

HSR

Improving Efficiency and Value in Health Care



Gaps in quality, safety, equity, and access characterize our health care system. At the same time, rising health care costs affect employers and payers as well as patients and hospitals and health systems. Policymakers, private payers, and system leaders are looking for ways to reduce waste, increase the efficiency of health care delivery, and allocate resources to improve value in health care. And patients—the consumers—want to maximize the value of their own health care dollar.

Changing the way we deliver health care will require process redesigns that improve quality and limit cost growth at the same time, thereby making health care more efficient.

Much of the current discussion on efficiency focuses on *how to measure it*. A *Health Services Research (HSR)* theme issue on *Improving Efficiency and Value in Health Care* seeks to move beyond measurement to improvement—that is, reducing unnecessary cost and waste while at the same time maintaining or improving quality.

This *HSR* theme issue features outstanding papers by seven research teams that examine how to improve efficiency and value. Lessons learned and findings from the seven teams and their studies include:

HELP HOSPITALS MOVE INCREMENTALLY ALONG A HIERARCHY OF IMPROVEMENT PROGRAMS. In “Examining Quality Improvement Programs: The Case of Minnesota Hospitals,” John Olson, James Belohlav, Lori Cook, and Julie Hays examine 21 common quality improvement programs, such as Six Sigma and the 100,000 Lives Campaign, in over 100 Minnesota hospitals. The researchers found that hospitals vary in their ability to pursue quality improvement, and quality improvement efforts in turn vary in difficulty. In designing a successful quality improvement program, it is important for hospitals to determine their own capacity for sustained change. Success at one level can help support success at the next. But if a hospital attempts to implement a program that is too difficult for its ability level or capacity, it can lead to higher inefficiency and more waste.

LISTEN TO FRONT-LINE WORKERS TO HELP IDENTIFY FAILING PROGRAMS OR SYSTEMS. Anita Tucker, Sara Singer, Jennifer Hayes, and Alyson Falwell used an intervention to leverage front-line expertise and identify hospital patient safety system failures. As described in “Front-Line Staff Perspectives on Opportunities for Improving the Safety and Efficiency of Hospital Work Systems,” front-line workers reported that 36 percent of failures were equipment/supply failures or facility failures. Front-line reported failures are not typically considered as important to examine in quality improvement programs, so this finding is significant. Campaigns to monitor and track equipment failures and facility failures may be a crucial next step to improving safety and efficiency of systems in hospitals.

Sponsored by the Agency for Healthcare Research and Quality

Published by the Health Research & Educational Trust

Initial Editors: All *HSR* Editors-in-Chief and Senior Associate Editors

Final Editors: Irene Fraser, William Encinosa, Sherry Glied

About HSR

Published six times a year plus two special supplements, *HSR* is HRET's flagship publication and an official journal of AcademyHealth. Rated a top journal in the field, *HSR* publishes outstanding articles reporting the findings of original investigations that expand understanding of the wide-ranging field of health care and help improve the health of individuals and communities. For more information, visit www.hsr.org.

About HRET

HRET is an independent, nonprofit organization that engages in timely research and education on topics of critical interest to hospitals and health systems and the communities they serve, including business leaders and policymakers. For more information, visit www.hret.org.

MEASURE AND QUANTIFY INEFFICIENCIES. In "Hospital Quality, Efficiency, and Input Slack Differentials," Vivian Valdmanis, Michael Rosko, and Ryan Mutter present a method for measuring and quantifying inefficiency in 1,377 hospitals across 34 states, controlling for patient safety. They found that on average hospitals could increase admissions and patient visits by 27 percent by eliminating inefficiency. Adverse patient outcomes account for about 3 percent of hospital inefficiency. Even among high-quality hospitals with few adverse outcomes, there was still much inefficiency due primarily to unused resources such as personnel and idle beds.

ENSURE EFFICIENT DESIGN OF FINANCIAL INCENTIVES. In a study tracking the impact of a tiered network in Minnesota, Dennis Scanlon, Richard Lindrooth, and Jon Christianson found evidence that financial incentives influenced patients' choice of hospital for nonsurgical admissions, but not for surgery. Discussed in "Steering Patients to Safer Hospitals? The Effect of a Tiered Hospital Network on Hospital Admissions," the results suggest there may be differential success and, therefore, "efficiencies" by using appropriate financial incentives for patients. For example, financial incentives for surgery may need to be large enough so that patients are willing to travel longer distances to high-quality hospitals, though this may not be necessary for medical hospitalizations.

CONSIDER THE VITAL ROLE PLAYED BY PHYSICIANS IN REFERRING PATIENTS TO SPECIALISTS AND SPECIALTY HOSPITALS. Surgical and orthopedic specialty hospitals were significantly less efficient than traditional full-service hospitals, according to Kathleen Carey, James Burgess Jr., and Gary Young, who examine the growing trend toward specialty hospitals from 1998 to 2004 in "Specialty and Full-Service Hospitals: A Comparative Cost Analysis." Overall, specialty hospitals had an inefficiency score of 47 percent, compared with 27 percent for traditional hospitals. But cardiac specialty hospitals were no different than traditional hospitals. The presence of nearby competition from specialty hospitals did not explain efficiency in traditional hospitals.

PROVIDE PHYSICIANS WITH INCENTIVES TO INCREASE PRODUCTIVITY. "Access Intervention in an Integrated, Prepaid Group Practice: Effects on Primary Care Physician Productivity" by Douglas Conrad, Paul Fishman, David Grembowski, James Ralston, Robert Reid, Diane Martin, Eric Larson, and Melissa Anderson describes an evaluation of the impact of Group Health Cooperative's Access Initiative on physician productivity over an eight-year period. These researchers found that three of the seven incentives to improve access directly addressed productivity. Other results of the incentives: Service intensity per visit increased, and visits per full-time employee fell, without reducing quality. Overall, costs per patient declined.

USE PHYSICIAN ASSISTANTS TO INCREASE PRODUCTIVITY. In "Impact of Physician Assistant Care on Office Visit Resource Use in the United States," Perri Morgan, Nilay Shah, Jay Kaufman, and Mark Albanese examine the recent increase in using physician assistants, from about 20,000 in 1991 to over 68,000 in 2006. They found that patients whose care included physician assistants had 16 percent fewer office-based visits than patients cared for by physicians only. This efficiency gain was not offset by increased office visit resource use in other settings.

Timing, organizations, and markets all contribute to the likely success of interventions aimed at improving efficiency and value, as described in this issue's seven papers. Thus, any design of efficiency improvements and value-based benefits must involve an integrated approach over time, across markets, and throughout the organization from top to bottom.

To access the complete articles in the *HSR* theme issue *Improving Efficiency and Value in Health Care*, go to <http://www3.interscience.wiley.com/journal/121414513/issue>.