Population Health Management:
The 4M Approach to Volume-to-Value Transformation
(Second Edition)

An innovative population health management model that helps clinically integrated entities master the transformation into accountable care
Abstract

The biggest problem facing U.S. healthcare is the lack of value. Despite over four decades of top-down healthcare reform, U.S. healthcare consistently performs poorly in terms of quality, efficiency, and cost of care. With this poor performance coming at ever-increasing cost, payers have orchestrated a profound shift in the way healthcare is provided and reimbursed: from individual care to population health, from volume to value-based payment. Unfortunately, healthcare organizations and providers have been slow to change their behavior. This paper:

- Examines why top-down reform has failed to effect the volume-to-value transformation
- Explains why bottom-up provider-driven healthcare reform can
- Details an enabling methodology, and
- Introduces an innovative solution that employs it
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U.S. healthcare lacks value

For the fifth consecutive year, the United States finished last on the Commonwealth Fund’s international ranking of industrialized health systems — despite spending thousands more per person than the United Kingdom, which ranked number one.1 Although the Affordable Care Act (ACA) may boost America’s rankings by addressing two of the metrics used to determine the rankings, access and equity, bottom-of-the-list performance on the three remaining metrics — quality, efficiency and healthy lives — is emblematic of the primary problem with U.S. healthcare: Lack of value.

Top-down healthcare reform has not worked

If value is defined as quality per unit of cost, it is logical to assume that improving both quality and cost would improve value. This is exactly what reform efforts have focused on.

The call for quality began in earnest when the Institute of Medicine (IOM) released its groundbreaking report on the alarming numbers of hospital deaths from medical errors. Since then, safety and quality improvement initiatives have fallen roughly into three camps:

1. Standardization of care according to evidence-based best practices. Examples include: Institute for Healthcare Improvement’s (IHI’s) “bundled”, 100,000 Lives and 5 Million Lives campaigns.2
2. Standardization of reliable care processes through industrial engineering methodologies. Examples include: Six Sigma and Lean Process Improvement.
3. Measuring and using quality data to guide ongoing process and performance improvement efforts. Examples include: Learning Organizations and Richard M.J. Bohmer’s work on operational redesign in sequential and iterative care.3

3 Bohmer RMJ. Designing Care: Aligning the Nature and Management of Health Care: Harvard Business Press; 2009
Despite the protraction and proliferation of top-down reform efforts, the U.S. continues to have the most expensive, least effective healthcare system in the world.

The concern over costs began much earlier. Indeed, since the early to mid-70s, when healthcare’s 7.2 percent share of the economy started its exponential climb to more than double (17.9 percent) by 2009, the relentless inflation of healthcare costs has triggered many efforts to reform the system. The focus of these efforts has been to decrease waste and inefficiency — by eliminating non-value adding costs from the process. Estimates vary, but experts say that waste — failures of care delivery and coordination, overtreatment, administrative complexity, pricing failures and fraud — accounts for 30–50 percent of healthcare costs.

ACA is the most significant government reform effort, but smaller scale reform efforts, especially state-level Medicaid initiatives, are materializing in the public sector.

Private reform efforts are being driven by consumers’ demand for higher value as they find themselves shouldering a bigger share of incomprehensible medical bills. According to America’s Health Insurance Plans (AHIP), as of January 2013, nearly 15.5 million Americans were covered by a high-deductible health plan (HDHP), the result of an annual growth rate of approximately 15 percent over the last several years, and two million more than in 2012.

The Centers for Medicare and Medicaid Services (CMS) announced, on January 26, 2015, their decision to move to a predominantly (80-90 percent) value-based reimbursement model by 2018. Some commercial payers such as Anthem Blue Cross and United Healthcare have begun to make similar decisions in recent months.

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**The issue is incentives**

Until now, top-down healthcare reform has failed to address the real reason for the high cost of healthcare: volume, not value, pays. Furthermore, the traditional focus on quality and cost is intrinsically and extrinsically problematic.

From an intrinsic standpoint, quality is difficult to define and measure, and costs are not accurate. Doctors won’t accept quality measures not adjusted for severity and attributed appropriately. This is especially true when attempts are made to quantify quality via billing records, such as Medicare’s physician quality reporting system or PQRS. Furthermore, true costs are not measured routinely within healthcare systems, especially around clinical conditions or processes of care. Instead, healthcare accountants commonly use inaccurate proxies such as RVUs and charge-to-cost ratios to measure the intrinsic costs of providing healthcare services. Robert Kaplan

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5 Bohmer RMJ


Rising healthcare costs are forcing payers and patients to demand more for their healthcare dollar—and leading them to incentivize value.

and Michael Porter at the Harvard Business School have written extensively on the need for providers to apply true, activity-based cost accounting methodologies to the healthcare industry.  

Extrinsically, the issue is incentives — or rather, the lack of them. With no financial incentives or disincentives within the reimbursement system to improve quality, quality does not pay in healthcare. In fact, poor quality often does pay. For example, healthcare-related complications of care such as infections or readmissions are, for the most part, reimbursable.

Current incentives drive inefficient activities and waste, such as indiscriminate ordering of tests, treatments and other expensive care for which “someone else” will pay. Fee for service reimbursements incentivize doing more, regardless of value. For one clinical condition alone — back pain — imaging, opiate analgesia, epidural steroid injections, chiropractic manipulation, and spinal fusion surgery, are ordered routinely. They all are unnecessary in most cases.

Moreover, reimbursements reward acute/episodic/procedural care much more often than preventive, long-term, cognitive care, as evidenced by the pay differential between orthopedic surgeons and primary care providers.

However, rising healthcare costs are forcing payers and patients to demand more for their healthcare dollar — and leading them to incentivize value.

Traditional approaches don’t work

Under fee-for-service, volume pays. Conversely, the financial rewards of a value-based delivery system are largely unproven and riskier to pursue. Four theories underlie current volume-to-value transformation efforts:

1. The organizational structure will systemize value: Value-based payment (VBP) is driving the evolution of such new care models as accountable care organizations, clinically integrated networks, and patient-centered medical homes. However, absent a systematic process to change care at the bedside and exam room level, front-line providers continue to operate on the basis of volume.

2. Technology will facilitate change. In a recent report focused on automation for population health management, the Institute for Health Technology Transformation stated, “Cutting-edge technology-based applications for actionable, multi-level reporting, patient engagement and education, and quality improvement will be needed to continuously identify and impact thousands of patients efficiently.” Increasingly, organizations are purchasing such sophisticated data systems, only to discover they are both difficult to use and ineffective if provider behaviors at the front lines of the care delivery system do not change.

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3. Value-based contracts will change the delivery system. Value-based payment incentives are key, but so far, the revenue available to providers through value-based reimbursements has been insignificant. Conversely, huge financial rewards associated with the current, predominantly fee-for-volume system, make providers reluctant to change and forego what has been, up until this point, a very profitable enterprise.

4. Change is not necessary. Likening VBP to the failed HMOs and capitated managed care of the 1980s and 1990s, some organizations have adopted a wait-and-see approach. There are, however, several distinct differences between accountable care and managed care:

- Accountable care centers on providing the right services at the right time to the right patients. Managed care was all about saying no and putting providers, particularly primary care gatekeepers, in the uncomfortable position of rationing necessary care to achieve a profit margin.

- In accountable care, providers determine budgets with accurate cost accounting of well-designed care processes and transparent price setting based on true costs. Under managed care, payers set the budgets and providers, again, were tasked with trying to provide care within those budgets.

- Accountable care is informed with best practices and leverages advanced technology to measure outcomes and manage care. There has been a tremendous amount of learning over the last two decades about what truly comprises best practice and the IT infrastructure now available to providers is far superior to that available to practitioners 20–30 years ago.

Accelerating the volume-to-value transformation calls for bottom-up, provider-driven healthcare reform supported by comprehensive, replicable and scalable programs to retool the clinical enterprise.

The inability of top-down mandates to effect significant improvement in quality and cost, coupled with healthcare organizations’ inattention to the front-line changes needed in the care delivery system are slowing the transition from volume- to value-based healthcare.

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Volume-to-value transformation calls for the 4M approach

Volume-to-value transformation starts with physicians at the point of care. Most physicians did not go to medical school in order to learn how to order unnecessary tests or prescribe unneeded treatments. A care delivery model that rewards patient or population health will increase provider satisfaction and attract the right kind of people to the medical profession.

Value-based care cannot be provided via volume-based delivery systems. Therefore, the volume-to-value transformation calls for a comprehensive, replicable and scalable way of retooling the clinical enterprise. The 4M approach does just that.
The 4M approach helps clinically integrated entities rapidly operationalize their organizations for bottom-up volume-to-value transformation. It also mitigates the risk of transformation, assuring an entity’s ability to succeed in the value-based marketplace.

The 4M approach comprises:

1. Method: A systematic approach to re-vamping of processes and procedures using multi-disciplinary teams comprising front-line clinical and non-clinical caregivers. These teams utilize the following techniques to accomplish their care process design activities:
   - Modified lean care process mapping
   - Best practice care guidelines for each step in the process, informed by the evidence base and the caregiver’s knowledge, experience and innovative ideas
   - Vigorous measurements of quality and cost outcomes
     - True outcomes, not process measures
     - True costs of providing care, not costs to payers
       - Continuous learning with feedback of outcome data to providers resulting in ongoing data-driven process improvements
       - Clinical predictive modeling through the application of sound population health management techniques

2. Measures: Data analytics to assess quality, patient satisfaction and cost efficiency outcomes. Doing so enables an organization to rank providers according to their outcomes measurements, quality and cost efficiency. High performers are rewarded with preferential referrals and their clinical processes and procedures are used to guide best practice care design. Low performers are motivated to adopt best practices in order to gain more referrals and improve their ranking.

3. Mechanisms: mHealth technology, including:
   - Mobile applications to support the care process design system
     - Process mapping
     - Time-driven, activity based, cost accounting (TDABC)
   - Mobile applications to support population health management
     - Patient outreach and engagement
       - Health risk assessment
       - Patient risk stratification
       - Patient education and awareness
       - Chronic disease management
       - Patient self-care and group learning through social networking
       - Patient surveys and self-reported outcome measurements
   - Mobile applications to support care delivery
     - Provider facing apps
       - Decision support
       - Information sharing
       - Guidelines
       - Best practices
       - Cost transparency
       - Quality outcomes
       - Education and training
       - Patient communication
Coker’s population health management program help clinically integrated entities move from volume to value and rewards the providers for their successful transition and transformation into accountable care.

4. Means: Managing risks and maximizing the return on investment in change by:
   - Reinsuring the risk through provider-owned insurance captives
   - Developing high value, narrow networks
   - Value-based, risk contracting for population health management services
     - Pricing and negotiating novel reimbursements — shared savings, bundled payments, partial and global capitation with knowledge of true costs and maintenance of margins
   - Administering claims (medical and pharmaceutical) for the provider-owned health plan/captive
   - Distributing provider incentives
   - Applying sound actuarial science for financial predictive modeling

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Delivering on the value proposition of population health

The first wave of healthcare reform has now passed with the passage and nearly full implementation of the ACA, as well as the creation of many types of clinically integrated entities — PCMHs, ACOs, CINs, and IPAs. To deliver on the value proposition of population health, they now must operationalize quality and efficiency by retooling the organization for value-based care delivery at the front line — the physician at the point of care.
About Coker Group

Founded in 1986, Coker Group is a national healthcare advisory firm that works with hospitals and physician groups to develop customized solutions with positive bottom-line impact. Coker's Consulting division offers services that include, but are not limited to, Hospital-Physician Alignment, ACO Readiness, ICD-10 Transition, Practice Management, Compensation, Pre- and Post-Merger Integration, Training, Hospital Operations, Medical Staff Development and Executive Search. Coker Technology focuses on the healthcare sector by providing a wide range of services, including Strategic Information Technology Planning, HIT Software/Hardware Vendor Vetting and Procurement, and Managed Services. Coker Capital Advisors, a premier healthcare-focused investment bank, provides financial advisory and capital raising solutions to clients in connection with mergers, acquisitions, restructuring and other strategic financial transactions.