THE Value Initiative

Members in Action: Implement Operational Solutions

Johns Hopkins Health System – Baltimore, Md.

Implementing Evidence-based Practice Improves Care, Reduces Cost

The AHA's Members in Action series highlights how hospitals and health systems are implementing new value-based strategies to improve health care affordability. This includes work to redesign the delivery system, manage risk and new payment models, improve quality and outcomes, and implement operational solutions.

Overview

The Johns Hopkins Health System (JHHS) High Value Care Committee (HVCC) is focused on improving patient care quality, safety and affordability by reducing practices that provide little or no value to patients. To achieve this, JHHS is ensuring the appropriateness of its tests, procedures, treatments and medications. The multidisciplinary, interprofessional committee built the initiative upon results of earlier quality improvement projects and expanded the process throughout the health system in 2016.

The committee identifies initiatives that have reduced wasteful practice in one department or one hospital and disseminates the intervention to practitioners across JHHS's six hospitals and large community practice medical group.

Impact

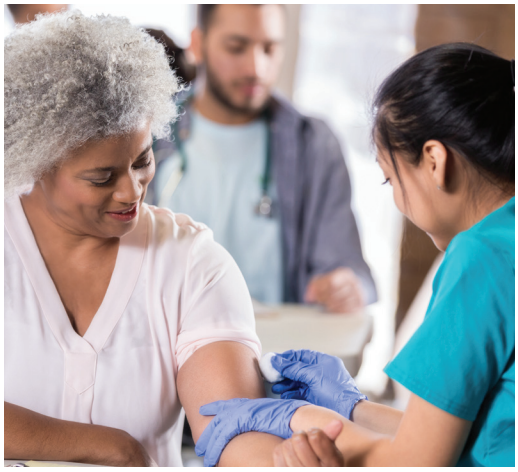
Each intervention is evaluated for clinical and cost outcomes. For example, by reducing excess cardiac biomarker testing, Johns Hopkins Bayview Medical Center increased its accuracy in diagnosing acute coronary syndrome and reduced charges by more than $1 million within one year. And by eliminating unnecessary blood transfusions, which carry risks for patients, the hospital reduced costs by $2 million in one year and preserved blood supply for patients who need it.

Johns Hopkins Health System clinicians implement evidence-based practices throughout their hospitals and care sites to improve care and lower costs.

For example, after assessing the appropriateness of a variety of imaging procedures, the committee targeted unnecessary CT and MRI procedures for chronic headache and uncomplicated low back pain, renal ultrasounds soon after abdominal CTs, pulmonary CTA and panspine imaging in emergency department patients, and thyroid ultrasounds and biopsies for benign disease.

Laboratory value improvement focused on overtesting for *C. difficile* infection and unnecessary use of folic acid and paraneoplastic antibodies tests. The means by which practice is improved include educational resources that deliver continuing medical education credits and maintenance of certification points, clinical decision support and provider feedback reports that compare ordering effectiveness to peers.

Project managers, clinical decision support experts and value analytics experts support the committee, and a radiologist, three hospitalists and a pathologist guide its work. Physician representatives from all six health system hospitals and the community practices participate in a monthly conference call.



By focusing on care that adds value, JHHS improves the patient experience while reducing the total cost of care.

Lessons Learned

JHHS learned individual interventions, whether they be clinical decision support alerts, education or feedback reports are laborious. When used in isolation, they result in only incremental improvement. Providing decision trees to manage medical conditions in the electronic medical record (EMR), which incorporate laboratory tests, imaging exams, consults and admissions and links to evidence has proved to be a more robust means of improving care.

Johns Hopkins Hospital emergency medicine physicians championed this work by integrating more than 50 evidence-based guidelines into the EMR to safely improve appropriate use of tests and treatments, health care efficiency and patient experience while reducing total cost of care. In some cases, JHHS learned imaging utilization decreases more costly resources, such as increasing the use of coronary imaging tests in the emergency department rather than admitting patients with noncardiac chest pain for observation to rule out heart conditions.

"This is the new focus of the committee's work," said Pamela Johnson, M.D., vice chair of quality, safety and value in the Department of Radiology and a physician lead on the committee. "That's been an interesting discovery process for us."

Johnson said the institutions' gains in quality, safety and affordability are made possible because of the support from health system leadership and interdisciplinary collaboration on the committee, which draws upon the best practices of all medical specialties.

"It's been incredibly rewarding," she said. "I've developed great working relationships with colleagues in other specialties. We all have the same goal, and that is to improve the quality of care for patients and protect them from tests, treatment, procedures and hospital admissions that they don't need and aren't of benefit. By improving care together, our interventions are more effective."

Future Goals

JHHS is advancing the best practice decision-tree guidelines in the EMR throughout all patient care settings in the health system.

"It's a tremendously exciting project and we've assembled an army of faculty and residents to review the evidence and design the guidelines," said Johnson. "The best care that we can deliver is driven by strong evidence in the literature in conjunction with our clinical experts' decision making."

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