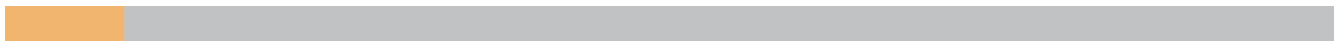


**HIMSS** Analytics

# HIMSS Analytics Stage 7 Case Study

Lucile Packard Children's Hospital Stanford



# Profile

Lucile Packard Children's Hospital Stanford, the heart of Stanford Children's Health, is a leader in world-class, nurturing care and extraordinary outcomes in pediatric and obstetric specialties, with care ranging from the routine to the rare. Together with Stanford Medicine physicians, nurses, and staff, the hospital and network can be accessed through partnerships, collaborations, outreach, specialty clinics and primary care practices at more than 60 locations in Northern California, and 100 locations in the western United States.

In October 2015, Lucile Packard Children's Hospital Stanford/Stanford Children's Health was awarded the HIMSS Analytics EMR Adoption Model Stage 7 recognition, and all 167 of their network practices received the Stage 7 Ambulatory Awards.

## The Challenge

In 2012, the organization began the process of implementing Epic as their new comprehensive Electronic Health Record (EHR) system. This was an essential step toward the goal of "one patient, one record," allowing each patient to have one integrated, easily accessed and updated medical record, shared across the full continuum of care.

During this same time, Lucile Packard Children's Hospital Stanford and Stanford Children's Health developed a new network of 130 pediatric and obstetric providers in 40 locations across the Bay Area. This network has now grown to over 60 locations. More than half of the physicians within the faculty and network practices were first-time EHR users. In the initial rollout plan, the hospital was scheduled to convert first to Epic, followed by the faculty and network practices over the following two-year period. During the implementation process, it became quickly evident that the entire enterprise would operate more successfully and efficiently, and meet the goal of "one patient, one record," sooner if the conversion covered all inpatient and ambulatory areas as quickly as possible. It was a herculean effort, made possible by the hard work and dedication of the operational, clinical and technical teams, to complete an accelerated organization-wide series of go-live conversions within a four-month period in the summer of 2014.

As one of the highest-acuity hospitals in the nation, Ed Kopetsky, Chief Information Officer, likened the conversion to, "reengineering the plane while it was in flight." On the day of go-live, the hospital was at 100% census and the cutover had to go off without a hitch. At the time of the cutover, several years of detailed historical patient data transitioned to the new system and the all-new Epic revenue cycle and administrative functions also went live.

## Implementation Overview

Detailed planning for the conversion to Epic began in 2011. Project approval and kick-off started in early 2012 with immediate efforts dedicated to team recruiting and training. Very sophisticated patient workflows, order sets and clinical rules were accommodated along with multifaceted integrated testing and an extensive end-user training program was completed. These endeavors culminated in a series of go-live conversions:

- May, 2014 – Lucile Packard Children's Hospital Stanford, Revenue Cycle and some Faculty Practices
- July, 2014 – Stanford Children's Health Network Practices
- Aug, 2014 – Remaining Faculty Practices and Oncology (Beacon)



# Resulting Value / ROI

## Patient Experience and Access –

- Integrated patient care workflows, care plans and follow-up care were greatly enhanced.
- MyChart, the interactive patient portal of Epic, allows patients to request appointments and prescription refills, make payments and view immunization records and lab results.

## Interoperability –

- Since the conversion to Epic, over 3 million patient records have been exchanged with 195 organizations in 48 states using Care Everywhere. This is particularly valuable due, as the specialty services and quaternary care provided at the hospital are largely physician-based referrals.

## Safety –

- The implementation of Bar Code Medication Administration (BCMA) resulted in a 30 percent decrease in medication errors.
- Chemotherapy Computerized Provider Order Entry resulted in four-times the improvement in chemotherapy infusions prepared 24-hours ahead and greatly improved the coordination of care to these complex patients.

## Innovation –

- Lucile Packard Children's Hospital Stanford is the first children's hospital to remotely monitor glucose levels of children with Type 1 Diabetes with automatic data capture that goes into the EHR.
- Apple's Healthkit platform was integrated with Epic's electronic health record system.
- Epic's Slicer Dicer, a self-service tool, easily allows providers to manage data within their patient population to improve the quality of care.

## Costs Savings –

- \$600K a year is saved in transcription costs.

## Revenue Improvements –

- \$21 million increase of cash collected adjusted for census and acuity.
- \$21 million improvement in final billing in FY15.
- 23 percent reduction in Hospital Accounts Receivable Days.

# Lessons Learned

- Internal, knowledgeable team members are extremely valuable.
- Creating realistic and complex integrated testing scenarios allowed us to find and address challenges before they became patient care issues.
- Establishing a fully staffed training team to work with providers one-on-one, not only during go-live but also during the first year after implementation, is key.
- Effective governance from the executive team all the way to clinical and operation leadership is essential to promoting organizational wide change.
- Customized training classes and follow-up sessions with clinicians were very effective and appreciated.
- The magnitude and corresponding budget for "At-the-Elbow" support is significant and expected by most providers. There is a need for supplemental support for several weeks post go-live.

**"These awards are a testament to quality and innovation by a very dedicated team of research, teaching and care delivery colleagues throughout our academic medical center, hospital and network. Together, we are leading the way to improve access and quality of care for all children and expectant mothers." Ed Kopetsky, Chief Information Officer**

