REDUCING WASTE IN CARE PROCESSES

BY DOCUMENTING DIRECT AND INDIRECT TIME

BY GEORGE KIS, MS, MANAGING DIRECTOR, HURON

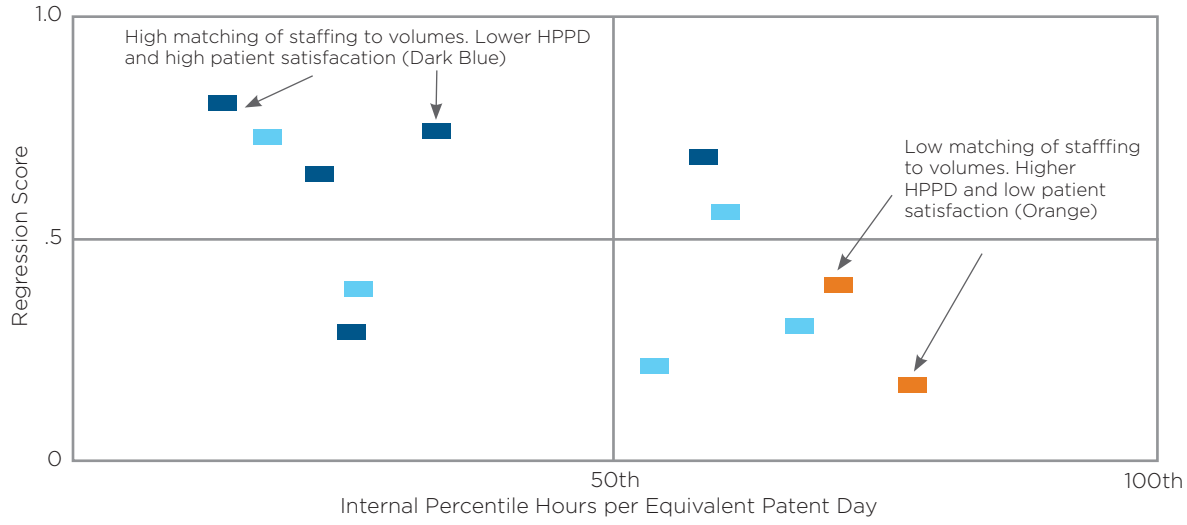
Well-run hospitals provide their patients with the best possible outcomes and service, and physicians and employees with an efficient, responsive workplace. Yet, current market and regulatory pressures on healthcare organizations can make providing efficiently delivered care difficult. Other industries, driven by similar pressures over multiple decades, invested in methods that removed waste and streamlined delivery of their products or services. Now, more hospitals are taking a hard look at their own work flows, specifically direct and indirect patient care time, and discovering that optimizing processes that conserve resources in those areas can also improve patient outcomes and the patient experience.

Increasingly, the industry recognizes consumer perceptions of care, or the patient experience, as a vital component of the quality of overall healthcare delivery. A proven link exists between this perception and clinical quality of care — patient experience is positively associated with clinical effectiveness, better health outcomes, and patient safety.

For example, at one hospital where a study of nursing time was performed on nursing units, only 30 to 40 percent of a nurse's time was spent on direct patient care. On one unit, direct care was only 25 percent, and dropped lower at night. By looking at patient satisfaction, staffing levels, and direct patient care time together, there was a distinct correlation between lower direct care time and lower patient satisfaction. Additionally, units whose staffing was better aligned with census also achieved higher patient satisfaction scores.

A comprehensive, national study of costs by the Institute of Medicine concluded that a third of health care expenditures do not actually improve health, a percentage that annually represents $750 billion. The study lists factors such as unnecessary services, inefficient care delivery, and excess administrative costs as being spread widely throughout the healthcare system.[1] In terms of the national economy as well as how their institutions perform, hospital leaders clearly have a financial stake in correcting inefficiencies. One way is to start with an evaluation of patient care delivery work flows.

CORRELATION OF STAFFING LEVELS, MATCHING STAFF TO DEMAND AND PATIENT SATISFACTION

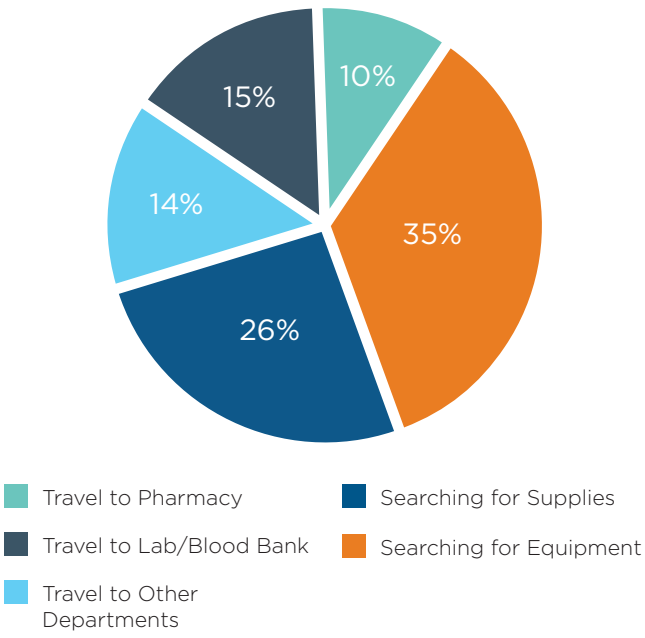


DIRECT AND INDIRECT WORK

Simply put, direct care is time spent with the patient, administering medications, taking vital signs, changing dressings, etc. Indirect care activities may ultimately benefit a patient, and are key to eliminating process wastes. Examples of indirect time include preparing medications, documentation, gathering patient supplies, etc. Wastes associated with indirect time include excess traveling within the hospital (e.g., going to another department to pick something up), frequent phone calls or other communications, and searching for supplies and equipment. Work in most hospital departments can be broken down into direct and indirect work.

Nursing managers appreciate these definitions and note that the time nurses spend with their patients satisfies other variables. They embrace correcting process issues and want to make a difference. Nurses can spend up to half their shifts running errands, waiting for transport, and looking for equipment and supplies. By optimizing processes, more time can be spent on patient care, improving outcomes and patient satisfaction while requiring fewer resources.

DISTRIBUTION OF NURSE ERRAND TIME



Looking at direct and indirect work flows determines where time is wasted, where performance barriers exist, where staff is not working to full licensure, and what processes are broken or need changing to make work more efficient and cost-effective. Ultimately, the focus is on providing the best care and service for the patient, not how many tasks a clinician can get done without mistakes in record time. Problems are about processes, not people.

PROCESS IMPROVEMENT FROM DIRECT OBSERVATION

Observing work to improve performance has been around since the start of the industrial revolution, with a modern-age focus rooted in quality improvement. Direct observation, combined with lean methodology — continuous quality improvement adopted by Japanese manufacturers facing limited resources after World War II — bring quality into focus in healthcare's current era of cost shifting and performance improvement where documentation and accountability are crucial.[2]

Direct observations help organizations discover sub-optimal work processes, weak points, or barriers, and allow them to reconsider how work flows should look and how to adjust staffing. When done right, the result is efficient, sustainable process improvement.

As the following examples illustrate, when hospital executives see directly observed proof that work flows are different than what they expected and they discover how many unnecessary steps/ inefficient tasks actually take place, they are more willing to adapt workflow process changes.

UNDOING RESTOCKING TIME STUFFERS

After observing central supply staff on all shifts restocking activity, processing disparities between two hospitals within the same system were identified. At one facility, nurses spent a significant portion of their time stocking supplies, while at the other hospital that was not the case. After determining and implementing more optimum

par levels and restocking times, search time and unnecessary trips to central supply by nursing personnel were virtually eliminated.

GIVING RTS BREATHING ROOM

One hospital achieved increased efficiencies and lower costs, while maintaining high quality, by having nurses help respiratory therapists (RTs) with spirometer testing (assesses post-surgical lung capacity to prevent pneumonia). Direct observation noted that a small number of RTs spent a significant amount of their time traveling to the bedside and performing the test,

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which could be performed by nurses and nurse assistants. The nurses were willing to take on the testing after completing spirometer training, and the RTs were able to better focus their skills on weaning and other procedures. The change reduced RT hours and travel time, but barely added time for RNs since they were already regularly checking on these patients, and allowed the testing to be done more quickly.

PROCESS DESIGN DU JOUR

Patient meal satisfaction scores rose dramatically after a hospital deployed a nutritional specialist to review menus and observe the kitchen tray line as meals were prepared to determine where errors in patient meals were occurring. The specialist recommended simplifying the menus and adjusting the tray line speed. By changing the menus to a restaurant style and reducing the tray line speed by about one second, accuracy increased dramatically as did patient satisfaction scores, coupled with a large decrease in wasted food.

ACHIEVING A RECORD PERFORMANCE

One hospital's medical records department was not performing optimally so direct observations were undertaken to measure what each staff member was doing within a specific time frame. What jumped out was that the department was manually labeling records before they were scanned. Inquiring as to the ability of the scanning technology to automatically label the record, the capability did exist but was not being used. Observers identified a very manual process that could simply be automated, which provides better quality, faster turnaround times, and the ability to redeploy resources to other needed activities.

QUICK PROCESS IMPROVEMENT ASSESSMENT

- Do I listen when managers tell me about work inefficiencies?
- Do I have the tools and guidance to observe work flows?
- Am I able to recognize where indirect processes undermine direct patient care?
- Can I prioritize which areas would benefit from a work flow study?
- Which quality and satisfaction metrics are not meeting expectations?

DIRECT OBSERVATION TOOL

What these success stories have in common is a new tool Huron developed that documents direct and indirect work activities and flows, and also allows observers the ability to recommend process improvements as the observations take place. The direct observation tool rolled out in pilot projects at Southern Illinois Hospital in March 2015 and has been used successfully in every Huron performance improvement engagement since.

An exclusive solution used by Huron, this is a customized tool that trained Huron observers use on location. With it, they "shadow" staff in real time over a span that varies by issue and area (observing a large nursing unit would take more time than doing so with a smaller medical records department). Unlike self-directed studies that can hinder objectivity, or time and motion studies that are more time-consuming and expensive to administer, the tool allows the observer to record and summarize activities in real time. The tool formats the collected observational data and graphs the work flow patterns automatically to provide immediate feedback, enabling managers to understand wastes, barriers, redundancies, or broken work processes. Huron Labor experts familiar with leading practices in the areas they observe then recommend improvements to fix the work flow problems.

DIRECT OBSERVATION TOOL RESULTS

- Provides immediate feedback that visualizes barriers, broken work processes
- Used to recommend process improvements that fix work flows

When the issues are about process, and not individuals, there is no stigma about judging job performance and there is more staff and organizational buy-in. When benefits are measured in increased efficiencies and enhanced quality, the changes are transformational — for staff, who now enjoy more direct patient-facing time and removal of performance barriers, and for the organization, which can experience sustainable, even scalable, process improvement.

PROCESS IMPROVEMENT AND ORGANIZATIONAL CHANGE

Hospital executives responsible for labor want solutions that go beyond staffing management to those that improve processes across all care delivery points. Many have reached a point where they need ways to change behavior that go beyond silo thinking, and point their organizations to a future of continuously higher performance.

> **"The direct observations provided invaluable insight into unit activities. Through this process, the amount of time spent in direct and indirect caregiving was delineated as well as those actions that did not provide value to the patient. Identifying waste aligned with our organization's lean initiatives and was something the staff understood."**
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	LEAN THINKING - THE 8 DEADLY WASTES IN HEALTHCARE PROCESSES	% OF TOTAL WASTE
H	**Halting** - e.g., waiting, delays	17%
O	**Overproduction** - i.e., blood samples on every patient "just in case"	0%
S	**Slips** - e.g., mistakes (not reading the chart properly, poor training)	0%
P	**Process Non-Value-Added** - anything else in the process that doesn't add value	17%
I	**Inventory** - e.g., cluttered supply rooms leading to confusion	50%
T	**Transportation** - unnecessary movement of patients	0%
A	**Action** - unnecessary movement of employees (supply rooms on opposite end, etc.)	17%
L	**Lack of Employee Engagement** - ideas that are stifled, unhappy employees	0%

Learning how to recognize throughput waste and finding impactful process changes to streamline patient care are a good place to start. Listen to staff that notice department work inefficiencies. Observe workflows to determine how and where indirect work undermines direct work and causes waste. Initially focusing on areas which have low quality and satisfaction metrics, high overtime, high employee turnover, and staffing above comparative and historical performance can provide the greatest benefit in the short-term. And, partner with those who can help you implement plans that optimize processes, improve work flows and throughput, and align the right skills at the right time and at the right location.

ABOUT HURON

Huron is committed to achieving sustainable results in partnership with its clients – across the institutions, industries and communities it serves. The company brings depth of expertise in strategy, technology, operations, advisory and analytics to drive lasting and measurable outcomes for leaders in the healthcare, higher education, life sciences and commercial sectors. Through focus, passion and commitment, Huron works closely with its clients to solve their most pressing problems, providing strategic guidance in the face of the rapid change transforming their industries. Learn more at www.huronconsultinggroup.com.

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1. Institute of Medicine, *Best Care at Lower Cost: The Path to Continuously Learning Health Care in America*, September 6, 2012.

2 Whittenburg, Luann, RN, FNP, "Workflow Viewpoints: Analysis of Nursing Workflow Documentation in the Electronic Health Record," Journal of Health Information Management, Volume 24, Number 3, Summer, 2010.

To learn more about Huron's Direct Observation Tool or other Labor solutions, please contact:

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