

Geisinger Health System Partners with ISS Solutions for Comprehensive Clinical Engineering Services across Geographically-Distant Campuses



Snapshot

Company: Geisinger Health System

Headquarters: Danville, PA

Business: Over \$3.4 billion healthcare delivery system in Northeastern and Central Pennsylvania

Overview

Challenge: Provide comprehensive, cost-effective clinical engineering services to a large healthcare system spanning a broad geography (44 of 67 Pennsylvania counties).

Solution: Capitalize on ISS Solutions' knowledge, experience, and broad geographical base to manage clinical engineering assets at all Geisinger campuses.

Benefits:

- Exceeded industry benchmarks without exceeding budgets
- Turned clinical engineering program management over to an objective, technically-proficient partner
- Saved money with medical equipment recovery green initiative

ISS Solutions' responsibility is to provide total clinical engineering support to Geisinger Health System. This assures Geisinger of objectivity; management of economic, regulatory, and technological risks; and best practices.

100% of devices managed

ISS Solutions currently manages 100% of the clinical devices at Geisinger's five hospitals and 78 community practice and specialty clinics—everything from patient monitoring systems, to sterilizers, to linear accelerators. Over 70 ISS Solutions employees are charged with assessment, acceptance testing, preventative maintenance, repair, and disposal service for over 60,000+ clinical devices.

Blanket geographical coverage

As Geisinger strives to provide patient care close to patients' homes and workplaces, they have strategically expanded facilities or acquired facilities in local communities. Since ISS Solutions is already managing other clinical engineering programs throughout the state, they have technical resources on-site or nearby. ISS Solutions can provide blanket geographic coverage to the entire Geisinger Health System with local responsive service.

High-quality recommendations

Geisinger is strongly committed to high-quality decision-making—decision-making that drives quality patient care. Geisinger management requires partners who can make well-formulated, informed decisions that most benefit patients. ISS Solutions provides well-researched and insightful recommendations to the Geisinger staff in relation to the safety of clinical devices.

Integral to our team

Geisinger Executive Vice President and Chief Operating Officer, Frank Trembulak, sums up the relationship with ISS Solutions as follows: "ISS Solutions' engineers and technicians have done a great job serving the Geisinger clinical enterprise and are viewed as integral to the Geisinger team."

"ISS Solutions provides more productivity, more efficiency, more cost savings, and more value to the organization."

—Frank Trembulak, Geisinger Executive Vice President and Chief Operating Officer



Exceeded industry benchmarks without exceeding budgets

Providing clinical engineering services to a healthcare system that has a large number of facilities in a rural geographical area can be difficult. Small facilities without internal resources may have to wait for service. Hiring more engineers can increase responsiveness, but drives up costs. Deborah Templeton, Geisinger Vice President of Supply Chain Services, points out: "A lot of times, we can't wait three or four hours for somebody to travel from Pittsburgh or Philadelphia to provide service. ISS Solutions provides on-site, reliable, responsive service delivery and consistently comes in under budget."

To monitor quality performance and client satisfaction, ISS Solutions tracks service outcomes and surveys clients every year. In Figure 2, the red bars show ISS Solutions' performance for Geisinger versus

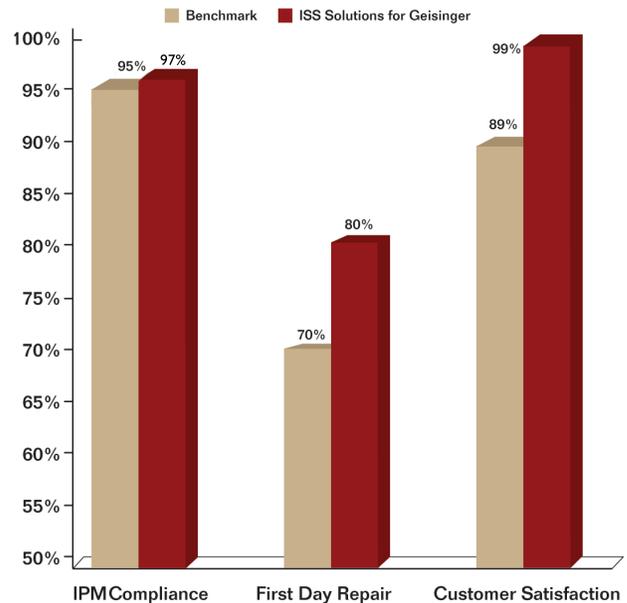


Figure 2: ISS Solutions' performance at Geisinger Health System compared to industry benchmarks.



Figure 1: ISS Solutions manages all of Geisinger Health System's 60,000+ clinical devices through assessment, acceptance testing, preventative maintenance, repair, and disposal service.

industry benchmarks in tan. Geisinger's statistics reflect the results from a satisfaction survey of almost 200 internal administrative and clinical customers within the clinical enterprise.

Turned clinical engineering management over to an objective, technically proficient partner

Because ISS Solutions is not tied to a particular clinical device manufacturer, their engineers make independent recommendations from experience. Rick Tevis is a certified clinical engineer and ISS Solutions' director of clinical engineering for Geisinger's main campus in Danville, Pennsylvania. "It's our job to help provide the best patient care possible using the appropriate technology in the most cost-effective manner," Mr. Tevis says. "To do that, we manage our own technicians, specialized sourcing agents, and contracts with key external partners."

Clients trust ISS Solutions' objective market standpoint and experienced engineers and technicians. ISS Solutions focuses on quality, yet makes cost-effective recommendations. Since ISS Solutions is an independent, multi-vendor service provider, they can evaluate different clinical devices completely without bias. ISS Solutions can objectively determine if a healthcare device is safe or unsafe for patient use and also evaluate new equipment for purchase.

When Geisinger purchases new equipment, ISS Solutions' engineers and technicians undergo training to service it. The experience in repairing all kinds of devices for Geisinger transfers easily to servicing new, cutting edge equipment for the healthcare system including: MRIs, linear accelerators, cardiac catheterization and angiography laboratories, patient monitoring equipment, lasers, dialysis machines, intra-aortic balloon pumps, perfusion machines, anesthesia machines, surgical robots, blood irradiators, PET, SPECT, and many other devices.



“Joint Commission examiners are not lavish with compliments; but, they said our performance was the best in the country in a number of areas. ISS Solutions has done a superb job of preparing us for inspections.”

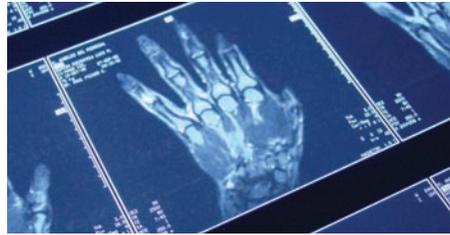
—Susan Hallick, RN, Geisinger Executive Vice President and Chief Nursing Officer

Biomedical



- Infusion pumps
- Defibrillators
- Lasers
- Ventilators
- Balloon pumps
- Perfusion equipment
- Patient monitoring systems
- PCA pumps
- Infant warmers
- Blood warmers
- Electrosurgical units
- Nurse call systems
- Pulse oximeters
- Hemodialysis units
- Surgical microscopes
- Blood irradiators
- eICU
- Medical device integration

Radiology



- MRI scanners
- Linear accelerators
- Cardiac catheterization labs
- Angiography labs
- Nuclear medicine equipment
- Radio-Fluoro rooms
- CT scanners
- Mammography/Digital mammography
- C-arms
- Portable X-Ray units
- Ultrasound scanners
- Computed radiography equipment

Special Equipment



- Pneumatic tube system (with over 250 devices and 13 miles of pipe)
- Wheelchairs
- Stretchers
- Sterilizers
- Carts for electronic health record use
- Medication carts
- Suction regulators
- Electric beds
- Special projects

Figure 3: Examples of devices maintained by ISS Solutions at Geisinger Health System. In total, over 60,000+ devices are inspected and maintained throughout the system.

Saved money with medical equipment recovery green initiative

One of the greatest challenges that healthcare facilities face is determining the fate of surplus or outdated medical equipment. While Geisinger was facing this dilemma, newer technology sat idle, occupying valuable hospital floor space. "We had hallways and storage facilities cluttered with unused equipment," says Deborah Templeton. "There was no accountability in the process and no inventory of what existed."

In 2007, Geisinger asked ISS Solutions for assistance. Together, Geisinger's Supply Chain department and ISS Solutions created the Medical Equipment Recovery Program, to reuse, remarket, or dispose of older or surplus equipment. The clinical engineering expertise within ISS Solutions helps to determine the value of the equipment and also ensures that any repurposed equipment is fit for use. ISS Solutions also helped to set up a central database to track the inventory as well as a centralized warehouse for storage. Through equipment resale, redeployment of useable equipment, and parts harvesting, ISS Solutions has cut back on confusion, clutter, and cost. The Medical Equipment Recovery Program is an asset to the whole healthcare system. "The program has saved Geisinger in excess of over four million dollars over the past two years," says Ms. Templeton.

Not only can saved money go toward the best healthcare possible, but also the program supports Geisinger's green initiative to reuse and recycle equipment. "It is a true 'trash to treasure' success story," says Ms. Templeton. "By working together, ISS Solutions and Geisinger designed a viable solution that not only solved a problem, but improved the process as well."

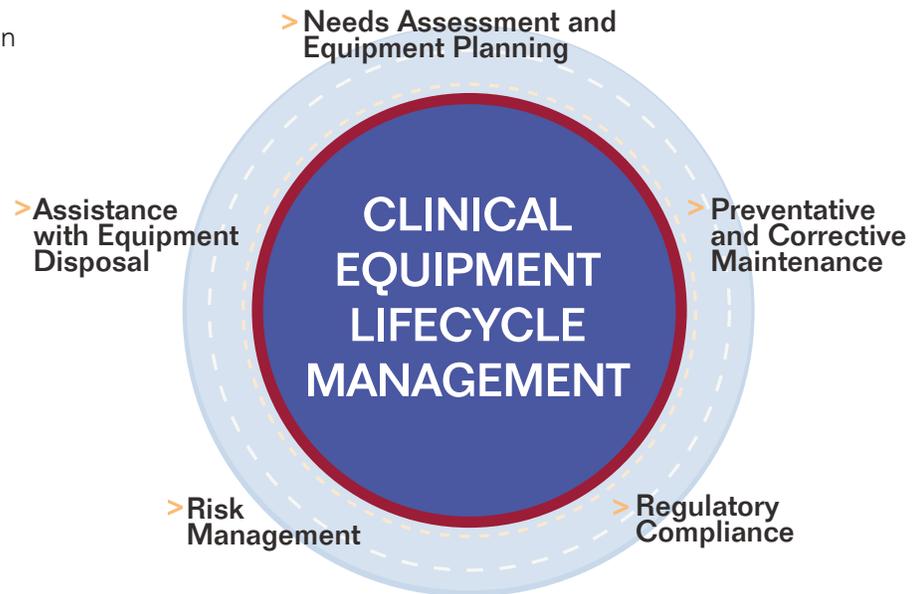


Figure 4: Geisinger Health System regularly receives recommendations from ISS Solutions on how to best manage its clinical assets. These recommendations have saved the health system thousands of dollars.