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The Four Habits of High-Value Health Care Organizations

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Recent attention to the question of value in health care — the ratio of outcomes to long-term costs — has focused on problems of definition and measurement: what outcomes and which costs? Less

attention has been given to an equally difficult but important issue: how do health care delivery organizations reliably deliver higher value?

It would certainly simplify health care reform if we could show the superiority of a dominant delivery model (e.g., the accountable care organization or the medical home) and roll it out nationwide, developing and proving new approaches to creating value only once. However, experience suggests that not only do new delivery models — for example, integrated networks - not necessarily live up to their promise, but they are surprisingly difficult to transfer, even when successful; those that succeed in one U.S. region haven't always done well

in another. Organizations considered to be among the nation's highest performers, such as the members of the new High Value Healthcare Collaborative, often have unique personalities, structures, resources, and local environments. Given the health care sector's mixed record of disseminating clinical innovations and system improvements, how do we learn from leading organizations?

Although high-value health care organizations vary in structure, resources, and culture, they often have remarkably similar approaches to care management. Specific tactics vary, but their "habits" — repeated behaviors and activities and the ways of thinking that they reflect and engender — are shared. This is important because experi-

ence suggests that such habits may be portable.¹

The first common habit is specification and planning. To an unusual extent, these organizations specify decisions and activities in advance. Whenever possible, both operational decisions, such as those related to patient flow (admission, discharge, and transfer criteria), and core clinical decisions, such as diagnosis, tests, or treatment selection, are based on explicit criteria. Criteria-based decision making may be manifest in the use of clinical decision support systems and treatment algorithms, severity and risk scores, criteria for initiating a call to a rapid-response team or triggering the commitment of a future resource (e.g., a discharge planner, preprocedure checklists, and standardized patient assessments), and for patients, shared decision making.

Specification also applies to separating heterogeneous patient

populations into clinically meaningful subgroups — by disease subtype, severity, or risk of complications — each with its own distinct pathway. For example, Dartmouth's Spine Center uses a detailed intake assessment that combines the 36-Item Short-Form Health Survey, computerized visual aids, and shared decision making to sort patients according to the likelihood that they will do better with either medical or surgical care. Similarly, genomic testing has allowed oncology units to divide patients into separate groups according to their probable response to specific therapies (for instance, KRAS testing for cetuximab therapy). And at Intermountain Healthcare in Utah and Idaho, the needs of psychiatric patients are divided into mild (routine care by a primary care physician), moderate (team care), and severe (specialist referral), with a scoring system based on published guidelines. Some organizations, such as Children's Hospital Boston, are developing standard approaches to uncommon and complex conditions.2

The specification of choices, transitions, subgroups, and patient pathways represents a substantial investment in advance planning. It contrasts sharply with the common practice of focusing management planning on the utilization of expensive resources, such as tests, procedures, and bed-days, rather than on the problems these resources are designed to solve. Many hospitals and clinicians do not plan care processes in advance in such detail; instead, they treat each new patient or problem as a random draw from a heterogeneous population and must therefore reinvent the strategy for solving it.

A second common habit is infrastructure design. High-value health care organizations deliberately design microsystems3 - including staff, information and clinical technology, physical space, business processes, and policies and procedures that support patient care - to match their defined subpopulations and pathways. Thus, different conditions or patient groups have different microsystem designs. The various tasks of care are allocated to different members of a clinical team (including the patient), with the skill and training of each staff member matched to the work. Such organizations make thoughtful use of assistive personnel and alternative providers, and they ensure that each has the necessary resources by carefully designing the supply chain of equipment and information, simplifying workflow, and reducing work stress. They also harmonize the parts of their management system so that budgets, incentives, data, goals, clinical processes, educational programs, and team structures are all mutually reinforcing.4 Unit-level routines, such as joint ward rounds, team meetings, and executive "walkarounds," help tie microsystem components together.

Attention to microsystem design and integration represents an important shift away from general-services-organization designs that use a single platform to meet the needs of many different patient groups and that focus on maximizing the use of scarce resources, such as operating-room slots, ICU beds, and physicians.

The third habit is measurement and oversight. For many, measurement of clinical operations is driven by external audiences: payers,

regulators, and rating agencies. Although high-value organizations share this reporting obligation, they primarily use measurement for internal process control and performance management. They collect more (and more detailed) measurements than those required for external reporting, selecting those that inform staff about clinical performance. For instance, of the 200-plus measurements used by Intermountain, more than two thirds were developed or refined internally rather than imported unmodified from external agencies. Moreover, such organizations integrate their measurement activities with other organizational priorities such as pay for performance, annual target setting, and improvement activities, making measurement an integral part of accountability and performance management. For example, each year Intermountain's board selects a different group of measurements from the institution's overall measurement set to use for annual quality and efficiency bonuses.

The fourth and final habit is self-study. Beyond ensuring that their clinical practices are consistent with the most recent science, these organizations also examine positive and negative deviance in their own care and outcomes, seeking new insights and better outcomes for their patients.5 By contrast, most health care organizations treat clinical knowledge as a property of the individual clinician, "managing" knowledge only by hiring and credentialing competent professional staff.

High-value organizations treat clinical knowledge as an organizational as well as individual property. They create knowledge and innovations with the use of some common tools (sentinelevent reporting and root-cause analysis) and some less common ones (monitoring of protocol overrides and rapid-cycle experimentation). Some have units for instance, the Mavo Clinic's See-Plan-Act-Refine-Communicate (SPARC) program — that are dedicated to developing innovations in-house, and most have academies to teach leaders and staff the principles and techniques for improving the value of care and to support the application of these principles to high-priority clinical programs and processes. Most important, these organizations deliberately nurture a culture that supports learning by encouraging dissenting views and overriding of specified clinical decision rules (habit 1).

These habits are not unique to high-value health care organizations. Many delivery organizations engage in some of them — de-

signing clinical pathways and reporting on quality and safety, for instance. But high-value organizations are distinct in two important ways. First, they engage in all four habits systematically. For them, these activities are truly habits, baked into their structures, culture, and routines, not simply short-lived projects. Second, the habits are integrated into a comprehensive system for clinical management that is focused more on clinical processes and outcomes than on resources. A consensus is emerging about how to manage clinical care.

Each organization expresses these four habits differently. Each faces a unique regulatory and reimbursement environment and has different resources, so each uses different tools and terminologies, varying in the details of how they specify decisions or measure clinical processes. Still, the habits are the same. As we seek models

for achieving high-value health care, we must look past the particularities of local structures and tactics to the habits they reflect. Although a "dominant" delivery model may not be transferrable, the habits of high-value health care may be.

Disclosure forms provided by the author are available with the full text of this article at NEJM.org.

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- 1. Horbar JD, Plsek PE, Leahy K. NIC/Q 2000: establishing habits for improvement in neonatal intensive care units. Pediatrics 2003;111(4 Pt 2):e397-e410.
- 2. Rathod RH, Farias M, Friedman KG, et al. A novel approach to gathering and acting on relevant clinical information: SCAMPs. Congenit Heart Dis 2010;5:343-53.
- **3.** Nelson EC, Batalden PB, Godfrey MM, Lazar JS. Value by design: developing clinical microsystems to achieve organizational excellence. San Francisco: Jossey-Bass, 2011.
- **4.** James BC, Savitz LA. How Intermountain trimmed health care costs through robust quality improvement efforts. Health Aff (Millwood) 2011;30:1185-91.
- **5.** Bohmer RMJ. Designing care. Boston: Harvard Business Press, 2009.

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2012 — A Watershed Election for Health Care

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The 2012 election will be the most important in the history of our health care system because it will determine whether the Affordable Care Act (ACA) is implemented or repealed. The consequences for Americans and their health care will be huge.

Three possible federal electoral outcomes seem most likely. All assume that the Republicans will retain control of the House of Representatives, though perhaps with a diminished majority. Under the first scenario, the status quo continues with President Barack Obama in the White House and Democrats control-

ling the Senate; in the second, Obama is reelected but the Senate goes Republican; in the third, the Republicans recapture the White House and control both houses of Congress.

Electoral math makes the first of these possibilities a long shot. The Democrats have a three-vote majority in the Senate, but 23 Democratic seats will be contested in 2012, as compared with only 10 Republican seats. In a time of fierce anti-incumbency, it's much harder to defend 23 seats than 10. The Democrats also have notable vulnerabilities. For example, Senator Kent Con-

rad (D-ND) is retiring in a solidly Republican state. Senator Bill Nelson (D-FL) is running in a state that elected a Republican governor and senator in 2010. The most vulnerable Republican senator, Scott Brown of Massachusetts, continues to poll well and will face an inexperienced Democratic challenger.

Each scenario has different implications for the ACA and its agenda (see table). If the status quo persists, the President will continue implementing the legislation unless the Supreme Court rules the entire law unconstitutional. If the Court overturned