

# Case Study: Clinical Engineering

## Snapshot

### Organization: Geisinger

Headquarters: Danville, PA

### Business:

A 30,000 employee, integrated health services organization widely recognized for its innovative use of the electronic health record and the development of innovative care delivery models.

## Overview

### Challenge:

Provide comprehensive, cost-effective clinical engineering services to Geisinger's seven hospitals, over 100 clinics, two research centers, and medical school in Pennsylvania.

### Solution:

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

### Benefits:

- Exceeded industry benchmarks without exceeding budgets.
- Centralized management of all medical equipment.
- Expanded services to include device integration and security, and strategic technology planning.

## Geisinger Relies on ISS Solutions for Comprehensive Clinical Engineering Services across Geographically-Distant Campuses

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



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

**Tom Sokola**

Geisinger Central Hub Chief Administrative Officer



# Clinical Engineering



## 100 percent of devices managed

ISS Solutions currently manages 100 percent of the clinical devices at Geisinger's seven hospitals and over 100 community practice and specialty clinics in Pennsylvania—everything from patient monitoring systems, to sterilizers, to linear accelerators. Over 100 ISS Solutions employees are charged with assessment, onboarding, preventative maintenance, repair, and disposal services for over 60,000 clinical devices.



## Integral to our team

Geisinger Central Hub Chief Administrative Officer, Tom Sokola, sums up the relationship with ISS Solutions as follows: "We depend on ISS Solutions' quick response to our immediate equipment needs as well as for their routine maintenance service dependability. They are always proactive with service needs and within budget."



## Blanket geographical coverage

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



## Exceeded industry benchmarks without exceeding budgets

Providing clinical engineering services to a healthcare system that has many 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, Chief of Geisinger System Services, points out: "Often, 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, and responsive service delivery and consistently comes in under budget."



## High-quality recommendations

Geisinger is strongly committed to high-quality decision making that drives quality patient care and 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.



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

**Susan Robel, R.N., BSN, MHA**

Geisinger Executive Vice President and Chief Nursing Officer



### **Centralized management of all medical equipment issues under a single objective partner**

Because ISS Solutions is not tied to any clinical device manufacturer, our engineers make independent recommendations from experience.

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, we can evaluate different clinical devices completely without bias. ISS Solutions makes objective recommendations on the best equipment solutions, in addition to evaluating new equipment for purchase. Our engineers and technicians undergo training to service new equipment purchased at Geisinger, and our experience in repairing all kinds of devices for Geisinger transfers easily to servicing new, revolutionary 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.

*"We provide safe, reliable equipment so caregivers can focus on patient care. We do this each day by emphasizing quality and value in our services."*

**Barbara Maguire**

Certified Clinical Engineer and  
ISS Solutions' Vice President of Clinical Engineering for Geisinger.



### **Medical device integration and security**

As every new medical device can be connected directly or wirelessly to internal hospital networks or even the internet, there are added challenges to managing the onboarding, use and security of these devices. ISS Solutions has expanded our expertise by training our engineers and technicians in networking principles and adding staff with expertise in device integration and device security. Ensuring that medical devices function optimally within the health system has become an integral part of ISS Solutions' service. We also support Geisinger's efforts to ensure the integrity and security of protected health information by developing troubleshooting scripts for connected devices and setting policies for the disposal of medical equipment.

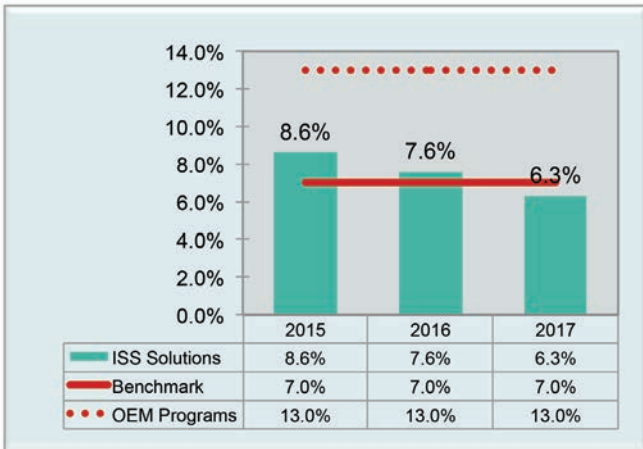


### **Strategic technology planning**

Utilizing cutting-edge technology to optimize patient care and routinely replacing existing technology are important priorities to Geisinger. ISS Solutions supports these technology planning needs by monitoring recalls and obsolescence of existing equipment and managing the routine replacement of medical equipment. ISS Solutions aids Geisinger in the selection of new technology by providing technology assessments, standards recommendations, life cycle cost evaluations and market analyses.

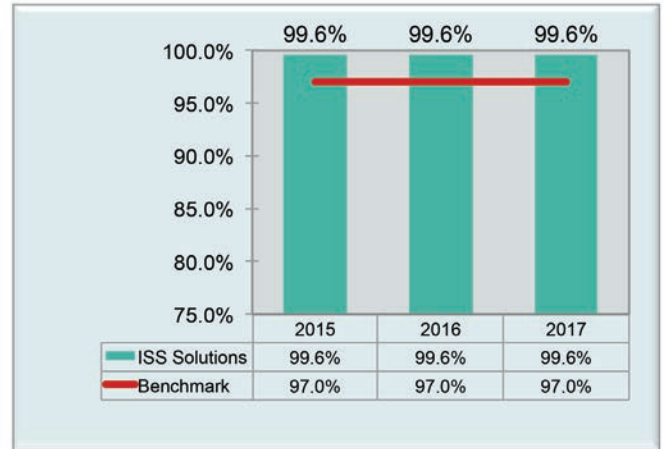


### Geisinger Clinical Engineering COSR



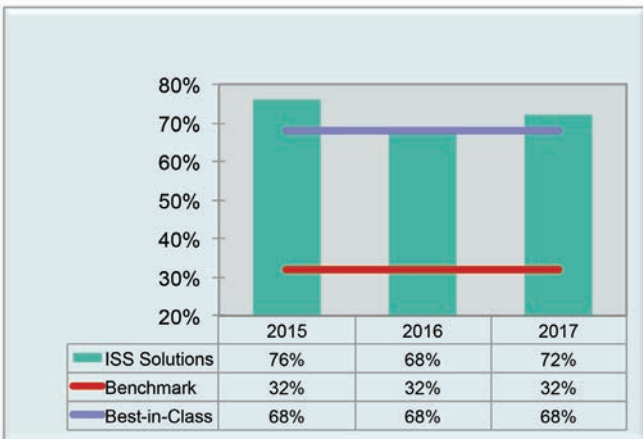
ISS Solutions has driven down the cost-of-service ratio (COSR) for clinical engineering services provided to Geisinger. ISS Solutions' COSR is significantly lower than that for original equipment manufacturers (OEMs) and is also lower than the benchmark published by the American Association of Medical Instrumentation (AAMI).

### Geisinger Clinical Engineering Uptime

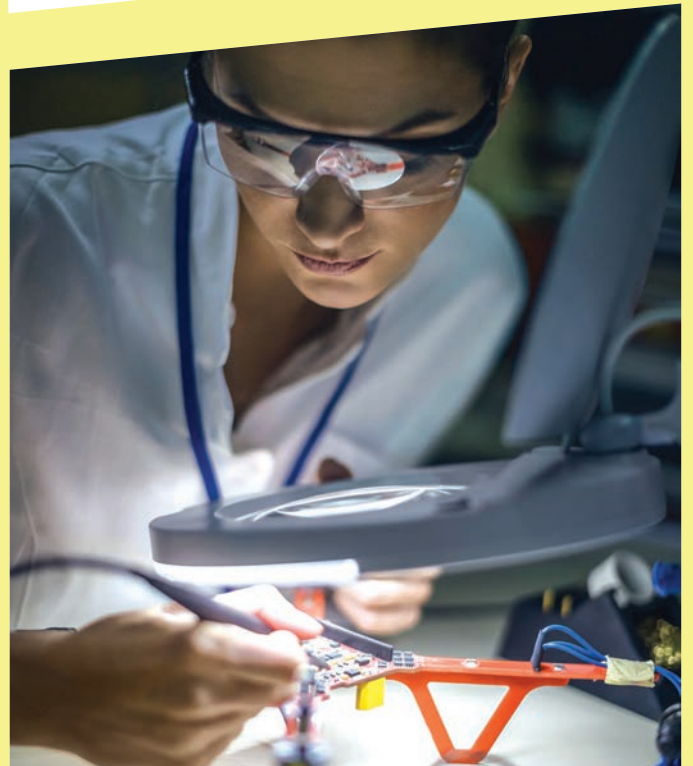


ISS Solutions has kept Geisinger critical imaging equipment up and running ("uptime") 99.6% of the time, which compares favorably to the industry uptime benchmark of 97.0%.



### ISS Solutions Net Promoter Score



ISS Solutions has consistently achieved a best-in-class or better net promoter score, an industry measure of client loyalty.



### Contact Us

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