Move Beyond Static Schedules for Efficient ED Staffing

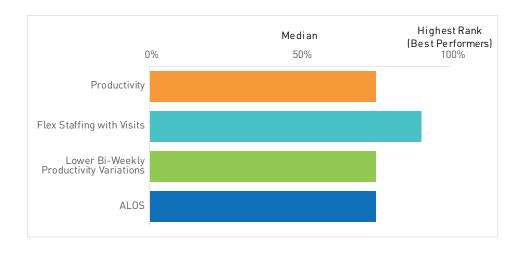
PROSPECT Data Comparison | Ann & Robert H. Lurie Children's Hospital of Chicago

A pediatric hospital recognizes local needs and relies on shared decision making to meet variability in the unit.

What works on paper may not always translate to success when it's tested in real time. The leadership team at Ann & Robert H. Lurie Children's Hospital of Chicago (Lurie Children's) attempted to follow emergency department (ED) operational plans outlined by a consulting group but hit snags. The team realized the two static schedules suggested for the year didn't meet the variability in the unit.

The team members went back to the drawing board and used historical data to identify volume changes. They defined indirect and direct care hours, and better defined the actual productivity time for nurses and paramedics. Those changes and other adjustments contributed to better performance.

To help hospitals uncover trends in data, CHA's PROSPECT program captures a vast library of operational metrics. CHA analysts compared four staffing criteria from PROSPECT to identify high-performing pediatric EDs, and Lurie Children's emerged as one of the top hospitals. Here's how the hospital performed in four areas ranked in PROSPECT data.



ED Staff Alignment

David Kruger is the director of the ED and manages productivity by focusing on length of stay (LOS), left without being seen episodes and worked hours per unit of service. Incorporation of a variety of skilled staff enhance efficiencies. Paramedics function as ED partners. Their job description supports response to emergency codes, initiation of IVs, application of splints, administration of respiratory medications, initiation of interosseous lines. Certified nursing assistants have a limited role, but can function in ED Pod Three as a runner, assisting with transportation and patient flow.

ED Structure

Volume: 56,886 Average daily census: 154 High season: 167 Low season: 137

The physical structure of the unit allows for treatment by the appropriate level of providers based on the patient condition. Three pods are usually open for distributing patients to specific need areas.

POD ONE:

Open 24 hours daily.

POD TWO:

Generally opens from 9 a.m. to 1 - 3 a.m. based on season. The pod is open longer to accommodate a surge.

POD THREE:

Pediatric faculty provides urgent care.

Physician coverage is routinely two providers for days and evenings. If volume causes a delay in patient flow, managers add more shifts.

"There's a lot of different variables we're looking at to paint a picture," says Kruger. "It's a little bit of science and a little bit of art."



Kruger says in the Chicago market, hospital staff prefer 12-hour shifts over 8- or 10-hour shifts available in other cities. "We do a wonderful job aligning our staffing model with the provider's side," says Dan Skarzynski, manager operations. "When managers make decisions about adjusting staffing patterns, it's done in tandem with physicians, nursing and in cohesion with faculty."

Timely Data, Ongoing Monitoring and Huddles

Daily, leaders receive the important data metrics for the unit including volumes, left without being seen, time to door, time to doctor, time to admission and other measures. These are displayed on a visual management board for staff and patients to view. Every morning, staff hold a huddle at the board to discuss the previous day's data and to plan for the day. The team uses EPIC tools to get data about patient acuity, volumes and times. Weekly, the ED operations committee reviews the data looking at trends. One trend showed that while volume decreased, the number of critical patients admitted from the ED increased.

Shared Decision Making

Awareness of the trends alerted ED managers to a variance from anticipated seasonal fluctuation. High volumes expected in November and December did not happen. However, volumes began to spike in February and March. Normally, staff are scheduled six weeks out, so leaders adjusted schedules to cover the anticipated volume changes. At times, managers rely on a group of staff with ED experience, known as "friends of the ED", to help cover the influx. The group is contacted via text and can respond if they can take a shift.

"Our philosophy supports a collaborative environment and shared decision making," says Skarzynski. "Leadership and staff need to be involved and understand the big picture."

Lure Children's created the Proactive Premium Pay Program to take a proactive approach to peak and surge census periods and provide adequate inpatient nurse staffing to support increased volume and acuity. Nurses must work 36 additional hours over their budgeted FTE status in a three-month period and will be paid in addition to their base pay. They can work the 36 hours in four, eight, and 12-hour increments. The contract is only for Lurie Children's nurses and a commitment to the program must be done in advance.

Continue Progress

Some services in the Chicago area have closed, which is expected to cause increased volumes and growth for the hospital. Managers are planning additional space to meet these community needs. The hospital has a 14-bed psychiatric unit. However, the increasing volumes resulted in longer LOS and beds not available for new patients. The ED manager considers holding new admissions until appropriate placement is possible. The ED functions with three rooms designed for psychiatric patients, but those are typically full.

Care for complex patients presenting with sepsis, cardiac or hematology/oncology conditions is particularly challenging. Managers are working to fully understand the time and resource intensity of these children.

For more information, contact **Carla Hronek**.

Methodology information

PROSPECT, time frame: Source: PROSPECT, CY 2018, Staff Included: RN, LPNs, Paramedics, PCT and Agency, Two comparative ED groups: Distribution of patients within emergency severity index 1 and 2 (<15% lower severity and >15% higher severity). Better performing hospitals selected based on overall rank within each category: 1) Worked Hours Per Visit, 2) Bi-weekly Worked Hours Per visit variation, 3) R2 4) ALOS. Bar Chart Interpretation: 100% represents best rank within each category.

Adapting to Census

Lurie Children's uses a variety of strategies to respond to routine and high-volume situations.



FTE LEVELS

The ED has a set level of FTEs available for safely and effectively staffing the unit.



AGENCY STAFF

Managers rely on agency staff for "upstaffing" during high volume times.



PHYSICIAN SCHEDULING

Managers adjust physician schedules to align with the number of nurses on duty.



PSYCHIATRIC SERVICES

A psychiatric social worker is assigned every shift to support the rise in behavioral health patients. The hospital also offers services through a psychiatric residency program.

