

AMERICAN SHARED HOSPITAL SERVICES
Form 10-K
March 29, 2019

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

FORM 10-K

(Mark One)

x Annual Report Pursuant To Section 13 or 15(d) Of The Securities Exchange Act of 1934
For The Fiscal Year Ended December 31, 2018

or

.. **Transition Report Pursuant To Section 13 or 15(d) Of The Securities Exchange Act of 1934**
For The Transition Period From _____ to _____ .

Commission file number 1-08789

American Shared Hospital Services

(Exact name of registrant as specified in its charter)

California 94-2918118
(State or other jurisdiction of (IRS Employer)

incorporation or organization) Identification No.)

Two Embarcadero Center, Suite 410, San Francisco, California 94111-4107
(Address of Principal Executive Offices) (Zip Code)

Registrant's telephone number, including area code: (415) 788-5300

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

Title of each class	Name of each exchange on which registered
Common Stock No Par Value	NYSE AMERICAN

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

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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 if the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes No

As of June 30, 2018, the aggregate market value of the common stock held by non-affiliates of the registrant was approximately \$10,027,000.

Number of shares of common stock of the registrant outstanding as of March 20, 2019: 5,714,000.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant’s definitive Proxy Statement for the 2018 Annual Meeting of Shareholders are incorporated by reference into Part III of this report.

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FORWARD-LOOKING STATEMENTS

Certain matters discussed in this Annual Report on Form 10-K other than statements of historical information are “forward-looking statements.” The Private Securities Litigation Reform Act of 1995 has established that these statements qualify for safe harbors from liability. Forward-looking statements may include words like we “believe”, “anticipate”, “target”, “expect”, “pro forma”, “estimate”, “intend”, “will”, “is designed to”, “plan” and words of similar meaning. Forward-looking statements describe our future plans, objectives, expectations or goals. Such statements address future events and conditions concerning and include, but are not limited to, such things as:

- capital expenditures
- earnings
- liquidity and capital resources
- financing of our business
- government programs and regulations
- legislation affecting the health care industry
- the expansion of our proton beam radiation therapy business
- accounting matters
- compliance with debt covenants
- competition
- customer concentration
- contractual obligations
- timing of payments
- technology
- interest rates

These forward-looking statements involve known and unknown risks that may cause our actual results in future periods to differ materially from those expressed in any forward-looking statement. Factors that could cause or contribute to such differences include, but are not limited to, such things as:

- our high level of debt
- the limited market for our capital-intensive services
- the impact of lowered federal reimbursement rates
- the impact of recent U.S. health care reform legislation
- competition and alternatives to our services
- technological advances and the risk of equipment obsolescence
- our significant investment in the proton beam radiation therapy business
- the small and illiquid market for our stock

These lists are not all-inclusive because it is not possible to predict all factors. A discussion of some of these factors is included in this document under the headings “Item 1A. Risk Factors” and “Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations” “–Application of Critical Accounting Policies” and “–Liquidity and Capital Resources.” This report should be read in its entirety. No one section of this report deals with all aspects of the subject matter. Any forward-looking statement speaks only as of the date such statement was made, and we are not obligated to update any forward-looking statement to reflect events or circumstances after the date on which such statement was made, except as required by applicable laws or regulations.

PART I

ITEM 1. BUSINESS

GENERAL

American Shared Hospital Services (“ASHS” and, together with its subsidiaries, the “Company”) provides Gamma Knife stereotactic radiosurgery equipment and radiation therapy and related equipment to sixteen (16) medical centers in fourteen (14) states in the United States and one Gamma Knife unit at a stand-alone facility in Lima, Peru as of March 1, 2019. The Company provides Gamma Knife services through its 81% indirect interest in GK Financing, LLC, a California limited liability company (“GKF”). The remaining 19% of GKF is owned by GKV Investments, Inc., a wholly-owned U.S. subsidiary of Elekta AG, a Swedish company (“Elekta”). Elekta is the manufacturer of the Leksell Gamma Knife (the “Gamma Knife”). GKF is a non-exclusive provider of alternative financing services for Leksell Gamma Knife units.

The Company wholly-owns the subsidiaries American Shared Radiosurgery Services (“ASRS”), OR21, Inc. and MedLeader.com, Inc. (“MedLeader”). ASRS is the majority-owner of GKF.

GKF has established the wholly-owned subsidiary Instituto de Gamma Knife del Pacifico S.A.C. (“GKPeru”) for the purpose of providing similar Gamma Knife services in Peru.

GKF also owns a 51% interest in Albuquerque GK Equipment, LLC (“AGKE”) and Jacksonville GK Equipment, LLC (“JGKE”). The remaining 49% in each of these two companies is owned by radiation oncologists.

The Company is also the sole owner of PBRT Orlando, LLC (“Orlando”) and the majority owner of Long Beach Equipment, LLC (“LBE”) which were formed to provide proton beam radiation therapy services in Orlando, Florida and Long Beach, California. A 40% minority ownership in LBE is owned by radiation oncologists.

The Company continues to develop its design and business model for “The Operating Room for the 21st Century”SM through its 50% owned OR21, LLC (“OR21”). The remaining 50% of OR21 is owned by an architectural design company. OR21 is not expected to generate significant revenue within the next two years.

The Company was incorporated in the State of California in 1983 and its predecessor, Ernest A. Bates, M.D., Ltd. (d/b/a American Shared Hospital Services), a California limited partnership, was formed in June 1980.

OPERATIONS

Gamma Knife Operations

Gamma Knife stereotactic radiosurgery, a non-invasive procedure, is an alternative to conventional brain surgery and/or radiation therapy can be an adjunct to conventional brain surgery, radiation therapy, or chemotherapy. Compared to conventional surgery, Gamma Knife radiosurgery usually is an out-patient procedure with lower risk of complications and can be provided at a lower cost. Typically, Gamma Knife patients resume their pre-surgical activities one or two days after treatment. The Gamma Knife Perfexion unit, which was introduced by Elekta in 2006, treats patients with 192 single doses of gamma rays that are focused with great precision on small and medium sized, well circumscribed and critically located structures in the brain. The Cobalt-60 sources coverage at the target area and deliver a dose that is high enough to destroy the diseased tissue without damaging the surrounding healthy tissue. In 2015, Elekta introduced an upgrade to the Gamma Knife Perfexion unit called Icon. As of March 1, 2019, all of the Company's sixteen (16) Gamma Knife units in the United States were Gamma Knife Perfexion units.

The Gamma Knife treats selected malignant and benign brain tumors, arteriovenous malformations, and functional disorders including trigeminal neuralgia (facial pain). Research is being conducted to determine whether the Gamma Knife can be effective in the treatment of epilepsy, tremors, and other functional disorders.

As of December 31, 2018, there were approximately 116 Gamma Knife sites in the United States and more than 335 units in operation worldwide. Based on recent data, an estimated percentage breakdown of Gamma Knife procedures performed in the U.S. by indications treated is as follows: malignant (61%) and benign (23%) brain tumors, vascular disorders (4%), and functional disorders (12%).

The Company, as of March 1, 2019, had sixteen (16) operating Gamma Knife units located in the United States and one in Lima, Peru. The Company's first Gamma Knife commenced operation in September 1991. The Company's Gamma Knife units performed 1,460 procedures in 2018 for a cumulative total of approximately 40,500 procedures from commencement through December 31, 2018.

Revenue from Gamma Knife services for the Company during each of the last five (5) years ended December 31, and the percentage of total revenue of the Company represented by the Gamma Knife for each of the last five years, are set forth below:

Year Ended	Total Gamma Knife	Gamma Knife % of	
December 31,	Revenue (in thousands)	Total Revenue	
2018	\$ 13,578	68.9	%
2017	\$ 14,848	75.9	%
2016	\$ 16,076	86.0	%
2015	\$ 16,077	97.2	%
2014	\$ 14,521	94.2	%

The Company conducts its Gamma Knife business through its 81% indirect interest in GKF. The remaining 19% interest is indirectly owned by Elekta. GKF, formed in October 1995, is managed by its policy committee. The policy committee is composed of one representative from the Company, Ernest A. Bates, M.D., ASHS's Chairman and CEO, and one representative from Elekta. The policy committee sets the operating policy for GKF. The policy committee may act only with the unanimous approval of both of its members. The policy committee selects a manager to handle GKF's daily operations. Craig K. Tagawa, Chief Executive Officer of GKF and Chief Operating and Financial Officer of ASHS, serves as GKF's manager.

GKF's profits and/or losses and any cash distributions are allocated based on membership interests. GKF's operating agreement requires that it have a cash reserve of at least \$50,000 before cash distributions are made to its members. From inception to December 31, 2018, GKF has distributed \$48,276,000 to the Company and \$11,324,000 to the non-controlling member.

Image Guided Radiation Therapy Operations ("IGRT")

The Company's radiation therapy business currently consists of one IGRT system that began operation in September 2007 at an existing Gamma Knife customer site. Revenue generated under IGRT services accounted for approximately 5.5% of the Company's total revenue in 2018. This contract is currently on a month-to-month basis and the Company

expects it will terminate sometime in the second quarter of 2019.

IGRT technology integrates imaging and detection components into a state-of-the-art linear accelerator, allowing clinicians to plan treatment, verify positioning, and deliver treatment with a single device, providing faster, more effective radiation therapy with less damage to healthy tissue. IGRT captures cone beam imaging, fluoroscopic and/or x-ray images on a daily basis, creating three-dimensional images that pinpoint the exact size, location and coordinates of tumors. Once tumors are pinpointed, the system delivers ultra-precise doses of radiation which ultimately leads to improved patient outcomes.

Based on the most recently available information, there are approximately 4,000 linear accelerator-based radiation therapy units installed in the United States, and it is estimated that a majority of these units provide Intensity-Modulated Radiation Therapy (“IMRT”), IGRT or a combination of this advanced radiation therapy capability. Radiation therapy services are provided through approximately 2,300 hospital-based and free-standing oncology centers.

Additional information on our operations can be found in Item 6– “Selected Financial Data”, Item 7– “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and Note 1 of our consolidated financial statements.

Proton Beam Radiation Therapy Operations (“PBRT”)

PBRT is an alternative to traditional external beam, photon-based radiation delivered by linear accelerators. PBRT, first clinically introduced in the 1950s, has physics advantages compared to photon-based systems which allow PBRT to deliver higher radiation doses to the tumor with less radiation to healthy tissue. PBRT currently treats prostate, brain, spine, head and neck, lung, breast, gastrointestinal tract and pediatric tumors. More than 180,000 patients have been treated with protons worldwide.

Introduction of PBRT in the United States, until recently, has been limited due to the high capital costs of these projects. The Company believes that the current development of one and two treatment room PBRT systems at lower capital costs and the level of reimbursement for PBRT from the Centers for Medicare & Medicaid Services (“CMS”) will help make this technology available to a larger segment of the market.

CUSTOMERS

The Company’s current business is the outsourcing of stereotactic radiosurgery services and radiation therapy services. The Company typically provides the equipment, as well as planning, installation, reimbursement and marketing support services. The majority of the Company’s customers pay the Company on a revenue sharing basis. The market for these services primarily consists of large and medium sized medical centers. The business is capital intensive; the total cost of a Gamma Knife or IGRT facility usually ranges from \$3.0 million to \$5.5 million, including equipment, site construction and installation; the total cost of a single room PBRT system usually ranges from \$30.0M to \$40.0M, inclusive of equipment, site construction and installation. The Company pays for the equipment and the medical center generally pays for site and installation costs. The following is a listing of the Company’s sites as of March 1, 2019:

Customers (Gamma Knife except as noted)	Original Term of Contract	Year Contract Began	Basis of Payment
Southwest Texas Methodist Hospital San Antonio, Texas	10 years	1998	Fee per use
Kettering Medical Center Kettering, Ohio	10 years	1999	Revenue sharing
Tufts Medical Center Boston, Massachusetts	10 years	1999	Fee per use

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University of Arkansas for Medical Sciences Little Rock, Arkansas	15 years	1999	Revenue sharing
Central Mississippi Medical Center Jackson, Mississippi	10 years	2001	Fee per use
OSF Saint Francis Medical Center Peoria, Illinois	10 years	2001	Fee per use
Albuquerque Regional Medical Center	10 years	2003	Fee per use
Albuquerque, New Mexico Northern Westchester Hospital	10 years	2005	Fee per use
Mt. Kisco, New York Tufts Medical Center (IGRT)	10 years	2007	Revenue Sharing
Boston, Massachusetts USC University Hospital	10 years	2008	Fee per use
Los Angeles, California Ft. Sanders Regional Medical Center	10 years	2011	Revenue Sharing
Knoxville, Tennessee St. Vincent's Medical Center	10 years	2011	Revenue Sharing
Jacksonville, Florida Sacred Heart Medical Center	10 years	2013	Revenue Sharing
Pensacola, Florida PeaceHealth Sacred Heart Medical Center at RiverBend Eugene, Oregon	10 years	2014	Revenue Sharing
Orlando Health – UF Health Cancer Center Orlando, Florida (PBRT)	10 years	2016	Revenue Sharing
Bryan Medical Center Lincoln, Nebraska	10 years	2017	Revenue Sharing
Methodist Hospital Merrillville, Indiana	10 years	2019	Revenue Sharing

The Company's typical fee per use agreement is for a ten-year term. The fixed fee per use reimbursement amount that the Company receives from the customer is based on the Company's cost to provide the service and the anticipated volume of the customer. The Gamma Knife contracts signed by the Company typically call for a fee ranging from \$6,000 to \$9,300 per procedure. There are no minimum volume guarantees required of the customer. In most cases, GKF is responsible for providing the Gamma Knife and related ongoing Gamma Knife equipment expenses (i.e., personal property taxes, insurance, and equipment maintenance) and helps fund the customer's Gamma Knife marketing. The customer generally is obligated to pay site and installation costs and the costs of operating the Gamma Knife. The customer can either renew the agreement or terminate the agreement at the end of the contractual term. If the customer chooses to terminate the agreement, then GKF removes the equipment from the medical center for possible placement at another site.

The Company's typical revenue sharing agreements ("retail") are for a period of ten years. Instead of receiving a fixed fee, the Company receives all or a percentage of the reimbursement (exclusive of physician fees) received by the customer. The Company is at risk for any reimbursement rate changes for radiosurgery or radiation therapy services by the government or other third-party payors. There are no minimum volume guarantees required of the customer.

One customer accounted for approximately 26%, 21%, and 10% of the Company's total revenue in 2018, 2017 and 2016, respectively. At December 31, 2018 and 2017, three customers individually accounted for more than 10% of total accounts receivable, in the respective years.

MARKETING

The Company markets its Gamma Knife services through its preferred provider status with Elekta and a direct sales effort led by its Vice President of Sales and Business Development, its Chief Operating Officer and its Chief Executive Officer. The Company markets its PBRT service through a direct sales effort led by its Vice President of Sales and Business Development, its Chief Operating Officer and its Chief Executive Officer. The major advantages to a health care provider in contracting with the Company for its services include:

The medical center avoids the high cost of owning the equipment. By not acquiring the equipment supplied by the Company, the medical center is able to allocate the funds otherwise required to purchase and/or finance the equipment to other projects.

The Company does not have minimum volume requirements, so the medical center avoids the risk of equipment under-utilization. The medical center pays the Company only for each procedure performed on a patient.

For contracts under revenue sharing arrangements, the Company assumes all or a portion of the risk of reimbursement rate changes. The medical center pays the Company only the contracted portion of revenue received from each procedure.

§ The medical center transfers the risk of technological obsolescence to the Company. The medical center and its physicians are not under any obligation to utilize technologically obsolete equipment.

§ The Company provides planning, installation, operating and marketing assistance and support to its customers.

FINANCING

The Company's Gamma Knife business is operated through GKF. GKF generally finances its U.S. Gamma Knife units, upgrades and additions with loans or capital leases from various finance companies for typically 100% of the cost of each Gamma Knife, plus any sales tax, customs, and duties. The financing is predominantly fully amortized over an 84-month period and is collateralized by the equipment, customer contracts and accounts receivable, and is generally without recourse to the Company and Elekta. The lease financing obtained by Orlando is guaranteed by the Company and collateralized by the equipment, customer contract and accounts receivable related to this project.

COMPETITION

Conventional neurosurgery, radiation therapy and other radiosurgery devices are the primary competitors of Gamma Knife radiosurgery. Gamma Knife radiosurgery has gained acceptance as an alternative and/or adjunct to conventional surgery due to its more favorable morbidity outcomes for certain procedures as well as its non-invasiveness. Utilization of the Company's Gamma Knife units is contingent on the acceptance of Gamma Knife radiosurgery by the customer's neurosurgeons, radiation oncologists and referring physicians. In addition, the utilization of the Company's Gamma Knife units is impacted by the proximity of competing Gamma Knife centers and providers using other radiosurgery devices.

Conventional linear accelerator-based radiation therapy is the primary competitor of the Company's proton therapy system at Orlando Health. Proton beam radiation therapy although available for many years is only recently emerging as a more clinically beneficial alternative to conventional linear accelerators for certain tumors. Utilization of the Company's proton therapy system is dependent on the acceptance of this technology by Orlando Health's radiation oncologists and referring physicians, as well as patient self-referrals. There are currently no competing proton therapy facilities near the Company's site.

There are several competing manufacturers of PBRT systems, including Mevion, IBA Particle Therapy Inc., Varian Medical Systems, Inc., Hitachi Ltd., ProNova Solutions, LLC, Sumitomo Heavy Industries, ProTom International, Inc. and Mitsubishi Electric. The Company has purchased one MEVION S250 and has made deposits towards the purchase of two additional MEVION S250 systems. The Mevion system, as well as single room proton therapy systems from other manufacturers, potentially provides cancer centers the opportunity to introduce single treatment room PBRT services with a cost in the range of approximately \$30 to \$40 million versus four and five PBRT treatment room programs costing in excess of \$120 million. The MEVION S250 system received FDA approval in the second quarter of 2012 and the first clinical treatment occurred in December 2013 at Barnes-Jewish Hospital. The MEVION S250i (Hyperscan) unit, which includes pencil beam scanning, was FDA approved in December 2017. The Company's first MEVION S250 system in operation at Orlando Health treated its first patient in April 2016. The Company currently does not have customer contracts for its second and third PBRT units.

The Company believes the business model it has developed for use in its Gamma Knife and IGRT placements can be tailored for the PBRT market segment. The Company is targeting large, hospital-based cancer programs. The Company's ability to develop a successful PBRT financing entity depends on the decision of cancer centers to self-fund or to fund the PBRT through conventional financing vehicles, the Company's ability to capture market share from competing alternative PBRT financing entities, and the Company's ability to raise capital to fund PBRT projects.

The Company's ability to secure additional customers for Gamma Knife services and other proton beam radiation therapy services, or other equipment, is dependent on its ability to effectively compete against the manufacturers of these systems selling directly to potential customers and other companies that outsource these services. The Company does not have an exclusive relationship with any manufacturer and has previously lost sales to customers that chose to purchase equipment directly from manufacturers. The Company may continue to lose future sales to such customers and may also lose sales to the Company's competitors.

GOVERNMENT PROGRAMS

The Medicare program is administered by CMS of the U.S. Department of Health and Human Services. Medicare is a health insurance program primarily for individuals 65 years of age and older, certain younger people with disabilities, and people with end-stage renal disease, and is provided without regard to income or assets.

The Medicare program is subject to statutory and regulatory changes, administrative rulings, interpretations and determinations, requirements for utilization review, and federal and state funding restrictions, all of which could materially increase or decrease payments from these government programs in the future, as well as affect the cost of providing services to patients and the timing of payments to our client hospitals.

The Company's Gamma Knife, PBRT and IGRT customers receive payments for patient care from federal government and private insurer reimbursement programs. Currently in the United States, Gamma Knife, proton therapy and IGRT services are performed primarily on an out-patient basis. Gamma Knife patients with Medicare as their primary insurer, treated on either an in-patient or out-patient basis, comprise an estimated 35%-45% of the total Gamma Knife patients treated nationwide. PBRT and IGRT patients with Medicare as their primary insurer are treated primarily on an out-patient basis and comprise an estimated 45% to 50% of the total radiation therapy patients treated.

Congress enacted legislation in 2013 that significantly reduced the Medicare reimbursement rate for outpatient Gamma Knife treatment by setting it at the same amount paid for linear accelerator-based radio surgery treatment. Prior to April 1, 2013, Medicare's reimbursement rate for Gamma Knife treatment had been relatively stable. The Company's IGRT services are reimbursed by CMS and other insurers. Reimbursement for these services has remained fairly stable. See additional discussion under "Item 1A Risk Factors".

The average Medicare reimbursement rate trends from 2015 to 2019 are outlined below:

Average Medicare Reimbursement Rate Trends - Gamma Knife

2015	2016	2017	2018	2019
\$9,700	\$8,800	\$9,000	\$9,100	\$9,300

The average Medicare reimbursement rate trends for PBRT from 2016 to 2019 are outlined below. Patients typically undergo 25-40 delivery sessions.

Average Medicare Reimbursement Rate Trends - PBRT

	2016	2017	2018	2019
Simple without Compensation	\$506	\$494	\$522	\$520
Simple with Compensation, Intermediate, or Complex	\$1,051	\$994	\$1,053	\$1,079

We are unable to predict the effect of future government health care funding policy changes on operations. If the rates paid by governmental payers are reduced, if the scope of services covered by governmental payers is limited, or if one or more of our hospital clients are excluded from participation in the Medicare program or any other government health care program, there could be a material adverse effect on our business.

Affordable Care Act and Subsequent Regulation

In March 2010, President Obama signed into law the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010, (“Affordable Care Act”), which has resulted in significant changes to the health care industry. The primary goal of the legislation was to extend health care coverage to uninsured legal U.S. residents through both an expansion of public programs and reforms to private sector health insurance. The expansion of insurance coverage was expected to be funded in part by measures designed to promote quality and cost efficiency in health care delivery and by budgetary savings in the Medicare and Medicaid programs. Because the Company is not a health care provider, we were not directly affected by the law, but we could be indirectly affected principally as follows:

An increase in the number of insured residents could potentially increase the number of patients seeking Gamma Knife or radiation therapy treatment.

The Company’s retail contracts are subject to reimbursement rate changes for radiosurgery or radiation therapy services by the government or other third-party payors. Any changes to Medicare or Medicaid reimbursement through the repeal or modification of the Affordable Care Act could affect revenue generated from these sites.

Some of the provisions of the Affordable Care Act have yet to be fully implemented, while certain provisions have been subject to judicial and Congressional challenges as well as recent efforts by the current U.S. President’s administration to repeal or replace certain aspects of the Affordable Care Act. Since January 2017, the current U.S. President has signed two Executive Orders and other directives designed to delay the implementation of certain provisions of the Affordable Care Act or otherwise circumvent some of the requirements for health insurance mandated by the Affordable Care Act. Concurrently, Congress has considered legislation that would repeal or repeal and replace all or part of the Affordable Care Act. While Congress has not passed comprehensive repeal legislation, it has enacted laws that modify certain provisions of the Affordable Care Act such as removing penalties, starting January 1, 2019, for not complying with the Affordable Care Act’s individual mandate to carry health insurance and delaying the implementation of certain Affordable Care Act-mandated fees. On December 14, 2018, a U.S. District Court Judge in the Northern District of Texas, or Texas District Court Judge, ruled that the individual mandate is a critical and inseparable feature of the Affordable Care Act, and therefore, because it was repealed as part of the Tax Cuts and Jobs Act, the remaining provisions of the Affordable Care Act are invalid as well. While the Texas District Court Judge, as well as the current U.S. President’s administration and CMS, have stated that the ruling will have no immediate effect, it is unclear how this decision, subsequent appeals, and other efforts to repeal and replace the Affordable Care Act will impact the Affordable Care Act.

In addition, other legislative changes have been proposed and adopted in the United States since the Affordable Care Act was enacted. On August 2, 2011, the Budget Control Act of 2011, among other things, created measures for spending reductions by Congress. A Joint Select Committee on Deficit Reduction, tasked with recommending a targeted deficit reduction of at least \$1.2 trillion for the years 2013 through 2021, was unable to reach required goals,

thereby triggering the legislation's automatic reduction to several government programs. This includes aggregate reductions to Medicare payments to providers of up to 2% per fiscal year, started in April 2013, and, due to subsequent legislative amendments, will stay in effect through 2027 unless additional Congressional action is taken. On January 2, 2013, the then-U.S. President signed into law the American Taxpayer Relief Act of 2012, which, among other things, also reduced Medicare payments to several providers, including hospitals, imaging centers and cancer treatment centers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. It is unclear what effect, if any, the shifting legislative and other governmental proposals would have on our business.

GOVERNMENT REGULATION

The payment of remuneration to induce the referral of health care business has been a subject of increasing governmental and regulatory focus in recent years. Section 1128B(b) of the Social Security Act (sometimes referred to as the "federal anti-kickback statute") provides criminal penalties for individuals or entities that offer, pay, solicit or receive remuneration in order to induce referrals for items or services for which payment may be made under the Medicare and Medicaid programs and certain other government funded programs. The Affordable Care Act amended the anti-kickback statute to eliminate the requirement of actual knowledge, or specific intent to commit a violation, of the anti-kickback statute. The Social Security Act provides authorizes the Office of Inspector General through civil proceedings to exclude an individual or entity from participation in the Medicare and state health programs if it is determined any such party has violated Section 1128B(b) of the Social Security Act. However, the federal anti-kickback statute is subject to evolving interpretations. In the past, the government has enforced the federal anti-kickback statute to reach large settlements with healthcare companies based on sham consulting and other financial arrangements with physicians. A person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation. In addition, the government may assert that a claim including items or services resulting from a violation of the federal anti-kickback statute constitutes a false or fraudulent claim for purposes of the False Claims Act. The Company believes that it is in compliance with the federal anti-kickback statute. Additionally, the majority of states also have anti-kickback laws, which establish similar prohibitions and, in some cases, may apply to items or services reimbursed by any third-party payor, including commercial insurers.

Additionally, the Omnibus Budget Reconciliation Act of 1993, often referred to as "Stark II", bans physician self-referrals to providers of designated health services with which the physician has a financial relationship. On September 5, 2007, the third and final phase of the Stark regulations (Phase III) was published. The term "designated health services" includes, among others, radiation therapy services and in-patient and out-patient hospital services. On January 1, 1995, the Physician Ownership and Referral Act of 1993 became effective in California. This legislation prohibits physician self-referrals for covered goods and services, including radiation oncology, if the physician (or the physician's immediate family) concurrently has a financial interest in the entity receiving the referral. The Company believes that it is in compliance with these rules and regulations.

On August 19, 2008, the CMS published a final rule relating to inpatient hospital services paid under the Inpatient Prospective Payment System for discharges in the Fiscal Year 2009 (the "Final Rule"). Among other things, the Final Rule prohibits "per-click payments" to certain physician lessors for services rendered to patients who were referred by the physician lessor. This prohibition on per-click payments for leased equipment used in the treatment of a patient

referred to a hospital lessee by a physician lessor applies regardless of whether the physician himself or herself is the lessor or whether the lessor is an entity in which the referring physician has an ownership or investment interest. The effective date of this prohibition was October 1, 2009. However, referrals made by a radiation oncologist for radiation therapy or ancillary services necessary for, and integral to, the provision of radiation therapy (such as Gamma Knife services) are not subject to this prohibition so long as certain conditions are met. GK Financing's majority owned subsidiaries, AGKE and JGKE have minority ownership interests that are held solely by radiation oncologists, who are otherwise exempt from the referral prohibition under the Final Rule. The Company believes it is in compliance with the Final Rule.

A range of federal civil and criminal laws target false claims and fraudulent billing activities. One of the most significant is the Federal False Claims Act, which prohibits the submission of a false claim or the making of a false record or statement in order to secure a reimbursement from a government-sponsored program. In recent years, the federal government has launched several initiatives aimed at uncovering practices which violate false claims or fraudulent billing laws. Claims under these laws may be brought either by the government or by private individuals on behalf of the government, through a "whistleblower" or "qui tam" action. The Company believes that it is in compliance with the Federal False Claims Act; however, because such actions are filed under seal and may remain secret for years, there can be no assurance that the Company or one of its affiliates is not named in a material qui tam action.

Legislation in various jurisdictions requires that health facilities obtain a Certificate of Need ("CON") prior to making expenditures for medical technology in excess of specified amounts. Four of the Company's existing customers were required to obtain a CON or its equivalent. The CON procedure can be expensive and time consuming and may impact the length of time before Gamma Knife services commence. CON requirements vary from state to state in their application to the operations of both the Company and its customers. In some jurisdictions the Company is required to comply with CON procedures to provide its services and in other jurisdictions customers must comply with CON procedures before using the Company's services. The Company is unable to predict if any jurisdiction will eliminate or alter its CON requirements in a manner that will increase competition and, thereby, affect the Company's competitive position.

The Company's Gamma Knife units contain Cobalt 60 radioactive sources. The medical centers that house the Company's Gamma Knife units are responsible for obtaining possession and user's licenses for the Cobalt 60 source from the Nuclear Regulatory Commission. The Company's Gamma Knife center in Peru was responsible for obtaining possession and user's licenses for the Cobalt-60 sources from the Peruvian Regulatory Agencies.

Standard linear accelerator equipment utilized to treat patients is regulated by the FDA. The licensing is obtained by the individual medical center operating the equipment.

The Company believes it is in substantial compliance with the various rules and regulations that affect its businesses.

INSURANCE AND INDEMNIFICATION

The Company's contracts with equipment vendors generally do not contain indemnification provisions. The Company maintains a comprehensive insurance program covering the value of its property and equipment, subject to deductibles, which the Company believes are reasonable.

The Company's customer contracts generally contain mutual indemnification provisions. The Company maintains general and professional liability insurance in the United States. The Company is not involved in the practice of medicine and therefore believes its present insurance coverage and indemnification agreements are adequate for its business. The Company's Peruvian Gamma Knife center is a free-standing facility operated by GKPeru. GKPeru's treating physicians and clinical staff are independent contractors. The Company maintains general and professional liability insurance consistent with the operations of this facility and believes its present coverage is adequate for its business.

EMPLOYEES

At December 31, 2018, the Company employed nine (9) people on a full-time basis in the United States and three (3) people on a full-time basis in Lima, Peru. None of these employees is subject to a collective bargaining agreement and there is no union representation within the Company. The Company maintains various employee benefit plans and believes that its employee relations are good.

EXECUTIVE OFFICERS OF THE COMPANY

The following table provides current information concerning those persons who serve as executive officers of the Company. The executive officers were appointed by the Board of Directors and serve at the discretion of the Board of Directors.

Name:	Age:	Position:
Ernest A. Bates, M.D.	82	Chairman of the Board of Directors and Chief Executive Officer
Craig K. Tagawa	65	Senior Vice President - Chief Operating and Financial Officer
Ernest R. Bates	52	Vice President of Sales and Business Development

Ernest A. Bates, M.D., founder of the Company, has served in the positions listed above since the incorporation of the Company. A board-certified neurosurgeon, Dr. Bates is Emeritus Vice Chairman of the Board of Trustees at Johns Hopkins University and serves on the Johns Hopkins Neurosurgery Advisory Board. He also serves on the boards of Shared Imaging and The School of Nursing Dean's Advisory Council at UCSF. Dr. Bates currently serves as President and Director of the Ernest Bates Foundation. From 1981-1987 he was a member of the Board of Governors of the California Community Colleges, and he served on the California High Speed Rail Authority from 1997 to 2003. Dr. Bates is a member of the Board of Overseers at the University of California, San Francisco, School of Nursing. He is a graduate of the School of Arts and Sciences of the Johns Hopkins University, and he earned his medical degree at the University of Rochester School of Medicine and Dentistry.

Craig K. Tagawa has served as Chief Operating Officer since February 1999 in addition to serving as Chief Financial Officer since May 1996. Mr. Tagawa also served as Chief Financial Officer from January 1992 through October 1995. Previously a Vice President in such capacity, Mr. Tagawa became a Senior Vice President on February 28, 1993. He is also the Chief Executive Officer of GKF. From September 1988 through January 1992, Mr. Tagawa served in various positions with the Company. Mr. Tagawa currently serves as Chief Financial Officer and Secretary of the Ernest Bates Foundation. He is a former Chair of the Industrial Policy Advisory Committee of the Engineering Research Center for Computer-Integrated Surgical Systems and Technology at The Johns Hopkins University. He received his undergraduate degree from the University of California at Berkeley and his M.B.A. from Cornell University.

Ernest R. Bates joined the Company in January 2007 as Vice President of Sales and Business Development. He was on the Board of Directors of the Company from 2004 through February 2007. Prior to joining the Company, he had been Managing Director, Institutional Fixed Income Sales of HSBC Securities (USA), Inc. since 2003. Mr. Bates has also served as Managing Director, Head of Asian Product for HSBC Securities (USA) Inc. from 1999 to 2003. From 1993 through 1999, Mr. Bates held various positions with Merrill Lynch, last serving as Vice President, European Syndicate for Merrill Lynch International. He received his undergraduate degree from Brown University and a M.B.A. degree from The Wharton Business School. Ernest R. Bates is the son of Chairman of the Board and Chief Executive

Officer Dr. Ernest A. Bates.

AVAILABLE INFORMATION

Our Internet address is www.ashs.com. We make available free of charge, through our Internet website under the “Investor Center” tab in the “Corporate” section, our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (“Exchange Act”) as soon as reasonably practicable after such material is electronically filed with or furnished to the SEC. The information contained on our Internet website is not part of this document.

ITEM 1A. RISK FACTORS

In addition to the other information in this report, the following factors could affect our future business, results of operations, cash flows or financial position, and could cause future results to differ materially from those expressed in any of the forward-looking statements contained in this report.

The Federal Reimbursement Rate for Gamma Knife Treatments Has Fluctuated

Congress enacted legislation in 2013 that significantly reduced the Medicare reimbursement rate for outpatient Gamma Knife treatment by setting it at the same amount paid for linear accelerator-based radiosurgery treatment. Prior to April 1, 2013, Medicare's reimbursement rate for Gamma Knife treatment had been relatively stable. There can be no assurance that CMS reimbursement levels will be maintained at levels providing the Company an adequate return on its investment. Any future reductions in the reimbursement rate would adversely affect the Company's revenues and financial results.

The average Medicare reimbursement rate trends from 2015 to 2019 are outlined below:

Average Medicare Reimbursement Rate Trends

2015	2016	2017	2018	2019
\$9,700	\$8,800	\$9,000	\$9,100	\$9,300

The Company's Capital Investment at Each Site is Substantial

Each Gamma Knife, PBRT or IGRT device requires a substantial capital investment. In some cases, we contribute additional funds for capital costs and/or annual operating and equipment related costs such as marketing, maintenance, insurance and property taxes. Due to the structure of our contracts with medical centers, there can be no assurance that these costs will be fully recovered or that we will earn a satisfactory return on our investment.

The Market for the Gamma Knife is Limited

There is a limited market for the Gamma Knife, and the market in the United States may be mature. The Company has begun operation at only six (6) new Gamma Knife sites in the United States since 2011. Due to the substantial costs of acquiring a Gamma Knife unit, we must identify medical centers that possess neurosurgery and radiation oncology departments capable of performing a large number of Gamma Knife procedures. As of December 31, 2018, there were approximately 116 operating Gamma Knife units in the United States, of which fifteen (15) units were owned by the Company. As of December 31, 2018, the Company has one idle Gamma Knife unit with a cumulative net book value of \$729,000. There are currently no commitments to place into service or trade this unit in during 2019. There can be no assurance that we will be successful in placing these idle units or additional units at any sites in the future. The Company's existing contracts with its customers are fixed in length and there can be no assurance that the customers

will wish to extend the contract beyond the end of the term.

The Company Has a High Level of Debt and May Incur Additional Debt to Finance its Operations

The Company's business is capital intensive. The Company finances its Gamma Knife units through its GKF subsidiary. The amounts financed through GKF have been generally non-recourse to ASHS. The Company financed its first proton therapy unit through its wholly-owned subsidiary, Orlando, and guaranteed the lease financing. The Company's combined long-term debt and capital leases totaled \$20,166,000 as of December 31, 2018 and is collateralized by its Gamma Knife, MEVION S250 and other assets, including accounts receivable and future proceeds from any contract between the Company and any end user of the financed equipment. Depending on the Company's financing requirements and market conditions, the Company may seek to finance its operations by incurring additional long-term debt in the future. The Company's current level of debt may adversely affect the Company's ability to secure additional credit in the future, and as a result may affect operations and profitability. If a default on debt occurs in the future, the Company's creditors would have the ability to accelerate the defaulted loan, to seize the Gamma Knife or MEVION S250 units or other equipment with respect to which default has occurred, and to apply any collateral they may have at the time to cure the default.

A Small Number of Customers Account for a Major Portion of our Revenues

A limited number of customers have historically accounted for a substantial portion of the Company's total revenue, and the Company expects such customer concentration to continue for the foreseeable future. For example, in 2018, four (4) customers in total accounted for approximately 50% of the Company's revenue. The loss of a significant customer or a significant decline in the business from the Company's largest customers could have a material adverse effect on the Company's business and results of operations.

The Market for the Company's Services is Competitive

The Company estimates that there are two other companies that actively provide alternative, non-conventional Gamma Knife financing to potential customers. We believe there are no competitor companies that currently have more than three (3) Gamma Knife units in operation. The Company's relationship with Elekta, the manufacturer of the Leksell Gamma Knife unit, is non-exclusive, and in the past the Company has lost sales to customers that chose to purchase a Gamma Knife unit directly from Elekta. The Company also has several competitors in the financing of proton therapy projects. The Company's business model differs from its competitors, but there can be no assurances that the Company will not lose placements to its competitors. In addition, the Company may continue to lose future sales to customers purchasing equipment directly from manufacturers. There can be no assurance that the Company will be able to successfully compete against others in placing future units.

There are Alternatives to the Gamma Knife

Other radiosurgery devices and conventional neurosurgery compete against the Gamma Knife. Each of the medical centers targeted by the Company could decide to acquire another radiosurgery device instead of a Gamma Knife. In addition, neurosurgeons who are responsible for referring patients for Gamma Knife surgery may not be willing to make such referrals for various reasons, instead opting for invasive surgery. There can be no assurance that the Company will be able to secure a sufficient number of future sites or Gamma Knife procedures to sustain its profitability and growth.

International Operations

The Company installed a Gamma Knife in Lima, Peru in 2017. International operations can be subject to exchange rate volatility which could have an adverse effect on our financial results and cash flows. In addition, international operations can be subject to legal and regulatory uncertainty and political and economic instability, which could result in problems asserting property or contractual rights, potential tariffs, increased compliance costs, increased regulatory scrutiny, potential adverse tax consequences, the inability to repatriate funds to the United States, and the Company's inability to operate in those locations.

New Technology and Products Could Result in Equipment Obsolescence

There is constant change and innovation in the market for highly sophisticated medical equipment. New and improved medical equipment can be introduced that could make the Gamma Knife technology obsolete and that would make it uneconomical to operate. During 2000, Elekta introduced an upgraded Gamma Knife which cost approximately \$3.6 million plus applicable tax and duties. This upgrade includes an Automatic Positioning System™ (“APS”), and therefore involved less health care provider intervention. In early 2005, Elekta introduced a new upgrade, the Gamma Knife Model 4C (“Model 4C”). The cost to upgrade existing units to the Model 4C with APS was approximately \$200,000 to \$1,000,000, depending on the current Gamma Knife configuration. In 2006 Elekta introduced a new model of the Gamma Knife, the Perfexion, which costs approximately \$4.5 million plus applicable taxes and duties. The Perfexion can perform procedures faster than previous Gamma Knife models and it involves less health care personnel intervention. In 2015, Elekta introduced the Leksell Gamma Knife Icon™. The Perfexion is upgradeable to the Icon platforms which has enhanced imaging capabilities allowing for treatment without a head frame and the treatment of larger tumors. Existing model 4Cs of the Gamma Knife are not upgradeable to the Perfexion model. As of March 1, 2019, all the Company’s Gamma Knife units in the United States are Perfexion models. The failure to acquire or use new technology and products could have a material adverse effect on our business and results of operations.

The Company Has Invested in a Proton Beam Business

We have committed a substantial amount of our financial resources to next-generation proton beam technology. The first MEVION S250 system began treating patients in December 2013. The Company’s first MEVION S250 system began treating patients in April 2016. The Company has committed to purchase two (2) additional MEVION S250 systems and has already made deposits of \$2,250,000 towards this commitment. There can be no assurance that we will be able to finance the two additional systems.

The Trading Volume of Our Common Stock is Low

Although our common stock is listed on the NYSE American, our common stock has historically experienced low trading volume. Reported average daily trading volume in our common stock for the three-month period ended December 31, 2018 was approximately 16,000 shares. There is no reason to think that a more significant active trading market in our common stock will develop in the future. Limited trading volume subjects our common stock to greater price volatility and may make it difficult for you to sell your shares in a quantity or at a price that is attractive to you.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

The Company's corporate offices are located at Two Embarcadero Center, Suite 410, San Francisco, California, where it leases approximately 3,253 square feet for \$19,556 per month with a lease expiration date in August 2023. Prior to the Company's relocation in 2016, it leased approximately 4,640 square feet for \$25,128 per month and subleased approximately 3,500 square feet of the office space for \$16,042 per month. The sublease expired in May 2016. The Company also has a satellite office in Fairfield, California, where it leases 895 square feet for \$2,865 per month with a lease expiration date in April 2020.

For the year ended December 31, 2018 the Company's aggregate net rental expenses for all properties were approximately \$298,000.

ITEM 3. LEGAL PROCEEDINGS

There are no material pending legal proceedings involving the Company or any of its property. The Company knows of no legal or administrative proceedings against the Company contemplated by governmental authorities.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Market Information and Dividend Policy

The Company's common shares, no par value (the "Common Shares"), are currently traded on the New York Stock Exchange. At December 31, 2018, the Company had 5,714,000 issued and outstanding common shares, 613,000 common shares reserved for options, 4,000 unvested restricted stock units issued, 272,000 vested restricted stock units and 129,000 restricted stock awards reserved for issuance.

The following table sets forth the high and low closing sale prices of the Common Shares of the Company on the New York Stock Exchange for each full quarter for the last two fiscal years.

Quarter Ending	Prices for Common Shares	
	High	Low
March 31, 2017	\$ 4.53	\$ 3.35
June 30, 2017	\$ 4.75	\$ 3.80
September 30, 2017	\$ 4.05	\$ 2.80
December 31, 2017	\$ 3.15	\$ 2.50
March 31, 2018	\$ 2.87	\$ 2.50
June 30, 2018	\$ 2.89	\$ 2.30
September 30, 2018	\$ 3.50	\$ 2.65
December 31, 2018	\$ 3.89	\$ 2.33

The Company estimates that there were approximately 1,100 beneficial holders of its Common Shares at December 31, 2018.

There were no dividends declared or paid during 2018, 2017, or 2016.

Stock Repurchase Program

In 1999 and 2001, the Board of Directors approved resolutions authorizing the Company to repurchase up to a total of 1,000,000 shares of its common stock on the open market from time to time at prevailing prices, and in 2008 the Board of Directors reaffirmed these authorizations. In 2018, 2017, and 2016 there were no shares repurchased by the Company. A total of approximately 928,000 shares have been repurchased in the open market pursuant to these authorizations at a cost of approximately \$1,957,000. As of December 31, 2018, there were approximately 72,000 shares remaining under the repurchase authorizations.

Shareholder Rights Plan

On March 22, 1999, the Company adopted a Shareholder Rights Plan (“Plan”). Under the Plan, the Company made a dividend distribution of one Right for each outstanding share of the Company’s common stock as of the close of business on April 1, 1999. The Rights become exercisable only if any person or group, with certain exceptions, becomes an “acquiring person” (acquires 15% or more of the Company’s outstanding common stock) or announces a tender or exchange offer to acquire 15% or more of the Company’s outstanding common stock. The Company’s Board of Directors adopted the Plan to protect shareholders against a coercive or inadequate takeover offer. On March 12, 2009, the Board of Directors approved the First Amendment to the Plan which, among other things, extended the final date on which the Rights are exercisable until the close of business on April 1, 2019.

Equity Compensation Plans

During 2018, 4,000 restricted stock units, 31,000 restricted stock units for deferred compensation and 16,000 options were issued. Additional information regarding our equity compensation plans is incorporated herein by reference from the 2019 Proxy Statement. Also, see Note 8 - “Shareholders’ Equity to the Consolidated Financial Statements”.

ITEM 6. SELECTED FINANCIAL DATA**Summary of Operations**

	Year Ended December 31,				
	(Amounts in thousands except per share data)				
	2018	2017	2016	2015	2014
Revenue	\$19,714	\$19,556	\$18,700	\$16,548	\$15,417
Costs of revenue	12,228	10,893	9,905	9,833	10,138
Selling and administrative expense	3,994	4,323	3,802	3,496	3,630
Interest expense	1,631	1,927	1,707	1,239	1,699
Total expenses	17,853	17,143	15,414	14,568	15,467
Income (loss) from operations	1,861	2,413	3,286	1,980	(50)
Proceeds received from investment in equity securities	22	0	0	0	0
(Loss) on write-down investment in equity securities	0	(579)	0	(2,140)	0
(Loss) on early extinguishment of debt	0	0	(108)	0	0
(Loss) on sale of subsidiary	0	0	0	0	(572)
Gain foreign currency transactions	0	0	0	0	161
Interest and other income	198	3	15	18	28
Income (loss) before income taxes	2,081	1,837	3,193	(142)	(433)
Income tax expense (benefit)	451	(1,103)	943	434	129
Net income (loss)	1,630	2,940	2,250	(576)	(562)
Less net income attributable to non-controlling interest	(607)	(1,017)	(1,320)	(946)	(390)
Net income (loss) attributable to ASHS	\$1,023	\$1,923	\$930	\$(1,522)	\$(952)
Net income (loss) per common share attributable to ASHS:					
Basic	\$0.18	\$0.33	\$0.17	\$(0.28)	\$(0.19)
Diluted	\$0.17	\$0.33	\$0.17	\$(0.28)	\$(0.19)

See accompanying note (1)

Balance Sheet Data

	As of December 31,				
	(Amounts in thousands)				
	2018	2017	2016	2015	2014
Cash and cash equivalents	\$1,442	\$2,152	\$2,871	\$2,209	\$1,059
Certificate of deposit and securities	0	0	0	0	9,000
Restricted cash	350	350	250	50	50
Working capital (deficit)	472	(114)	(815)	(2,691)	(2,004)
Total assets	57,502	58,176	60,598	54,114	67,528

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Advances on line of credit	0	0	0	0	8,780
Current portion of long-term debt and capital leases	6,526	7,273	7,078	7,005	6,108
Long-term debt/capital leases, less current portion	13,640	15,870	19,958	16,113	20,776
Shareholders' equity	\$31,048	\$29,885	\$27,137	\$25,180	\$26,154

See accompanying note (1)

(1) In 1995, the Company entered into an operating agreement granting to American Shared Radiosurgery Services (a California corporation and a wholly-owned subsidiary of the Company) an 81% ownership interest in GKF. During 2010 and 2011, GKF established new operating subsidiaries, EWRS, EWRS Turkey, GKPeru, AGKE, and JGKE, and other subsidiaries that are not yet operational. On June 10, 2014, the Company sold EWRS Turkey. Accordingly, the financial data for the Company presented above include the results of GKF and its subsidiaries for the periods 2014 through 2018.

This financial data as of December 31, 2018 and 2017 and for the years ended December 31, 2018 and 2017 should be read in conjunction with our consolidated financial statements and the notes thereto beginning on page A-1 of this report and with Item 7– “Management’s Discussion and Analysis of Financial Condition and Results of Operations.”

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

APPLICATION OF CRITICAL ACCOUNTING POLICIES

The Company’s consolidated financial statements are prepared in accordance with generally accepted accounting principles and follow general practices within the industry in which it operates. Application of these principles requires management to make estimates, assumptions and judgments that affect the amounts reported in the financial statements and accompanying notes. These estimates, assumptions and judgments are based on information available as of the date of the financial statements; accordingly, as this information changes, the financial statements could reflect different estimates, assumptions and judgments. Certain policies inherently have a greater reliance on the use of estimates, assumptions and judgments and as such have a greater possibility of producing results that could be materially different than originally reported.

The most significant accounting policies followed by the Company are presented in Note 2 to the consolidated financial statements. These policies along with the disclosures presented in the other financial statement notes and, in this discussion, and analysis, provide information on how significant assets and liabilities are valued in the financial statements and how those values are determined. Based on the valuation techniques used and the sensitivity of financial statement amounts, and the methods, assumptions and estimates underlying those amounts, management has identified revenue recognition and costs of sales for turn-key and revenue sharing arrangements, and the carrying value of fixed assets and useful lives, and as such could be most subject to revision as new information becomes available. The following are our critical accounting policies in which management’s estimates, assumptions and judgments most directly and materially affect the financial statements:

Revenue Recognition - The Company recognizes revenues under Accounting Standards Codification (“ASC”) 840, *Leases* (“ASC 840”) and ASC 606, *Revenue from Contracts with Customers* (“ASC 606”). The Company has one revenue-generating activity, which consists of equipment leasing to hospitals, and includes the operation of Gamma Knife units by GKF, the operation of one proton therapy unit by Orlando, and the operation of one IGRT site by ASHS.

Rental income from medical services – The Company recognizes revenues under ASC 840 when services have been rendered and collectability is reasonably assured, on either a fee per use or revenue sharing basis. During 2018, the Company had nine (9) fee per use arrangements and nine (9) retail service arrangements. Under both types of agreements, the hospital is responsible for billing patients and collecting technical component fees for services performed. Revenue associated with installation of the Gamma Knife, PBRT, and IGRT units, if any, is a part of the negotiated lease amount and not a distinctly identifiable amount. The costs, if any, associated with installation of the units are amortized over the period of the related lease to match revenue recognition of these costs.

For fee per use agreements, revenue is not estimated because these contracts provide for a fixed fee per procedure and are typically for a ten-year term. Revenue is recognized at the time the procedures are performed, based on each hospital’s contracted rate. There is no guaranteed minimum payment. Costs related to operating the units are charged to costs of operations as incurred, which approximates the recognition of the related revenue. Revenue under fee per use agreements is recorded in accordance with the contract terms.

During 2018, ASHS had one (1) agreement, Orlando had one (1) agreement, and GKF had seven (7) agreements that are retail service arrangements. These can be further classified as either “turn-key” arrangements or “revenue sharing” arrangements. For GKF’s seven (7) turn-key sites, GKF is solely responsible for the costs to acquire and install the Gamma Knife. In return, GKF receives payment from the hospital in the amount of its reimbursement from third party payors. Revenue is recognized by the Company during the period in which the procedure is performed and is estimated based on what can be reasonably expected to be paid by the third-party payor to the hospital. The estimate is primarily determined from historical experience and hospital contracts with third party payors. These estimates are reviewed on a regular basis and adjusted as necessary to more accurately reflect the expected payment amount. The Company also records an estimate of operating costs associated with each procedure during the period in which the procedure is performed. For two of the turn-key sites, the Company also shares a percentage of net operating profit. The Company records an estimate of net operating profit based on estimated revenues, less estimated operating costs. Costs are determined primarily based on historical treatment protocols and cost schedules with the hospital. The Company’s estimated operating costs are reviewed on a regular basis and adjusted as necessary to more accurately reflect the actual operating costs. Revenue for turn-key sites is recorded on a gross basis, and the operating expenses the Company reimburses to the hospital are recorded in other operating costs.

Under revenue sharing arrangements the hospital shares in the responsibility and risk with the Company for the capital investment to acquire and install the equipment. Unlike our turn-key arrangement, the lease payment under a revenue sharing arrangement is a percentage of reimbursed revenue. Payments are made by the hospital, generally on a monthly basis, to the Company based on an agreed upon percentage allocation of cash collected. Revenue is recognized during the period in which procedures are performed and is estimated based on the reimbursement amount that the Company expects to receive from the hospital for those procedures. This estimate is reviewed on a regular basis and adjusted as necessary to more accurately reflect the expected payment amount. For the year ended December 31, 2018, the Company recognized revenues of approximately \$18,987,000 under ASC 840.

Revenue from retail arrangements amounted to approximately 70%, 64% and 57% of total revenue for the years ended December 31, 2018, 2017 and 2016, respectively. Because the revenue estimates are reviewed on a quarterly basis, any adjustments required for past revenue estimates would result in an increase or reduction in revenue during the current quarterly period.

Patient income – The Company has a stand-alone facility in Lima, Peru, where a contract exists between GKPeru and the individual patient treated at the facility. Under ASC 606, the Company acts as the principal in this transaction and provides, at a point in time, a single performance obligation, in the form of a Gamma Knife treatment. Revenue related to a Gamma Knife treatment is recognized on a gross basis at the time when the patient receives treatment. There is no variable consideration present in the Company’s performance obligation and the transaction price is agreed upon per the stated contractual rate. Payment terms are typically prepaid for self-pay patients and insurance provider payments are paid net 30 days. The Company did not capitalize any incremental costs related to the fulfillment of its customer contracts. The Company adopted ASC 606 as of January 1, 2018 using the modified retrospective method. The cumulative effect of adopting ASC 606 did not have a material impact on retained earnings, as reported by the Company, and there was no change to the Company’s IT environment following adoption. Accounts receivable earned by GKPeru were not significant for the year ended December 31, 2018. For the year ended December 31, 2018, the

Company recognized revenues of approximately \$727,000 under ASC 606.

2018 Results

For the year ended December 31, 2018, 69% of the Company's revenue was derived from its Gamma Knife business, 26% was derived from the PBRT system, and the remaining 5% from its IGRT business. For the year ended December 31, 2017, 76% of the Company's revenue was derived from its Gamma Knife business, 21% was derived from the PBRT system, and the remaining 3% from its IGRT business. For the year ended December 31, 2016, 86% of the Company's revenue was derived from its Gamma Knife business, 12% was derived from the PBRT system, and the remaining 2% from its IGRT business.

TOTAL REVENUE