The Children’s Heart Center at Lucile Packard Children’s Hospital Stanford’s outcomes surpass peer hospital averages – despite tackling the most complex cases in the U.S.

According to recent data from the Children’s Hospital Association’s Pediatric Health Information System (PHIS), the Heart Center at Lucile Packard Children’s Hospital Stanford and Stanford Children’s Health has higher marks in key areas – including survival rates and average length of stay – compared with dozens of other children’s and young adult cardiac programs nationwide. What makes these outcomes even more noteworthy is the fact that the Heart Center also has the highest acuity Case Mix Index (CMI) in the country.*

* Data Source: Pediatric Health Information System (PHIS), 2013 and 2014. The PHIS hospitals are 46 of the largest and most advanced children’s hospitals in America, and constitute the most demanding standards of pediatric service in America. The Children’s Hospital Association developed PHIS to provide a rich data source for clinicians to conduct comparative effectiveness studies that affect hospitalized children.
**Exceptional outcomes for even the toughest cardiac cases.**

**HIGHER SURVIVAL RATES THAN NATIONAL DATA SET**

The Children’s Heart Center’s survival rates were higher than the national data set for PHIS “peer hospitals”:

- In 2014, the Heart Center’s observed-to-expected mortality ratio was 0.63 compared with an average ratio of 0.83 for PHIS peer hospitals. This index difference of 0.20 indicates that patients had a **24 percent higher survival rate** at Lucile Packard Children’s Hospital Stanford compared with the PHIS national data set.
- This is an even greater difference than reported the year before. In 2013, the Heart Center’s patients had an **8 percent higher survival rate** compared with the PHIS national data set (observed-to-expected mortality ratio of 0.79 vs. an average ratio of 0.86 for PHIS peer hospitals, for an index difference of 0.07).

**SURGICAL SURVIVAL RATES 56% HIGHER THAN PEERS**

When looking specifically at cardiac surgical care, the Children’s Heart Center’s outcomes were even more impressive:

- In 2014, an observed-to-expected mortality ratio of 0.29 vs. an average ratio of 0.66 for PHIS peer hospitals — an index difference of 0.37 — means the Heart Center’s surgical patients had a **56 percent higher survival rate** than the PHIS national data set.
- In 2013, an observed-to-expected mortality ratio of 0.71 vs. an average ratio of 0.92 for PHIS peer hospitals — an index difference of 0.21 — indicated the Heart Center’s surgical patients had a **23 percent greater chance of survival**.
HIGHEST COMPLEXITY CASES IN THE NATION

Adding even more weight to these survival rates is the fact that Lucile Packard Children’s Hospital Stanford handles the highest acuity and complexity cardiac cases in the country:

- The Heart Center’s overall surgical CMI in 2014 was 20 percent higher than the PHIS peer hospital average (6.05 CMI for Stanford vs. 5.06 CMI for the PHIS national data set, when adjusted for severity).

- The Heart Center’s overall medical CMI in 2014 was 19 percent higher than the PHIS peer hospital average (1.24 CMI for Stanford vs. 1.04 CMI for the PHIS national data set, when adjusted for severity).
SHORTER AVERAGE LENGTH OF STAY

Even while surpassing PHIS peer hospital averages for outcomes, the Heart Center’s average length of stay (ALOS) for both surgical and medical cases was lower than the PHIS national data sets:

- In 2014, patients who had surgery at Stanford spent an average of **3.31 fewer days** in the hospital (7.07 days on average vs. the PHIS peer hospital average of 10.38 days).

- In 2014, patients who were hospitalized at Stanford for medical care had an ALOS that was **1.01 days shorter** (4.07 days on average vs. the PHIS peer hospital average of 5.08 days).

Due to the Heart Center’s willingness to take on “last hope” cases, a focus on innovation and discovery is a critical part of the equation.

“We learn something new every time we push the limits of what should be achievable.”

— Stephen Roth, MD, MPH
Professor of Pediatrics (Cardiology), Stanford University School of Medicine
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