

# WHITEPAPER

Cost-Effectively Optimizing & Supporting Your EMR



10 Hospitals



Kansas City Area



500 Physicians



60 Specialties

*Congratulations! You've done it. After a large investment of capital and other resources, along with countless hours of training and implementation, your healthcare network successfully launched your new or upgraded electronic medical record (EMR) system! Yet soon after implementing the EMR, many health systems have found themselves unprepared for the ongoing support and maintenance problems that quickly manifest within their IT departments, due to increased pressure on IT staff.*

**EMR system maintenance requires highly-specialized knowledge and input from skilled resources.** These are often the same resources who spent months launching the EMR. But hospital IT departments are tasked with both maintaining EMR systems as well as ongoing project and development work. With hundreds or thousands of end users in need of instant and critical EMR support and maintenance, strategic planning and projects frequently receive secondary focus and cause strain on employee satisfaction.

Kansas City-based Saint Luke's Health System (SLHS) faced this common scenario after implementing their new EMR. The stresses

caused high levels of staff turnover and dissatisfaction within their IT department and they knew another solution was needed. SLHS partnered with **HCTec's Managed Services team** to efficiently handle all Tier I and II EMR support, increase employee satisfaction and meaningfully increase overall staff productivity. Importantly, this relationship has **provided SLHS \$9.2 million in cost savings to date, and with an additional \$10 million in savings projected.**

CHiME  
Collaboration  
Award Winner

“ Delegating the daily management and associated support tasks of our EMR has enabled Saint Luke's IT team to **become agile, flexible and efficient.** ”

Saint Luke's Health System CIO Debe Gash

## THE STRUGGLE FOR CONSISTENT EMR MAINTENANCE

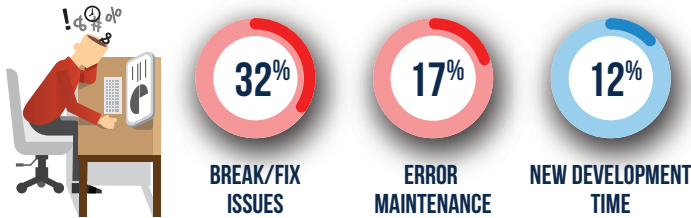
Starting in April 2014, Saint Luke's Health System began implementing a new EMR and Revenue Cycle Management System (Epic) across its organization, causing an immediate increase in the resources necessary to support it. Staff members were required to take on additional tasks to maintain the system, and they were frequently forced to switch between project tasks and support work. The unexpected and disparate tasks caused distractions and inefficiency.

The chaotic workflow became a challenge that led to heightened employee dissatisfaction and the rate of staff turnover rose to 15%. The struggles within the IT department impacted the

hospital's physicians and clinicians, causing unhappy end users and patients.

As turnover continued, new employees needed to be hired. However, highly specialized skillsets are difficult to find, especially in smaller geographic markets. Additionally, the average amount of time needed to train a new full-time employee to an acceptable level of productivity is six months, with an approximate cost of \$170,000 per new employee. Consultants can also be hired, but with fees as high as \$175 per hour per resource, their assistance is not sustainable as long-term support.

### INEFFICIENT SUPPORT STAFFING MODELS AND CHAOTIC WORKFLOW CREATES DISSATISFIED EMPLOYEES



Highly skilled IT staffers spend an average of half their time on EMR issues and maintenance at the expense of optimization.

### DISSATISFIED EMPLOYEES RESULT IN A LOSS OF:

1. PRODUCTIVITY
2. INCREASED STAFF TURNOVER
3. UNSATISFIED END USERS



EMPLOYEE  
TURNOVER RATE  
**15%**



AVERAGE EMPLOYEE  
REPLACEMENT  
**\$170,000**



END USER  
SATISFACTION  
**DECREASED**

## INCORPORATING QUALITY EMR SUPPORT

With the pressure of EMR system maintenance, health systems like SLHS are turning to external support teams for assistance. Extending the reach of the in-house IT team by partnering with a third party to perform system maintenance allows hospitals to reduce EMR support costs and increase internal IT staff productivity and satisfaction. Quality support teams consist of certified subject matter experts who work in tandem with the IT staff to increase resource capacity and drive maximum efficiency.

HCTec's Managed Services team integrates with hospital IT departments from their remote location in an Atlanta-based service center staffed by U.S.-based specialists. Using a combination of leveraged resource pools, the Managed Services team can identify, categorize, and delegate tasks. These tasks are then assigned to the most effective resources, thereby eliminating inefficiencies and miscommunications.

### Goals enabled by external EMR support:

- Increased staff retention
- Increased end user/clinical productivity and patient satisfaction
- Increased resource capacity for strategic projects
- Reduced EMR-related operating expenses

## RESTRUCTURING IT DEPARTMENTS FOR SUCCESS

External support teams relieve the pressure on overburdened IT staff, allowing them to focus critical project hours on strategic planning and new development. To implement EMR support teams, hospital Chief Information Officers (CIOs) need to analyze each task IT staff members are required to complete. Tasks are then sorted into two categories: General Operations and Growth and Business Transformation:

- **General Operations** tasks involve running the business and maintaining the EMR system.
- **Growth and Business Transformation** tasks focus on optimization, development, and strategic projects.

Using these categories, SLHS and HCTec established an operations strategy that created two workforce teams:

- **Team 1 is focused on general operations**, with HCTec's Atlanta-based Managed Services team acting as an extension of Saint Luke's IT department by providing 24-hour Tier I and II support.
- **Team 2 focused on growth and development**, with the support Team 1 provides freeing the internal IT staff members in Team 2 to focus on strategic planning and EMR optimization.

By redefining task production, full-time staff can now concentrate on similar assessments, which will be completed faster and more efficiently, without distractions. **The two teams solve a problem that one team could not have accomplished without the other.**

## THE BI-MODAL STRATEGY IN ACTION

HCTec worked with SLHS CIO Deborah Gash to identify the root source of the problem the SLHS IT department was facing. Together they developed a solution that reengineered the production method for the entire department. **HCTec's Managed Services team partnered with the department to work as a staff extension on an ongoing basis.** The two teams solve a problem that one team could not have accomplished without the other. This unique solution was initially applied to the SLHS IT department, and has since served as a model for multiple other hospital networks across the United States.

SLHS leadership found that under the new system, employee time was being used more effectively on a consistent basis. Employees were spending approximately 32% of their time in August 2016 solving break/fix issues. As of May 2017, the percentage of time devoted to maintenance and errors decreased by almost half, dropping from 17% to 9%. Additionally, only 15% of time was focused on break/fix resolutions, leaving the remaining time for production tasks. In parallel, the percentage of time employees committed to new development increased more than threefold to 38% during the ten-month period.

**HCTec's Managed Services team became an extension of the SLHS IT department, providing 24-hour Tier I and II support—freeing staff to optimize their EMR.**

The SLHS IT team does less of this...



And benefits more from this...



By working with an external EMR support team, hospital systems gain a network of specialists who integrate with internal staff, at a fixed operating expense for support related tasks. Employing telecommuters also reduces the need for increased office space, thus fewer funds must be spent on maintaining additional space. Avoiding the cost of a single floor of office space can be estimated around \$1 million in savings

annually. This flexible solution also expands geographic reach for qualified support resources, enabling them to work from anywhere in the U.S.

With the elimination of many outside consultants and the increase in overall staff productivity, **SLHS' five-year cost savings is projected to be \$20 million.**



## BACK-END SUPPORT FOR FRONT-END RESULTS

An increasing number of today's physicians and clinicians feel that maintaining digital patient records cuts into the time they would prefer to spend with patients. This sentiment only worsens if the clinical team experiences frequent system errors when entering patient information into the EMR. System malfunctions cause frustration for caregivers, which ultimately leads to dissatisfied patients and end users.

Physicians rely on the ability to use software without encountering system errors, so having the resources necessary

to maintain an EMR system is crucial. After SLHS integrated HCTec's Managed Services team, the EMR system became more reliable and physician productivity increased.

In addition to technical EMR support, Managed Services also incorporates a highly-trained team which interfaces with end users and customers via phone, email, and online chat. The team provides quality support for end users, and SLHS has found that since the implementation of the help desk, customer satisfaction has increased to over 97% satisfied.

## CONCLUSION

Large organizations like Saint Luke's Health System rely heavily on information technology for their day to day tasks, yet it is difficult for staff members to accommodate the extensive maintenance requirements. To alleviate some of the technological and administrative burdens on the SLHS IT staff, **CIO Gash and HCTec developed a coordinated effort to restructure task production and streamline efficient workflows.** In less than a year, the department has shown impressive increases in productivity, customer satisfaction, and cost savings. This collaborative effort is a practical and employable strategy for how health systems can partner with outside support to increase productivity and effectiveness.

In today's value-based healthcare industry, hospitals and physicians are having to incorporate new technology, population health initiatives, and operational improvements in quality or in workflow. With these increasing requirements, health systems' IT departments struggle to meet production demands and still control costs. Working with an external EMR support team to streamline tasks and EMR maintenance is a vital strategy for greater healthcare business success.

