skilled nursing market. The consideration paid for Providigm consisted of \$18.0 million in cash, which the Company funded with cash on hand. In addition, up to an additional \$500,000 in cash may be paid by the Company based on the financial performance of Providigm during an 18-month period following closing. Of the purchase price paid by the Company at closing, \$3.65 million is being held in escrow for a period of time following the closing to serve as a source of recovery for certain potential indemnification claims by the Company. The Company incurred \$388,000 in transaction costs, of which \$63,000 was incurred during 2019 and \$325,000 was incurred during 2018. The transaction costs were recorded in other general and administrative expense in the Consolidated Statements of Income. The results of operations for Providigm have been included in the Workforce Solutions segment of the Company's Financial Statements from the date of acquisition.

A summary of the purchase price is as follows (in thousands):

Cash paid at closing (including the post-closing working capital adjustment)	\$	14,368
Cash held in escrow		3,650
Total consideration paid	<u>\$</u>	<u>18,018</u>

The following table summarizes the fair value of the assets acquired and liabilities assumed as of the date of acquisition (in thousands):

Accounts and unbilled receivable, net	\$	960
Prepaid assets		847
Property and equipment		50
Operating lease right-of-use assets		1,233
Other assets		49
Deferred tax assets		104
Goodwill		11,395
Intangible assets		5,950
Accounts payable and accrued liabilities		(1,196)
Deferred revenue		(141)
Operating lease liabilities		(1,233)
Net assets acquired	\$	<u>18,018</u>

The excess of purchase price over the fair values of net tangible and intangible assets is recorded as goodwill. The fair values of tangible and identifiable intangible assets and liabilities are based on management's estimates and assumptions. The primary intangible assets acquired were customer relationships and developed technology. The fair value estimate for customer relationships intangible asset included significant assumptions in the prospective financial information, such as revenue growth, customer attrition, and EBITDA margin, and the discount rate. The fair value estimate for developed technology intangible asset included significant assumptions, including the estimate of employee hours that would be needed to recreate the technology. Additionally, these assumptions are forward looking and could be affected by future economic and market conditions. The goodwill balance is primarily attributed to the assembled workforce, additional market opportunities from offering Providigm's products, and expected synergies from integrating Providigm with other products or other combined functional areas within the Company. The goodwill balance is deductible for U.S. income tax purposes. The net tangible assets include deferred revenue, which was adjusted down from a book value at the acquisition date of \$266,000 to an estimated fair value of \$141,000. The \$125,000 write-down of deferred revenue will result in lower revenues than would have otherwise been recognized for such services. The acquired assets and liabilities include a \$750,000 indemnification asset and liability related to tax liabilities. The purchase agreement also provides that the Company will pay up to \$500,000 of additional consideration based on the achievement of financial performance targets by Providigm during an 18-month period following the closing date. Management assessed the likelihood of achieving these financial performance targets, which has been included in the purchase price allocation.

The following table sets forth the preliminary components of identifiable intangible assets and their estimated useful lives as of the acquisition date (in thousands):

	Fair Value	Useful life
Customer relationships	\$ 3,500	12 years
Developed technology	2,200	5 years
Trade Name	250	7 years
Total preliminary intangible assets subject to amortization	<u>\$ 5,950</u>	

The amounts of revenue and operating loss of Providigm included in the Company's Consolidated Statement of Income since the date of acquisition of January 10, 2019 for the twelve months ended December 31, 2019 are as follows (in thousands):

Revenues, net	\$	6,916
Operating loss	\$	<u>(491)</u>

The following unaudited pro forma financial information summarizes the results of operations of the Company and Providigm as though the companies were combined as of January 1, 2018 (in thousands, except per share data):

	For the twelve months ended	
	2019	2018
Total revenues	\$ 254,437	\$ 243,992
Income from continuing operations	\$ 14,262	\$ 13,102
Net income	\$ 15,836	\$ 32,068
Net income per share - basic	\$ 0.49	\$ 0.99
Net income per share - diluted	\$ 0.49	\$ 0.99

These unaudited pro forma combined results of operations include certain adjustments arising from the acquisition, such as amortization of intangible assets, depreciation of property and equipment, interest expense related to Providigm's previously outstanding debt, and fair value adjustments of acquired deferred revenue balances. The unaudited pro forma combined results of operations are for informational purposes only and is not indicative of what the Company's results of operations would have been had the transaction occurred at the beginning of the earliest period presented or to project the Company's results of operations in any future period.

CredentialMyDoc

On December 16, 2019, the Company acquired substantially all the assets of CredentialMyDoc, a Savannah, Georgia based company focusing on intuitive, easy to use, and fast to implement software-as-a-service solution, especially in ambulatory care settings. The consideration paid for CredentialMyDoc consisted of \$9.0 million in cash, subject to a post-closing working capital adjustment. Of the purchase price paid at closing, \$1.1 million is being held in escrow for a period of time following the closing to serve as a source of recovery for the working capital adjustment and certain potential indemnification claims by the Company. The results of operations for CredentialMyDoc have been included in the Provider Solutions segment of the Company's Financial Statements from the date of acquisition.

A summary of the purchase price is as follows (in thousands):

Cash paid at closing	\$ 7,920
Cash held in escrow	1,080
Total consideration paid	<u>\$ 9,000</u>

The following table summarizes the preliminary fair value of the assets acquired and liabilities assumed as of the date of acquisition (in thousands):

Accounts and unbilled receivable, net	\$ 216
Prepaid and other current assets	3
Operating lease right-of-use assets	30
Deferred tax assets	71
Goodwill	4,657
Intangible assets	4,340
Accounts payable and accrued liabilities	(7)
Deferred revenue	(280)
Operating lease liabilities	(30)
Net assets acquired	<u>\$ 9,000</u>

The excess of preliminary purchase price over the preliminary fair values of net tangible and intangible assets is recorded as goodwill. The preliminary fair values of tangible and identifiable intangible assets and liabilities are based on management's estimates and assumptions. The primary intangible assets acquired were customer relationships and developed technology. The fair value estimate for customer relationships intangible asset included significant assumptions in the prospective financial information, such as revenue growth, customer attrition, and EBITDA margin, and the discount rate. The fair value estimate for developed technology intangible asset included significant assumptions, including the estimate of employee hours that would be needed to recreate the technology. Additionally, these assumptions are forward looking and could be affected by future economic and market conditions. The preliminary fair values of assets acquired and liabilities assumed continue to be subject to change during the measurement period (up to one year from the acquisition date) as the Company finalizes the valuation of these items. The primary areas of the preliminary purchase price allocation that are not finalized include the composition and valuation of intangible assets. The goodwill balance is primarily attributed to the assembled workforce, additional market opportunities from offering CredentialMyDoc products, and expected synergies from integrating CredentialMyDoc with other products or other combined functional areas within the Company. The goodwill balance is deductible for U.S. income tax purposes. The net tangible assets include deferred revenue, which was adjusted down from a book value at the acquisition date of \$595,000 to an estimated fair value of \$280,000. The \$315,000 write-down of deferred revenue will result in lower revenues than would have otherwise been recognized for such services.

The following table sets forth the preliminary components of identifiable intangible assets and their estimated useful lives as of the acquisition date (in thousands):

	Preliminary Fair value	Useful life
Customer relationships	\$ 2,100	9 years
Developed technology	2,100	4 years
Non-compete	110	5 years
Trade name	30	3 years
Total intangible assets subject to amortization	<u>\$ 4,340</u>	

The amounts of revenue and operating loss of CredentialMyDoc included in the Company's Consolidated Statement of Income since the date of acquisition of December 16, 2019 for the twelve months ended December 31, 2019 are as follows (in thousands):

Total revenues	<u>\$ 34</u>
Operating loss	<u>\$ (49)</u>

The following unaudited pro forma financial information summarizes the results of operations of the Company and CredentialMyDoc as though the companies were combined as of January 1, 2018 (in thousands, except per share data):

	Year Ended December 31,	
	2019	2018
Total revenues	<u>\$ 256,053</u>	<u>\$ 236,445</u>
Income from continuing operations	<u>\$ 13,936</u>	<u>\$ 12,687</u>
Net income	<u>\$ 15,510</u>	<u>\$ 31,652</u>
Net income per share - basic	<u>\$ 0.48</u>	<u>\$ 0.98</u>
Net income per share - diluted	<u>\$ 0.48</u>	<u>\$ 0.98</u>

These unaudited pro forma combined results of operations include certain adjustments arising from the acquisition, such as amortization of intangible assets, depreciation of property and equipment, and fair value adjustments of acquired deferred revenue balances. The unaudited pro forma combined results of operations is for informational purposes only and is not indicative of what the Company's results of operations would have been had the transaction occurred at the beginning of the earliest period presented or to project the Company's results of operations in any future period.

9. BUSINESS SEGMENTS

The Company provides services to healthcare organizations and other members within the healthcare industry. The Company's services are focused on the delivery of workforce development products and services (Workforce Solutions) and provider credentialing, privileging, call center, and enrollment products and services (Provider Solutions).

The Company measures segment performance based on operating income before income taxes and prior to the allocation of certain corporate overhead expenses, interest income, interest expense, gains and losses from equity investments, and depreciation. The Unallocated component below includes corporate functions, such as accounting, human resources, legal, investor relations, administrative and executive personnel, depreciation, a portion of amortization, and certain other expenses, which are not currently allocated in measuring segment performance. The following is the Company's business segment information as of and for the years ended December 31, 2019, 2018, and 2017 (in thousands).

Revenues, net:	2019	2018	2017
Workforce Solutions	\$ 208,599	\$ 190,139	\$ 178,061
Provider Solutions	45,513	41,477	36,838
Total revenues, net	<u>\$ 254,112</u>	<u>\$ 231,616</u>	<u>\$ 214,899</u>

Operating income:	2019	2018	2017
Workforce Solutions	\$ 40,296	\$ 38,834	\$ 33,579
Provider Solutions	5,384	3,474	879
Unallocated	(30,960)	(26,817)	(25,051)
Total operating income	<u>\$ 14,720</u>	<u>\$ 15,491</u>	<u>\$ 9,407</u>

	<u>Assets*</u>		<u>Purchases of long-lived assets</u>			<u>Depreciation and amortization</u>		
	2019	2018	2019	2018	2017	2019	2018	2017
Workforce Solutions	\$ 118,382	\$ 104,668	\$ 14,972	\$ 12,820	\$ 9,888	\$ 10,813	\$ 9,780	\$ 9,982
Provider Solutions	148,398	145,637	2,959	5,240	3,619	9,757	8,895	8,147
Discontinued operations	—	—	—	180	2,764	—	181	2,235
Unallocated	222,764	191,643	13,602	7,191	1,762	7,299	5,375	5,919
Total	<u>\$489,544</u>	<u>\$441,948</u>	<u>\$ 31,533</u>	<u>\$ 25,431</u>	<u>\$ 18,033</u>	<u>\$ 27,869</u>	<u>\$ 24,231</u>	<u>\$ 26,283</u>

* Segment assets include accounts and unbilled receivables, prepaid royalties, prepaid and other current assets, other assets, capitalized software development, deferred commissions, certain property and equipment, and intangible assets. Cash and cash equivalents, marketable securities, non-marketable equity investments, and certain ROU assets are not allocated to individual segments and are included within Unallocated. A significant portion of property and equipment assets are included within Unallocated.

10. INCOME TAXES

The provision (benefit) for income taxes is comprised of the following (in thousands):

	Year Ended December 31,		
	2019	2018	2017
Current federal	\$ 233	\$ (79)	\$ 1,819
Current state	634	386	923
Deferred federal	2,717	2,661	(1,464)
Deferred state	149	356	24
Provision for income taxes	<u>\$ 3,733</u>	<u>\$ 3,324</u>	<u>\$ 1,302</u>

A reconciliation of income taxes at the statutory federal income tax rate to the provision for income taxes included in the accompanying Consolidated Statements of Income is as follows (in thousands):

	Year Ended December 31,		
	2019	2018	2017
Federal tax provision at the statutory rate	\$ 3,765	\$ 3,482	\$ 3,549
State income tax provision, net of federal benefit	895	658	491
Tax credits	(614)	(509)	(583)
Change in state valuation allowance	(247)	2	151
Tax Act revaluation of deferred tax balances	—	—	(1,680)
Stock compensation	(117)	(560)	(626)
Other	51	251	—
Provision for income taxes	<u>\$ 3,733</u>	<u>\$ 3,324</u>	<u>\$ 1,302</u>

Management periodically assesses the realizability of its deferred tax assets, and to the extent that a recovery is not likely, a valuation allowance is established to reduce the deferred tax asset to the amount estimated to be recoverable. At December 31, 2019, the Company has a valuation allowance of \$64,000 recorded against deferred tax assets for state net operating losses.

As of December 31, 2019, the Company had state net operating loss carryforwards of \$5.0 million. Certain losses have an indefinite carryforward period, while other loss carryforwards will expire in years 2031 through 2040. The Company is subject to income taxation at the federal and various state levels. The Company is no longer subject to U.S. federal tax examinations for tax years before 2016, and with few exceptions, the Company is not subject to examination by state tax authorities for tax years which ended before 2016. Loss carryforwards and credit carryforwards generated or utilized in years earlier than 2016 are also subject to examination and adjustment.

On December 22, 2017, the President signed into law the Tax Cuts and Jobs Act (the Tax Act), reducing the U.S. corporate income tax rate to 21% effective January 1, 2018. The Company reflected the income tax effects of the Tax Act as of December 31, 2017.

A reconciliation of the beginning and ending liability for gross unrecognized tax benefits are as follows (in thousands):

	December 31,	
	2019	2018
Balance at beginning of year	\$ 317	\$ 340
Additions for tax positions in the current year	—	—
Reductions for tax positions of prior years	—	(23)
Balance at end of year	<u>\$ 317</u>	<u>\$ 317</u>

The Company recognized \$14,000 and \$2,000 for interest and penalties related to unrecognized tax benefits within the provision for income taxes during the years ended December 31, 2019 and 2018. Unrecognized tax benefits included tax positions of \$317,000 for both December 31, 2019 and 2018 that if recognized would impact the Company's effective tax rate. The reduction for tax positions of prior years reflected in the table above as of December 31, 2018 relates to an item considered to be effectively settled due to lapse of the statute of limitations.

Deferred federal and state income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of deferred tax assets and deferred tax liabilities are as follows (in thousands):

	December 31,	
	2019	2018
Deferred tax assets:		
Allowance for doubtful accounts	\$ 215	\$ 297
Accrued liabilities	1,775	1,887
Lease liability	8,778	389
Stock based compensation	683	623
Deferred revenue	198	135
Basis difference on investments	381	396
Net operating loss carryforwards	263	291
Total deferred tax assets	12,293	4,018
Less: Valuation allowance	(64)	(311)
Deferred tax assets, net of valuation allowance	12,229	3,707
Deferred tax liabilities:		
Deductible goodwill	2,236	1,760
Nondeductible intangible assets	801	1,049
Right of use assets	7,773	—
Prepaid assets	6,275	5,698
Capitalized software development	5,580	4,746
Depreciation	2,478	659
PX sale deferral	—	718
Total deferred tax liabilities	25,143	14,630
Net deferred tax liabilities	<u>\$ 12,914</u>	<u>\$ 10,923</u>

The Company realized \$117,000 of excess tax benefits related to stock based awards during the year ended December 31, 2019, which was reflected in the statement of income as a component of the provision for income taxes.

11. STOCK BASED COMPENSATION

Stock Incentive Plans

The Company has outstanding stock based awards under its 2016 Omnibus Incentive Plan (2016 Plan) and 2010 Stock Incentive Plan (2010 Plan) (collectively, the 2016 Plan and the 2010 Plan, referred to as the Plans). In addition, the 2016 Plan authorizes the grant of options, restricted share units (RSUs), or other forms of stock based compensation to employees, officers, directors, and others, and such grants must be approved by the Compensation Committee of the Board of Directors. The 2016 Plan allows the Compensation Committee of the Board of Directors to determine the vesting period and parameters of each grant. The vesting period of the options and RSUs granted has historically ranged from immediate vesting to annual vesting up to four years, generally beginning one year after the grant date. As of December 31, 2019, 867,000 shares of unissued common stock remained reserved for future stock incentive grants under the 2016 Plan. The Company issues new shares of common stock when options are exercised or when RSUs become vested.

Stock Option Activity

A summary of activity and various other information relative to stock options for the year ended December 31, 2019 is presented in the tables below (in thousands, except exercise price).

	Common Shares	Weighted- Average Exercise Price	Aggregate Intrinsic Value
Outstanding at beginning of period	19	\$ 11.27	
Granted	—	—	
Exercised	(19)	11.27	
Expired	—	—	
Forfeited	—	—	
Outstanding at end of period	—	\$ —	\$ —
Exercisable at end of period	—	\$ —	\$ —

Other information relative to option activity during the three years ended December 31, 2019 is as follows (in thousands):

	2019	2018	2017
Total intrinsic value of stock options exercised	\$ 277	\$ 6,130	\$ 1,973
Cash proceeds from exercise of stock options	\$ 214	\$ 2,582	\$ 413

Restricted Share Unit Activity

A summary of activity relative to RSUs for the year ended December 31, 2019 is as follows (in thousands, except weighted average grant date fair value):

	Number of RSU's	Weighted- Average Grant Date Fair Value	Aggregate Intrinsic Value
Outstanding at beginning of period	289	\$ 24.31	
Granted	100	27.24	
Vested	(82)	23.29	
Forfeited	(19)	24.38	
Outstanding at end of period	288	\$ 25.61	\$ 7,847

The aggregate intrinsic value for stock options represents the total difference between the Company's closing stock price on December 30, 2019 (the last trading day of the year) of \$27.22 per share and the grant date fair value, multiplied by the number of unvested RSUs as of December 31, 2019.

The aggregate fair value of RSUs that vested during the year ended December 31, 2019 and 2018, as of the respective vesting dates, was \$1.9 million and \$1.8 million, respectively. A portion of RSUs that vested in 2019 and 2018 were net-share settled such that the Company withheld shares with value equivalent to the employees' minimum statutory obligation for the applicable income and other employment taxes and remitted the cash to the appropriate taxing authorities. The total shares withheld for RSUs during 2019 and 2018 were 15,000 and 13,000, respectively, and were based on the value of the RSUs on their respective settlement dates as determined by the Company's closing stock price. Total payments related to RSUs for the employees' tax obligations to taxing authorities were \$0.4 million in 2019, \$0.3 million in 2018, and \$0.4 million in 2017, and are reflected as a financing activity within the Consolidated Statements of Cash Flows. These net-share settlements had the effect of share repurchases by the Company as they reduced and retired the number of shares that would have otherwise been issued as a result of the vesting and did not represent an expense to the Company.

Stock Based Compensation

Total stock based compensation expense, which is recorded in our Consolidated Statements of Income, recorded for the years ended December 31, is as follows (in thousands):

	Years Ended December 31,		
	2019	2018	2017
Cost of revenues (excluding depreciation and amortization)	\$ 699	\$ 37	\$ 29
Product development	956	296	228
Sales and marketing	614	183	244
Other general and administrative	1,975	1,261	1,235
Total stock based compensation expense	<u>\$ 4,244</u>	<u>\$ 1,777</u>	<u>\$ 1,736</u>

The Company amortizes the fair value of all stock based awards, net of estimated forfeitures, on a straight-line basis over the requisite service period, which generally is the vesting period. As of December 31, 2019, total unrecognized compensation expense related to non-vested stock options and RSUs was \$3.5 million, net of estimated forfeitures, with a weighted average expense recognition period remaining of 2.4 years. The Company realized \$117,000 of excess tax benefits related to stock based awards during the year ended December 31, 2019, which was reflected in the Consolidated Statement of Income as a component of the provision for income taxes.

Stock based compensation cost for RSUs is measured based on the closing fair market value of the Company's stock on the date of grant. Stock based compensation cost for stock options is estimated at the grant date based on the fair value calculated using the Black-Scholes method. The Company did not grant any stock options during the years ended December 31, 2019, 2018, or 2017.

Stock Awards

During June 2019, the Company's Chief Executive Officer, Robert A. Frist, Jr., contributed 78,520 of his personally owned shares of HealthStream, Inc. common stock (valued at \$2.0 million) to the Company, without any consideration paid to him, for the benefit of the Company's employees. In connection therewith, effective June 26, 2019 the Company approved the award of 78,520 fully vested shares of common stock to approximately 820 employees of the Company under the HealthStream, Inc. 2016 Omnibus Incentive Plan. These shares were issued in July 2019. As required by ASC Topic 718, *Compensation – Stock Compensation*, the Company recognized \$2.0 million of stock based compensation expense for these stock awards during the three months ended June 30, 2019 based on the closing fair market value of the Company's stock on the date of the Company's approval of these grants. Total payments related to the employees' tax obligations to taxing authorities for these stock awards were \$0.6 million and are reflected as a financing activity within the Consolidated Statement of Cash Flows for 2019. In addition, the employer taxes and expenses associated with these grants were \$0.2 million and were recorded as an expense during June 2019. Mr. Frist contributed an additional 7,852 of his personally owned shares to cover these costs. The receipt of shares from Mr. Frist and in connection with the withholding of shares as set forth above are presented on the Company's Statement of Shareholders' Equity in a similar manner as a share repurchase (i.e., reduction of outstanding shares).

12. EMPLOYEE BENEFIT PLAN

401(k) Plan

The Company has a defined-contribution employee benefit plan (401(k) Plan) incorporating provisions of Section 401(k) of the Internal Revenue Code. Employees must have attained the age of 21 and have completed thirty days of service to be eligible to participate in the 401(k) Plan. Under the provisions of the 401(k) Plan, a plan member may make contributions, on a tax-deferred basis, subject to IRS limitations. The Company elected to provide eligible employees with matching contributions totaling \$1.4 million, \$1.3 million, and \$0.7 million for the years ended December 31, 2019, 2018, and 2017, respectively.

13. DISCONTINUED OPERATIONS

On February 12, 2018, the Company divested its PX business to Press Ganey for \$65.2 million in cash (after giving effect to the post-closing working capital adjustment), resulting in a gain, net of tax, of \$20.5 million, of which \$19.0 million was recorded during the year ended December 31, 2018 and \$1.5 million was recorded during the year ended December 31, 2019.

This sale of the PX business resulted in the divestiture of the Company's patient experience solutions business segment. The Company has classified the results of its PX business segment as discontinued operations in its Consolidated Statements of Income and Cash Flows for all periods presented.

The financial results of the PX business for the period prior to divestiture during the years ended December 31, 2018 and 2017 are presented in discontinued operations in the Company's Consolidated Statements of Income. The following table presents the financial results of the PX business (in thousands):

	Year Ended December 31,	
	2018	2017
Revenues, net	\$ 3,342	\$ 32,763
Operating costs and expenses:		
Cost of revenues (excluding depreciation and amortization)	1,982	18,792
Product development	554	3,751
Sales and marketing	460	4,310
Other general and administrative expenses	229	3,282
Depreciation and amortization	181	2,235
Total operating costs and expenses	3,406	32,370
Operating (loss) income	(64)	393
Other income	—	—
(Loss) income from discontinued operations before income tax provision	(64)	393
Income tax benefit	—	(773)
(Loss) income from discontinued operations, net of income taxes	<u>\$ (64)</u>	<u>\$ 1,166</u>

14. DEBT

At December 31, 2019 and 2018, the Company had no debt outstanding.

Revolving Credit Facility

The Company entered into a Second Amendment to Revolving Credit Agreement (Revolving Credit Facility), amending the Revolving Credit Facility, dated as of December 31, 2018 with SunTrust Bank (SunTrust), extending the maturity date to November 24, 2020. Under the Revolving Credit Facility, the Company may borrow up to \$50.0 million, which includes a \$5.0 million swing line sub-facility and a \$5.0 million letter of credit sub-facility, as well as an accordion feature that allows the Company to increase the Revolving Credit Facility by a total of up to \$25.0 million, subject to securing additional

commitments from existing lenders or new lending institutions. The obligations under the Revolving Credit Facility are guaranteed by each of the Company's subsidiaries. At the Company's election, the borrowings under the Revolving Credit Facility bear interest at either (1) a rate per annum equal to the highest of SunTrust's prime rate or 0.5% in excess of the Federal Funds Rate or 1.0% in excess of one-month LIBOR (the Base Rate), plus an applicable margin, or (2) the one, two, three, or six-month per annum LIBOR for deposits in the applicable currency (the Eurocurrency Rate), as selected by the Company, plus an applicable margin. The applicable margin for Eurocurrency Rate loans depends on the Company's funded debt leverage ratio and varies from 1.50% to 2.00%. The applicable margin for Base Rate loans depends on the Company's funded debt leverage ratio and varies from 0.50% to 1.50%. Commitment fees and letter of credit fees are also payable under the Revolving Credit Facility. Principal is payable in full at maturity on November 24, 2020, and there are no scheduled principal payments prior to maturity. The Company is required to pay a commitment fee ranging between 20 and 30 basis points per annum of the average daily unused portion of the Revolving Credit Facility, depending on the Company's funded debt leverage ratio.

The purpose of the Revolving Credit Facility is for general working capital needs, permitted acquisitions (as defined in the Loan Agreement), and for stock repurchase and/or redemption transactions that the Company may authorize.

The Revolving Credit Facility contains certain covenants that, among other things, restrict additional indebtedness, liens and encumbrances, changes to the character of the Company's business, acquisitions, asset dispositions, mergers and consolidations, sale or discount of receivables, creation or acquisitions of additional subsidiaries, and other matters customarily restricted in such agreements.

In addition, the Revolving Credit Facility requires the Company to meet certain financial tests, including, without limitation:

- a funded debt leverage ratio (consolidated debt/consolidated EBITDA) of not greater than 3.0 to 1.0; and
- an interest coverage ratio (consolidated EBITDA/consolidated interest expense) of not less than 3.0 to 1.0.

As of December 31, 2019, the Company was in compliance with all covenants. There were no balances outstanding on the Revolving Credit Facility as of December 31, 2019 and there were no borrowings under the Revolving Credit Facility during the year ended December 31, 2019.

15. LEASES

Effective January 1, 2019, the Company adopted ASC 842, which requires an entity to recognize a right-of-use (ROU) asset and a lease liability on the balance sheet for substantially all leases, including operating leases, using the modified retrospective approach. The Company elected to use the package of practicable expedients allowing companies to not reassess: (1) the lease classification for any expired or existing leases, (2) the treatment of initial direct costs as they related to existing leases, and (3) whether existing contracts are or contain leases. The Company did not elect the use of the hindsight practical expedient but did elect the practical expedient not to separate lease components from non-lease components related to its office space leases.

Upon adoption of ASC 842, the Company had non-cancellable operating leases for office space subject to recognition as ROU assets. Accordingly, on January 1, 2019 the Company recorded \$4.8 million in ROU assets and \$6.4 million in operating lease liabilities (the difference of \$1.6 million related to existing deferred rent liabilities as of December 31, 2018 which had the effect of reducing the ROU asset upon adoption). During 2019, the Company acquired operating leases as part of its acquisitions of Providigm, resulting in a \$1.2 million ROU asset and lease liability, and CredentialMyDoc, resulting in a \$30,000 ROU asset and lease liability, and another operating lease for office space commenced for the Company's new corporate headquarters in Nashville, TN, resulting in a \$26.5 million ROU asset and lease liability. As of December 31, 2019, the Company had one lease that had not yet commenced that will add \$85,000 to ROU asset and lease liability upon commencement on January 1, 2020.

The Company does not have any lease contracts that contain: (1) an option to extend that the Company is reasonably certain to exercise, (2) an option to terminate that the Company is reasonably certain not to exercise, or (3) an option to extend (or not to terminate) in which exercise of the option is controlled by the lessor. Additionally, the Company does not have any leases with residual value guarantees or material restrictive covenants. For leases already commenced, the lease term was determined to be the remaining months in the lease term as of January 1, 2019, the date of adoption. The Company has elected not to recognize leases with initial terms of one year or less on the balance sheet. Lease liabilities and their corresponding right-of-use assets have been recorded based on the present value of the future lease payments over the

expected lease term. Most of the Company's lease agreements contain provisions for escalating rent payments over the terms of the leases.

The Company's leases do not contain readily determinable implicit discount rates, and as such the Company must use its incremental borrowing rate to discount the future lease payments based on information available at lease commencement. The incremental borrowing rate was estimated by determining the rate of interest that the Company would have to pay to borrow on a collateralized basis over a similar term an amount equal to the lease payments in a similar economic environment.

The Company's operating lease cost as presented in other general and administrative expense in the Consolidated Statement of Income was \$4.9 million for the twelve months ended December 31, 2019. Cash paid for amounts included in the measurement of operating lease liabilities was \$2.5 million for the year ended December 31, 2019. As of December 31, 2019, the weighted-average remaining lease term was 10.6 years, and the weighted-average incremental borrowing rate was 6%.

The table below presents the lease-related assets and liabilities recorded on the Consolidated Balance Sheet as of December 31, 2019 (in thousands).

Assets	Classification		
Operating lease right-of-use assets	Operating lease right of use assets, net	\$	29,615
Total leased assets		\$	29,615
Liabilities			
Operating lease liabilities, current	Accounts payable and accrued expenses	\$	2,797
Operating lease liabilities, noncurrent	Operating lease liability, noncurrent		30,733
Total operating lease liabilities		\$	33,530

The table below presents the maturities of lease liabilities under non-cancellable leases as of December 31, 2019 (in thousands).

2020	\$	4,749
2021		4,591
2022		4,124
2023		3,979
Thereafter		28,655
Total undiscounted lease payments	\$	46,098
Less imputed interest		12,568
Total lease liabilities	\$	33,530

16. COLLABORATIVE ARRANGEMENT

The Company participated in a collaborative arrangement, SimVentures™, with Laerdal Medical A/S (Laerdal Medical), which ended effective March 1, 2018. Prior to the termination of this collaborative arrangement, the Company received 50 percent of the profits or losses generated from the collaborative arrangement. For the year ended December 31, 2018, the Company recorded \$391,000 of revenues and \$187,000 of expenses related to the collaborative arrangement. For the year ended December 31, 2017, the Company recorded \$2.2 million of revenues and \$1.2 million of expenses related to the collaborative arrangement.

17. LITIGATION

In connection with its business, the Company is from time to time involved in various legal actions. The litigation process is inherently uncertain, and it is possible that the resolution of such matters might have a material adverse effect upon the financial condition and/or results of operations of the Company. However, in the opinion of the Company's management,

matters currently pending or threatened against the Company are not expected to have a material adverse effect on the financial position or results of operations of the Company.

18. NON-MARKETABLE EQUITY INVESTMENTS

Non-marketable equity investments where the Company is not able to exercise significant influence over the investee are accounted for using the measurement alternative for equity investments that do not have readily determinable fair values. ASU 2016-01, *Financial Instruments – Overall (Subtopic 825-10)*, became effective for the Company as of January 1, 2018 and requires equity investments (except those accounted for under the equity method of accounting or those that result in consolidation of the investee) to be measured at fair value with changes in fair value recognized in net income. The aggregate carrying amount of all non-marketable equity investments was \$5.4 million and \$2.1 million for the years ended December 31, 2019 and 2018, respectively, which carrying value we evaluate for impairment at each reporting period. Cumulatively, the Company has recorded \$1.3 million in reductions to the carrying value of non-marketable equity investments due to downward changes in fair value based on observable prices from orderly transactions for similar investments made in the investee. The fair value of non-marketable equity investments is not estimated if there are no identified events or changes in circumstances that may have a significant adverse effect on the fair value of the investment.

19. SUBSEQUENT EVENT

In June 2018, a contract with one of our royalty partners expired and was not renewed. However, the contract required continued royalty payments for any subscriptions that extended beyond the contract termination date. Following the contract termination, there was a mutual disagreement related to various elements of this past partnership, and the Company accrued but did not pay royalties to the partner following the contract expiration. During the first quarter of 2020, the Company received a release of liability from the partner associated with this contract, resulting in no royalties to be paid to the partner. The de-recognition of this liability will be recorded as a \$3.4 million reduction to cost of goods sold in the first quarter of 2020.

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

HealthStream's chief executive officer and principal financial officer have reviewed and evaluated the effectiveness of the Company's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) promulgated under the Securities Exchange Act of 1934 (the Exchange Act)) as of December 31, 2019. Based on that evaluation, the chief executive officer and principal financial officer have concluded that HealthStream's disclosure controls and procedures were effective to ensure that the information required to be disclosed by the Company in the reports the Company files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms, and the information required to be disclosed in the reports the Company files or submits under the Exchange Act was accumulated and communicated to the Company's management, including its principal executive and principal financial officer, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act, and for assessing the effectiveness of internal control over financial reporting. The Company's internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP. The 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 GAAP, 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.

Management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2019. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in Internal Control-Integrated Framework (2013 Framework). Management's assessment included an evaluation of the design of our internal control over financial reporting and testing of the operational effectiveness of our internal control over financial reporting. Management believes that, as of December 31, 2019, the Company's internal control over financial reporting was effective based on those criteria. The Company's independent registered public accounting firm, Ernst & Young LLP, has issued an audit report on the Company's internal control over financial reporting, which appears in Item 8 of this Annual Report on Form 10-K.

Changes in Internal Control over Financial Reporting

There were no changes in HealthStream's internal control over financial reporting that occurred during the fourth quarter of 2019 that have materially affected, or that are reasonably likely to materially affect, HealthStream's internal control over financial reporting.

Item 9B. *Other Information*

None.

PART III

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

Information as to directors of the Company and corporate governance is incorporated by reference from the information to be contained in our proxy statement for the 2020 Annual Meeting of Shareholders (2020 Proxy Statement) that we will file with the Securities and Exchange Commission within 120 days of the end of the fiscal year to which this report relates. Pursuant to General Instruction G(3), certain information concerning executive officers of the Company is included in Part I of this Form 10-K, under the caption Information about our Executive Officers.

Item 11. *Executive Compensation*

Incorporated by reference from the information to be contained in the Company's 2020 Proxy Statement.

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

Incorporated by reference from the information to be contained in the Company's 2020 Proxy Statement.

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

Incorporated by reference from the information to be contained in the Company's 2020 Proxy Statement.

Item 14. *Principal Accounting Fees and Services*

Incorporated by reference from the information to be contained in the Company's 2020 Proxy Statement.

PART IV

Item 15. Exhibits, Financial Statement Schedules

(a)(1) Financial Statements

Reference is made to the financial statements included in Item 8 to this Report on Form 10-K.

(a)(2) Financial Statement Schedules

All schedules are omitted because they are not applicable or the required information is shown in the Consolidated Financial Statements or the notes thereto.

(a)(3) Exhibits

Number	Description
2.1 (1)	<u>Membership Interest Purchase Agreement, dated as of February 12, 2015, between HealthStream, Inc., Littrell Holdings, Inc., HealthLine Systems, Inc., the Shareholders of HealthLine Systems, Inc., and Dan Littrell in his individual capacity and as the Shareholders Representative.</u>
2.2 (2)	<u>Stock Purchase Agreement, by and between Echo, Inc. and Morrisey Holdings, Inc., dated August 8, 2016.</u>
2.3 (16)	<u>Membership Interest Purchase Agreement, by and between HealthStream, Inc. and Press Ganey Associates, Inc., dated February 12, 2018.</u>
3.1*	<u>Fourth Amended and Restated Charter of HealthStream, Inc.</u>
3.2 (8) *	<u>Second Amended and Restated Bylaws of HealthStream, Inc.</u>
4.1*	<u>Form of certificate representing the common stock, no par value per share, of HealthStream, Inc.</u>
4.2*	<u>Reference is made to Exhibits 3.1 and 3.2.</u>
4.3	<u>Description of Capital Stock of HealthStream, Inc.</u>
10.1^ (6)	<u>2010 Stock Incentive Plan, effective as of May 27, 2010</u>
10.2^*	<u>Form of Indemnification Agreement</u>
10.3^ (3)	<u>Executive Employment Agreement, dated July 21, 2005, between HealthStream, Inc. and Robert A. Frist, Jr.</u>
10.4^ (4)	<u>Form of HealthStream, Inc. Non-Qualified Stock Option Agreement (Employees) under 2010 Stock Incentive Plan</u>
10.5^ (4)	<u>Form of HealthStream, Inc. Incentive Stock Option Agreement (Employees) under 2010 Stock Incentive Plan</u>
10.6^ (4)	<u>Form of HealthStream, Inc. Non-Qualified Stock Option Agreement (Directors) under 2010 Stock Incentive Plan</u>
10.7^ (5)	<u>Form of HealthStream, Inc. Restricted Share Unit Agreement (Officers) under 2010 Stock Incentive Plan</u>
10.8^ (5)	<u>Form of HealthStream, Inc. Restricted Share Unit Agreement (Non-Employee Director) under 2010 Stock Incentive Plan</u>
10.9 (7)	<u>Revolving Credit Agreement, dated November 24, 2014, by and among HealthStream, Inc., the several banks and other financial institutions and lenders from time to time party thereto and SunTrust Bank, as administrative agent, issuing bank, and swingline lender</u>
10.10^	<u>Summary of Director and Executive Officer Compensation</u>
10.11^ (10)	<u>Letter Agreement, dated as of September 24, 2015, between HealthStream, Inc. and Michael Sousa.</u>
10.12^ (11)	<u>2016 Omnibus Incentive Plan.</u>
10.13^ (12)	<u>Form of HealthStream, Inc. Restricted Share Unit Agreement (Officers) under 2016 Omnibus Incentive Plan.</u>
10.14^ (12)	<u>Form of HealthStream, Inc. Restricted Share Unit Agreement (Non-Employee Director) under 2016 Omnibus Incentive Plan.</u>
10.15 (13)	<u>Lease Agreement, dated April 3, 2017, by and between HealthStream, Inc. and Capitol View Joint Venture.</u>
10.16 (14)	<u>First Amendment to Revolving Credit Agreement, dated November 13, 2017, by and between HealthStream, Inc. and SunTrust Bank.</u>
10.17 (15)	<u>Second Amendment to Revolving Credit Agreement, dated as of December 31, 2018, by and between HealthStream, Inc. and SunTrust Bank.</u>
10.18^ (9)	<u>Form of HealthStream, Inc. Restricted Share Unit Agreement (Performance) under 2016 Omnibus Plan between HealthStream, Inc. and J. Edward Pearson</u>

10.19^ (9)	<u>Form of HealthStream, Inc. Restricted Share Unit Agreement (Performance) under 2016 Stock Incentive Plan between HealthStream, Inc. and Michael Sousa</u>
10.20^ (17)	<u>HealthStream, Inc. Amended 2019 Executive and Corporate Management Cash Incentive Bonus Plan</u>
10.21^ (17)	<u>HealthStream, Inc. Amended 2019 Provider Solutions Cash Incentive Bonus Plan</u>
10.22^ (17)	<u>Contribution Agreement dated as of June 26, 2019 between HealthStream, Inc. and Robert A. Frist, Jr.</u>
21.1	<u>Subsidiaries of HealthStream, Inc.</u>
23.1	<u>Consent of Independent Registered Public Accounting Firm</u>
31.1	<u>Certification of the Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</u>
31.2	<u>Certification of the Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</u>
32.1	<u>Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002</u>
32.2	<u>Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002</u>
101.1 INS	XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
101.1 SCH	Inline XBRL Taxonomy Extension Schema
101.1 CAL	Inline XBRL Taxonomy Extension Calculation Linkbase
101.1 DEF	Inline XBRL Taxonomy Extension Definition Linkbase
101.1 LAB	Inline XBRL Taxonomy Extension Label Linkbase
101.1 PRE	Inline XBRL Taxonomy Extension Presentation Linkbase
104	Cover Page Interactive Data File (formatted in Inline XBRL and included in Exhibit 101.1)
*	Incorporated by reference to Registrant's Registration Statement on Form S-1, as amended (Reg. No. 333-88939).
^	Management contract or compensatory plan or arrangement
(1)	Incorporated by reference from exhibit filed on our Current Report on Form 8-K, dated February 13, 2015.
(2)	Incorporated by reference from exhibit filed on our Current Report on Form 8-K, dated August 8, 2016.
(3)	Incorporated by reference from exhibit filed on our Current Report on Form 8-K, dated July 25, 2005.
(4)	Incorporated by reference from exhibit filed on our Current Report on Form 8-K, dated June 1, 2010.
(5)	Incorporated by reference from exhibit filed on our Quarterly Report on Form 10-Q, for the quarterly period ended March 31, 2012 filed with the SEC on April 30, 2012.
(6)	Incorporated by reference to Appendix B of the Company's Definitive Proxy Statement filed with the SEC on April 29, 2010.
(7)	Incorporated by reference from exhibit filed on our Current Report on Form 8-K, dated November 25, 2014.
(8)	Incorporated by reference from exhibit filed on our Current Report on Form 8-K, dated October 23, 2015.
(9)	Incorporated by reference from exhibit filed on our Current Report on Form 8-K, dated May 16, 2018.
(10)	Incorporated by reference from exhibit filed on our Quarterly Report on Form 10-Q, for the quarterly period ended September 30, 2015, filed with the SEC on October 30, 2015.
(11)	Incorporated by reference from exhibit filed on our Current Report on Form 8-K, dated May 31, 2016.
(12)	Incorporated by reference from exhibit filed on our Quarterly Report on Form 10-Q, for the quarterly period ended March 31, 2017, filed with the SEC on May 1, 2017.
(13)	Incorporated by reference from exhibit filed on our Quarterly Report on Form 10-Q, for the quarterly period ended June 30, 2017, filed with the SEC on July 31, 2017.
(14)	Incorporated by reference from exhibit filed on our Current Report on Form 8-K, dated November 14, 2017.
(15)	Incorporated by reference from exhibit filed on our Current Report on Form 8-K, dated January 2, 2019.
(16)	Incorporated by reference from exhibit filed on our Current Report on Form 8-K, dated February 12, 2018.
(17)	Incorporated by reference from exhibit filed on our Quarterly Report on Form 10-Q, for the quarterly period ended June 30, 2019, filed with the SEC on July 26, 2019.

Item 16. *Form 10-K Summary*

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized on this 26th day of February 2020.

HEALTHSTREAM, INC.

By: /s/ ROBERT A. FRIST, JR.

Robert A. Frist, Jr.

Chief Executive Officer

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

<u>Signature</u>	<u>Title(s)</u>	<u>Date</u>
<u>/s/ ROBERT A. FRIST, JR.</u> Robert A. Frist, Jr.	Chief Executive Officer and Chairman (Principal Executive Officer)	February 26, 2020
<u>/s/ SCOTT A. ROBERTS</u> Scott A. Roberts	Chief Financial Officer and Senior Vice President (Principal Financial and Accounting Officer)	February 26, 2020
<u>/s/ THOMPSON DENT</u> Thompson Dent	Director	February 26, 2020
<u>/s/ FRANK GORDON</u> Frank Gordon	Director	February 26, 2020
<u>/s/ C. MARTIN HARRIS</u> C. Martin Harris	Director	February 26, 2020
<u>/s/ JEFFREY L. MCLAREN</u> Jeffrey L. McLaren	Director	February 26, 2020
<u>/s/ LINDA REBROVICK</u> Linda Rebrovick	Director	February 26, 2020
<u>/s/ MICHAEL SHMERLING</u> Michael Shmerling	Director	February 26, 2020
<u>/s/ WILLIAM STEAD</u> William Stead	Director	February 26, 2020
<u>/s/ DEBORAH TAYLOR TATE</u> Deborah Taylor Tate	Director	February 26, 2020

Description of Capital Stock

The following description of the capital stock of HealthStream, Inc. (“us,” “our,” “we,” “HSTM” or the “Company”) is a summary of the rights of our common stock and certain provisions of our Fourth Amended and Restated Charter (the “Charter”) and Second Amended and Restated Bylaws (the “Bylaws”) as currently in effect. This summary does not purport to be complete and is qualified in its entirety by the provisions of our Charter and Bylaws, each of which are incorporated by reference as an exhibit to this Annual Report on Form 10-K, of which this Exhibit 4 is a part. We encourage you to read our Charter, Bylaws, and the Tennessee Business Corporation Act (the “TBCA”) for additional information.

General

Our authorized capitalization consists of 85,000,000 shares, of which 75,000,000 shares are classified and designated common stock, no par value per share, and 10,000,000 shares are classified and designated preferred stock, no par value per share.

Common Stock

Our common stock is listed and traded on the Nasdaq Global Select Market under the symbol “HSTM.” All outstanding shares of our common stock are fully paid and nonassessable. Each outstanding share of our common stock is entitled to one vote on all matters submitted to a vote of shareholders. Our Board of Directors (the “Board”) is divided into three classes, and directors are elected by classes to three-year terms. The holders of our outstanding common stock do not have the right to cumulate their votes with respect to the election of directors or any other matters. The holders of outstanding shares of our common stock are entitled to receive dividends out of assets legally available for the payment of dividends at the times and in the amounts as our Board may from time to time determine. The shares of common stock are neither redeemable nor convertible. Holders of our common stock have no preemptive or subscription rights to purchase any securities of the Company. Upon liquidation, dissolution or winding up of the Company, the holders of our common stock are entitled to receive pro rata the assets of the Company that are legally available for distribution, after payment of all debts and other liabilities and subject to the prior rights of any holders of preferred stock then outstanding.

Preferred Stock

Our Charter authorizes our Board to issue, without further shareholder approval, up to 10,000,000 shares of preferred stock from time to time in one or more series with such designations, powers, preferences and relative rights, including voting rights, conversion rights, distribution rights, dividend rights, liquidation preference, transfer rights, redemption rights, merger rights and other rights, or restrictions as may be provided for the issue of such series by resolution and amendment to our Charter adopted by our Board. This generally is referred to as “blank check” preferred stock. The preferred stock could have priority over common stock as to dividends and as to the distribution of our assets upon any liquidation, dissolution or winding up of the Company. Accordingly, the Board’s ability to authorize, without shareholder approval, the issuance of preferred stock with conversion and other rights may adversely affect the rights of holders of our common stock or other series of preferred stock that may be outstanding. No shares of our preferred stock are currently issued and outstanding.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is ComputerShare Trust Company, N.A.

Our Charter and Bylaws Contain Provisions That May Have an Anti-Takeover Effect

Certain provisions of our Charter and Bylaws may delay or make more difficult acquisitions or changes of control of us that are not approved by our Board. These provisions could have the effect of discouraging third parties from making proposals involving an acquisition or change of control of the Company, although these kinds of proposals, if made, might be considered desirable by a majority of our shareholders. These provisions may also have the effect of making it more difficult for third parties to cause the replacement of our current management without the concurrence of our Board.

Undesignated preferred stock. As discussed above, our Board has the ability to designate and issue preferred stock with voting or other rights or preferences that could deter hostile takeovers or delay changes in our control or management.

Limits on the ability of shareholders to act by written consent. Our Bylaws provide that our shareholders may not act by written consent, which may lengthen the amount of time required to take shareholder actions. As a result, the holders of a majority of

our capital stock would not be able to amend our Charter or Bylaws or remove directors without holding a meeting of shareholders called in accordance with our Bylaws.

Requirements for advance notification of shareholder nominations and proposals. Our Charter and Bylaws contain advance notice procedures with respect to shareholder proposals and the nomination of candidates for election as directors, other than nominations made by or at the direction of our Board or a committee of the Board. These advance notice procedures may have the effect of precluding the conduct of certain business at a meeting if the proper procedures are not followed and may also discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempt to obtain control of our company.

Amendment of Charter and Bylaws. Tennessee law provides generally that the affirmative vote of a majority of the shares entitled to vote on any matter is required to amend a corporation's charter or bylaws, unless a corporation's charter or bylaws, as the case may be, requires a greater percentage. Our Charter provides that certain sections of our Charter and Bylaws may only be amended or revised by the affirmative vote of at least two-thirds of the voting power of the outstanding shares of capital stock outstanding and entitled to vote at an election of directors.

Classified Board of Directors. -Our Charter and Bylaws provide that our Board is to be divided into three classes as nearly equal in number as possible. Directors are elected by classes to three-year terms, so that approximately one-third of the directors of the Company are elected at each annual meeting of the shareholders. In addition, our Bylaws provide that the power to increase or decrease the number of directors and to fill vacancies is vested in the Board. The overall effect of these provisions may be to prevent a person or entity from seeking to acquire control of the Company through an increase in the number of directors on the Board and the election of designated nominees to fill newly created vacancies.

Removal of directors. Under Tennessee law, a director can be removed by shareholders with or without cause, unless a corporation's charter provides that the director can only be removed for cause. Our Charter includes this restriction, which could make it more difficult for shareholders to remove existing members of our Board other than in connection with an annual meeting at which their annual terms expire.

Calling a special meeting. Under Tennessee law, a special meeting of a Tennessee corporation's shareholders can be called by its board of directors or, unless the charter provides otherwise, the holders of at least 10% of the outstanding voting stock. Our Charter and Bylaws provide that special meetings of stockholders, for any purpose or purposes, may only be called by our Board, the chairman of our Board, or our President.

Tennessee Anti-Takeover Statutes

In addition to certain of the Charter and Bylaws provisions discussed above and below, Tennessee has adopted a series of statutes which can have an anti-takeover effect and may delay or prevent a tender offer or takeover attempt that a shareholder might consider in its best interest, including those attempts that might result in a premium over the market price for our capital stock.

The Tennessee Business Corporation Act

The Tennessee Business Combination Act (the "TN Business Combination Act") provides that an interested shareholder (defined as a person owning, either directly or indirectly, 10% or more of the voting securities in a Tennessee corporation) cannot engage in a business combination with that corporation unless the transaction takes place at least five years after the interested shareholder first becomes an interested shareholder, and unless either the transaction (a) is approved by at least two-thirds of the shares of the corporation not beneficially owned by an interested shareholder and the affiliates and associates of such interested shareholder or (b) satisfies certain fairness conditions specified in the TN Business Combination Act relating to the price to be paid to the non-interested shareholders in such transaction.

These provisions apply to Tennessee corporations unless one of two events occur. A business combination with an entity can proceed without the five-year moratorium if the business combination or transaction resulting in the shareholder becoming an interested shareholder is approved by the target corporation's board of directors before that entity becomes an interested shareholder. Alternatively, the corporation may enact an amendment to its charter or bylaws to remove itself entirely from the Tennessee Business Combination Act. This amendment must be approved by a majority of the shareholders who have held shares for more than one year prior to the vote and may not take effect for at least two years after the vote.

Our Charter has not adopted such a provision, and, therefore, we are subject to the Tennessee Business Combination Act.

The Tennessee Control Share Acquisition Act

The Tennessee Control Share Acquisition Act (the “TCSA”) takes away the voting rights of a purchaser’s shares any time an acquisition of shares in a Tennessee corporation brings the purchaser’s voting power to 20%, 33-1/3%, or more than 50% of all voting power in such corporation. The purchaser’s voting rights can be maintained or re-established only by a majority vote of all the shares entitled to vote generally with respect to the election of directors other than those shares owned by the acquirer and the officers and inside directors of the corporation.

The TCSA applies only to a corporation that has adopted a provision in its charter or bylaws declaring that the TCSA will apply. Our Charter has not adopted such a provision, and, therefore, we are not subject to the TCSA.

Tennessee Greenmail Act

The Tennessee Greenmail Act prohibits a Tennessee corporation whose stock is registered or traded on a national securities exchange or registered with the Securities and Exchange Commission, from purchasing, directly or indirectly, any of its shares at a price above the market value of the shares from any person who holds more than 3% of the class of securities to be purchased if such person has held the shares for less than two years, unless the purchase has been approved by the affirmative vote of a majority of the outstanding shares of each class of voting stock issued by the corporation or the corporation makes an offer, of at least equal value per share, to all holders of shares of the class. Under the Tennessee Greenmail Act, the market value of the shares is defined as the average of the highest and lowest closing market price for the shares during the 30 trading days preceding the purchase and sale or preceding the commencement or announcement of a tender offer if the seller of the shares has commenced a tender offer or announced an intention to seek control of the corporation.

Our common stock is traded on the Nasdaq Global Select Market and, therefore, is subject to the Tennessee Greenmail Act.

Tennessee Investor Protection Act

The Tennessee Investor Protection Act applies to tender offers directed at corporations, such as our Company, that have “substantial assets” in Tennessee and that are either incorporated in or have a principal office in Tennessee. Pursuant to the Investor Protection Act, an offeror making a tender offer for an offeree company who beneficially owns 5% or more of any class of equity securities of the offeree company, any of which was purchased within one year prior to the proposed tender offer, is required to file a registration statement with the Commissioner of Commerce and Insurance. When the offeror intends to gain control of the offeree company, the registration statement must indicate any plans the offeror has for the offeree. The Commissioner may require additional information concerning the takeover offer and may call for hearings. The Investor Protection Act does not apply to an offer that the offeree company’s board of directors recommends to shareholders.

In addition to requiring the offeror to file a registration statement with the Commissioner, the Investor Protection Act requires the offeror and the offeree company to deliver to the Commissioner all solicitation materials used in connection with the tender offer. The Investor Protection Act prohibits fraudulent, deceptive, or manipulative acts or practices by either side and gives the Commissioner standing to apply for equitable relief to the Chancery Court of Davidson County, Tennessee, or to any other chancery court having jurisdiction whenever it appears to the Commissioner that the offeror, the offeree company or any of their respective affiliates has engaged in or is about to engage in a violation of the Investor Protection Act. Upon proper showing, the chancery court may grant injunctive relief. The Investor Protection Act further provides civil and criminal penalties for violations.

Indemnification

Our Charter provides that, to the fullest extent permitted by the TBCA, a director will not be liable to the Company or its shareholders for monetary damages for breach of his or her fiduciary duty as a director. Under the TBCA, directors have a fiduciary duty which is not eliminated by this provision in our Charter. In some circumstances, equitable remedies such as injunctive or other forms of nonmonetary relief will remain available. In addition, each director will continue to be subject to liability under the TBCA:

- for any breach of the director’s duty of loyalty to the Company or its shareholders; or
- for acts or omissions which are found by a court of competent jurisdiction to be not in good faith or which involved intentional misconduct or knowing violations of law;
- in connection with any proceeding charging improper personal benefit to the director, whether or not involving action in the director’s official capacity, in which the director was adjudged liable on the basis that personal benefit was improperly received by the director; and
- for payment of distributions that are prohibited by the TBCA.

The TBCA provides that a corporation may indemnify any director or officer against liability incurred in connection with a proceeding if the director or officer acted in good faith or reasonably believed, in the case of conduct in his or her official capacity with the corporation, that the conduct was in the corporation's best interests. In all other civil cases, a corporation must indemnify a director or officer who reasonably believed that his or her conduct was not opposed to the best interests of the corporation. In connection with any criminal proceedings, a corporation may indemnify any director or officer who had no reasonable cause to believe that his or her conduct was unlawful.

In actions brought by or in the right of the corporation, however, the TBCA does not allow indemnification if the director or officer is adjudged to be liable to the corporation. Similarly, the TBCA prohibits indemnification of a director or officer if the director or officer is adjudged liable in a proceeding because a personal benefit was improperly received.

Under our Charter, in cases when the director or officer is wholly successful, on the merits or otherwise, in the defense of any proceeding brought because of his or her status as a director or officer of a corporation, the corporation must indemnify the director or officer against all expense, liability, and loss incurred in the proceeding. Also, the TBCA provides that a court may order a corporation to indemnify a director or officer for reasonable expenses if the court determines that the individual is entitled to mandatory indemnification, or, in consideration of all relevant circumstances, the court determines that the individual is fairly and reasonably entitled to indemnification, whether or not the individual acted in good faith or reasonably believed his or her conduct was in the corporation's best interest.

Our Bylaws provide that the Company shall indemnify and advance expenses to its directors and officers to the fullest extent permitted by the TBCA. The Company also maintains insurance to protect any director or officer against any liability and has entered into indemnification agreements with its directors to create a contractual obligation to indemnify its directors. These agreements, among other things, indemnify the Company's directors for some expenses, judgments and fines and amounts paid in settlement, actually and reasonably incurred by any of these persons in any threatened, pending or completed action, suit proceeding or arbitration or any inquiry, hearing or investigation arising out of the person's services as the Company's director.

HealthStream, Inc. (the Company)

Summary of Director and Executive Officer Compensation

I. Director Compensation. Directors who are employees of the Company do not receive additional compensation for serving as directors of the Company. For fiscal year 2019, each director received an annual retainer of \$5,000, except for the Audit Committee Chair and Nominating and Corporate Governance Chair, who received an additional annual retainer of \$7,500, and the Compensation Committee Chair, who received an additional annual retainer of \$2,000. Non-employee directors also received a \$20,000 flat-fee, except for members of the Audit Committee who received \$22,500, for board and committee meeting attendance and participation in lieu of per meeting fees.

In addition to the cash compensation set forth above, each non-employee director is eligible to receive a nondiscretionary annual grant of restricted share units. The restricted share units are granted annually and vest ratably over a three-year period.

Director compensation for 2020 has not yet been determined by the Compensation Committee.

II. Executive Officer Compensation. The following table sets forth the current base salaries and fiscal 2019 performance bonuses to be provided to our executive officers upon review and approval by the Compensation Committee, including the individuals who the Company expects to be its Named Executive Officers for 2020.

Executive Officer	Current Base Salary	Fiscal 2019 Bonus Amount*
Robert A. Frist, Jr.	\$345,050	\$138,020
J. Edward Pearson	\$339,900	\$135,960
Michael Sousa	\$339,900	\$135,960
Scott A. Roberts	\$250,000	\$46,937
Jeffrey D. Cunningham	\$292,520	\$87,756
Michael M. Collier	\$272,950	\$81,885
Trisha L. Coady	\$253,450	\$76,035
M. Scott McQuigg	\$250,000	\$70,963

* Fiscal 2019 bonus amounts remain subject to review and approval by the Compensation Committee.

Base salary adjustments for 2020, bonus targets for 2020 cash bonuses, and 2020 equity grants for executive officers have not yet been determined by the Compensation Committee.

III. Additional Information. The foregoing information is summary in nature. Additional information regarding Director and Named Executive Officer compensation will be contained in the Company's 2020 Proxy Statement.

SUBSIDIARIES OF HEALTHSTREAM, INC.

<u>Names Under Which We Do Business</u>	<u>State or Other Jurisdiction of Incorporation or Organization</u>
Decision Critical, Inc.	Texas
VerityStream, Inc. (f/k/a Echo, Inc.)	Tennessee
Morrisey Associates, Inc.	Illinois
Performance Management Services, Inc.	California
Nursing Registry Consultants Corporation	Delaware
Health Care Compliance Strategies, Inc.	New York
HealthStream Acquisition I, Inc.	Tennessee
HealthStream Acquisition II, Inc.	Tennessee
Providigm, LLC	Colorado

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the following Registration Statements:

- (1) Registration Statement (Form S-3 ASR No. 333-230169) of HealthStream, Inc. for the registration of shares of its common stock;
- (2) Registration Statement (Form S-8 No. 333-211725) pertaining to the HealthStream, Inc. 2016 Omnibus Incentive Plan; and
- (3) Registration Statement (Form S-8 No. 333-167241) pertaining to the HealthStream, Inc. 2010 Stock Incentive Plan;

of our reports dated February 26, 2020, with respect to the consolidated financial statements of HealthStream, Inc. and the effectiveness of internal control over financial reporting of HealthStream, Inc. included in this Annual Report (Form 10-K) of HealthStream, Inc. for the year ended December 31, 2019.

/s/ Ernst & Young LLP

Nashville, Tennessee
February 26, 2020

CERTIFICATION

I, Robert A. Frist, Jr., certify that:

1. I have reviewed this annual report on Form 10-K of HealthStream, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date : February 26, 2020

/s/ ROBERT A. FRIST, JR.

Robert A. Frist, Jr.
Chief Executive Officer

CERTIFICATION

I, Scott A. Roberts, certify that:

1. I have reviewed this annual report on Form 10-K of HealthStream, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date : February 26, 2020

/s/ SCOTT A. ROBERTS
Scott A. Roberts
Chief Financial Officer

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of HealthStream, Inc. (the “Company”) on Form 10-K for the year ending December 31, 2019, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), Robert A. Frist, Jr., Chief Executive Officer of the Company certifies, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ ROBERT A. FRIST, JR.

Robert A. Frist, Jr.
Chief Executive Officer
February 26, 2020

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of HealthStream, Inc. (the “Company”) on Form 10-K for the year ending December 31, 2019, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), Scott A. Roberts, Chief Financial Officer of the Company certifies, pursuant to 18 U.S.C. § 1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ SCOTT A. ROBERTS
Scott A. Roberts
Chief Financial Officer
February 26, 2020

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