Workforce Performance and Organizational Experience

Making Data Work
When children’s hospitals give the same level of attention to the well-being of their employees as they do patients, the care they provide improves. Consider a new approach to answering critical workforce questions. As a community, we can analyze and collaborate using available data sources to understand how to effectively invest in employees.

A previous Children’s Hospital Association (CHA) report described how a high reliability organization (HRO) in health care largely depends on people and how people are the most important, high-cost and variable resource to organizations. The quadruple aim confirms the effects of the workforce on care delivery and is foundational to providing patient-centered, timely and equitable care. CHA is committed to advancing the conversation around these topics and translating it into strategies for improved employee well-being and patient outcomes.

We can make progress together. If we share different combinations of data such as staffing, quality and safety reporting, employee health and wellness, electronic medical records (EMR), administrative, and financial and operations, we can speed up the discovery of leading workforce practices that improve the safety and efficiency of children’s hospitals. In this report, two human resources executives share examples of how data can be used to induce change.

**Correlating Workforce Strategies with Quality and Safety**

Lorrie Ortiz is vice president of Human Resources at Riley Hospital for Children at Indiana University Health, and she has been using data to correlate workforce strategies with her organization’s operations and quality improvement initiatives. Ortiz monitors several employee well-being factors, as well as employee engagement. She is working with finance and quality improvement colleagues to create a dashboard connecting the effect of employee well-being on patient safety and overall hospital performance.
Here are the areas her organization monitors using data to assess employee well-being:

**Time-to-fill and vacancy.** From a well-being perspective, Riley Children’s takes a holistic view, including time inside and outside of work. Ortiz’s team learned that time-to-fill rates affect employee well-being, and if a position stayed open too long, the added responsibility on team members could take a toll on their passion for the job. High vacancy rates add stress to the teams as they’re either short-handed or working with staff who are unfamiliar with how the team functions.

**External log-in frequency relating to physician burnout.** Physicians are working all of the time: coming in at 7 a.m., leaving at 7 p.m., and logging into the EMR at 11 p.m. There is little time to decompress or to process difficult situations that may have arisen during the day. Ortiz and her team are beginning to correlate EMR log-in times outside of work to a [physician burnout survey](#) adopted from Mayo Clinic. Riley Children’s benchmarks hospital burnout scores to industry standards. Children’s hospitals in general score better than adult hospitals, but Ortiz says the organization could do better.

**Turnover correlation to operations.** Ortiz has been working with the hospital’s chief financial officer to understand the effect of employee engagement on overall finance. She says since they have a strength-based philosophy for employees, it should trickle down to finances from an efficiency perspective. Ortiz is layering HR data and turnover rates over finance data from the hospital’s Goldman Sachs reports to better understand potential correlations. “My retail background taught me that high engagement means getting things done efficiently,” Ortiz says. “We can use business intelligence tools to target employee well-being and financial well-being.”
Engagement correlation to safety. Riley Children’s discovered a strong correlation between highly engaged teams and lower rates of harm. An example of the opposite effect, the hospital found that central line-associated bloodstream infection rates are higher in departments with employees reporting less engagement. Teams convey a lack of engagement is typically due to poor leadership, a lack of team dynamics or time pressures. Ortiz says they learn from high-performing teams and then make adjustments. They discuss strategies for success followed by rolling out the tactics to other teams.

Riley Children’s has quantified the data and is beginning to introduce initiatives to improve employee well-being. “We are starting to see some movement in our numbers and will target additional programs where the scores remain low,” Ortiz says. “We do see more collaboration and more resourcefulness as employees increasingly find their voice.”

Next Steps

Riley Children’s is working on a change in mindset to emphasize the necessity of an employer providing work-life balance. Ortiz says there needs to be an expectation to integrate activities supporting health and well-being into the workplace, like having a worksite gym.

“Hospital teams acknowledge they are all in this together. This is especially true when dealing with quality and safety issues,” she says. “We need to ask if employees are okay or let them take a break or let them go home after an acutely stressful situation instead of immediately jumping to a task list of to-do’s.” Ortiz says the hospital’s chief operating officer does a good job of managing staff needs. For example, the CMO continually recognizes a physician’s overloaded schedule and inquires about their well-being. “It’s the little things that allow employees to continue on to fight the good fight for our patients,” says Ortiz.

Your Organization May Already Have What it Needs

Matthew Stephenson, a partner at Mercer, a human resources consulting firm, discussed the notion you don’t need more data than your hospital already collects. Stephenson provides industry insights on the current state of employee analytics in children’s hospitals and how organizations can learn how to better analyze data.

Stephenson says hospitals need to find the actions that will produce the most change, and with a few adjustments they can shift from reporting data to taking action. He says to:

- Start off on the right foot
  - Understand the workforce needs of clinicians and managers, choose two to three solid data points that can help measure those needs, and come to the table prepared. If you get it right, this approach allows the organization to understand the possibilities of using these types of data to enhance safety and operations.
Streamline the reporting

- Less is likely better when it comes to data gathering. Fewer data points can free up resources to work on action steps. Encourage stakeholders to choose what’s most important and be careful about collecting data before you know how you will use it.

To give your organization greater potential for change, Stephenson suggests beginning with a focus on four data points relating to staffing. His input is based on adult health care industry experience and he cautions the children’s hospital experience may be different. “Several of these data points serve as natural experiments,” Stephenson says. “Hospitals collect data on a regular basis that likely no other industry can compare to.”

1. **Overtime**: Drill down to the department level to understand what overtime means to your organization. Overtime in the intensive care unit may be associated with improvements in quality due to continuity of care aspects. Overtime on medical/surgical floors could mean someone didn’t show up, and the floor is understaffed resulting in lower quality of care.

2. **Staffing models**: Hospitals already collect in their administrative systems data necessary to measure the impact of the staffing model on operations and safety.
Examples include:

- HR systems track turnover and have timekeeping
- Safety systems document errors such as hospital-acquired conditions
- EMR data records diagnoses
- Administrative data tracks readmissions

3.) **Turnover**: Stephenson says hospitals consistently observe that high levels of turnover lead to low quality of care. “We are finding overall engagement scores are less a predictor of who will stay with the organization,” he says. “The predictor of turnover is engagement at the department and team level. And these scores consistently vary by department. The emergency department is different than oncology. Maybe it’s the leadership of those departments, maybe it’s the patients they see. But whatever it is, this accounts for much of the relationship to turnover.”

Stephenson observed lower first-year turnover rates are a predictor of quality. One organization approached first year turnover with the option to move to another department which resulted in an 80 percent “more likely to stay” rate.

4.) **Clinician profiles**: Some organizations are now seeing a difference in organizational performance related to the experience of new hires. New hires straight out of school are less expensive, but organizations report they are often less effective and require more training resources. “Many of these decisions may be mission driven,” Stephenson says. “It is important to quantify the differences and target training for required competencies.

**Looking for Combinations of Data that Work**

Trial and error is unavoidable in the pursuit of finding what new insights data can provide. But trying something different can also reveal the unexpected. CHA is beginning to experiment with combinations of data points from PHIS, PROSPECT and CHART with the intention of uncovering possible correlations to workforce practices.

**What are You Experimenting With?**

CHA wants to hear about the critical business issues your team thinks could be answered by examining workforce behaviors and staffing. Based on your input, CHA will conduct more analyses and highlight that information in the next white paper.

Send us an email describing your hospital’s progress in workforce analysis. We’d like to add more perspectives from thought leaders and share effective use of metrics to create strategies in future papers.