

# Integrated Healthcare Delivery Models in an Era of Reform

—Douglas McCarthy

---

## LEARNING OBJECTIVES

- Understand the historical background against which healthcare systems are evolving.
- Analyze the impact of culture on organizational development.
- Analyze and critique the requirements for a successful integrated health system.
- Explain and analyze the characteristics of some of the best integrated systems.

## INTRODUCTION

Healthcare delivery in the United States is shifting from a fragmented “cottage industry” of solo and small physician practices paid on a fee-for-service basis to more organized forms in which physicians join with other providers in efforts to improve the quality and efficiency of care. In the midst of this historic change—which is being driven by both market forces and public policy—it is useful to reexamine where the United States has come from in terms of healthcare delivery models and where the current pathways are leading. This chapter describes how models of integrated healthcare delivery have provided inspiration and ideas for recent policy reforms, and traces the evolution of such models into new and emerging ways of integrating care.

## A Brief History

Early in the twentieth century, experts began taking note of the benefits of large **multispecialty group practices (MSGP)** that employ primary and specialty care physicians who share common governance, infrastructure, and finances, and refer patients to one another for services offered within the group (Falk, Rorem, & King, 1933). At the Mayo Clinic, for example, all patients are assigned a coordinating physician to ensure that they have an appropriate care plan, that all ancillary services and consultations are scheduled in a timely fashion, and that patients receive clear communication throughout and at the conclusion of an episode of care. Such multispecialty groups sometimes became the nucleus of **integrated delivery systems (IDS)** that included hospitals and an array of other services such as home health and skilled nursing care.

In a major innovation, some multispecialty groups began accepting a fixed payment for a defined set of services in lieu of separate fees for services (Enthoven & Tollen, 2004). The example of these prepaid group practices inspired the U.S. federal government to support the development of **health maintenance organizations (HMOs)** in the 1970s as a means of controlling costs by integrating the financing and delivery of care. To reduce the effort required to start HMOs, looser models sought to achieve integration among networks of independent physicians, albeit with mixed results. After a period of rapid growth, HMOs lost momentum in the 1990s as consumers reacted against the restrictions they placed on choice. (Many HMOs have since gained membership by enrolling elderly beneficiaries in the Medicare Advantage program.)

Meanwhile, physicians in many markets began forming single-specialty group practices, which may create efficiencies and ensure bargaining clout in price negotiations with insurers, but lack the natural opportunities for care coordination inherent in multispecialty practice (Liebhaber & Grossman, 2007). Although integrated delivery systems and large multispecialty groups gained a footing in California, the upper Midwest, and some other urban and rural areas of the country, they generally have remained the exception in U.S. health care.

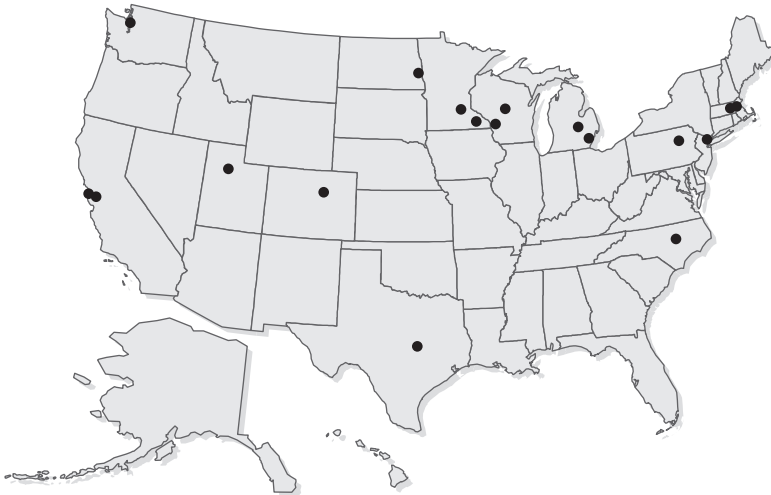
## Charting a New Path

Recently, there has been renewed interest in learning how the experience of integrated delivery systems can help address the shortcomings of uncoordinated fee-for-service medicine that lead to undesirable patient experiences, suboptimal outcomes, and unnecessarily high costs (Schoen, How, Weinbaum, Craig, & Davis, 2006). The Commonwealth Fund's Commission on a High Performance Health System (2007) called for the nation to

“embark on the organization and delivery of health care services to end the fragmentation, waste, and complexity that currently exist. Physicians and other care providers should be rewarded, through financial and non-financial incentives, to band together into traditional or virtual organizations that can provide the support needed to physicians and other providers to practice 21st century medicine.” Similar recommendations were issued by the Institute of Medicine (2001) and the Medicare Payment Advisory Commission (2009).

In the four years since the enactment of the Patient Protection and Affordable Care Act (ACA), this vision has taken concrete form. Provisions in the law allow the Medicare program to test new payment models to foster coordination of care through bundled services and the formation of **accountable care organizations (ACOs)**. Several states are redesigning their Medicaid programs in pursuit of accountable care (Silow-Carroll et al., 2013), while commercial insurers are partnering with health care providers in new arrangements that seek to reward value rather than volume of services (Van Citters et al., 2013).

To illustrate the potential of integrated care delivery, the Commonwealth Fund has sponsored a series of case studies of organizations located across the United States (**Figure 1-1**) that have been recognized for innovation



**Figure 1-1** Case Study Locations

Reproduced from Shih, A., Davis, K., Schoenbaum, S., Gauthier, A., Nuzum, R., & McCarthy, D. 2008. *Organizing the U.S. Health Care Delivery System for High Performance*. New York, NY: The Commonwealth Fund.

and performance (McCarthy & Mueller, 2009b; McCarthy, Klein, & Cohen, 2014).<sup>\*</sup> In this chapter, the term *integrated healthcare delivery* means that “care providers have established relationships and mechanisms for communicating and working together to coordinate patient care across health conditions, services, and care settings over time” (Institute of Medicine, 2001). It may also mean the use of payment mechanisms for sharing financial risk that foster accountability for outcomes over the continuum of care.

The following sections describe how these organizations exemplify the ideal attributes of healthcare delivery identified by the Commission (Shih et al., 2008; **Exhibit 1–1**) and synthesize key lessons from their experiences to guide other healthcare leaders in the accountable care era.

**Exhibit 1–1** Six Attributes of an Ideal Health Care Delivery System

- *Easy access to appropriate care.* Patients have convenient access to care and information that is appropriate to their needs at all hours, there are multiple points of entry to the system, and providers are culturally competent and responsive to patients’ needs.
- *Information continuity and integration.* Patients’ clinically relevant information is available to all providers at the point of care and to patients through electronic health record (EHR) systems and related information technologies.
- *Care coordination and transitions.* Patient care is coordinated among multiple providers, and transitions across care settings are actively managed.
- *Peer review and teamwork for high-value care.* Providers and care teams both within and across settings have accountability to each other, review each other’s work, and collaborate to reliably deliver high-quality, high-value care.
- *Continuous innovation.* The system is continuously innovating and learning so as to improve the quality, value, and patients’ experiences of healthcare delivery.
- *System accountability.* There is clear accountability for the total care of patients.

Information from Shih, A., Davis, K., Schoenbaum, S., Gauthier, A., Nuzum, R., & McCarthy, D. 2008. *Organizing the U.S. Health Care Delivery System for High Performance*. New York, NY: The Commonwealth Fund.

<sup>\*</sup>Information for the case studies was gathered from interviews with organization leaders, internal material provided by the sites, and external sources.

## IDEAL ATTRIBUTES OF INTEGRATED HEALTHCARE DELIVERY

### Easy Access to Appropriate Care

Co-locating multispecialty services in a single facility can promote convenient access to care. Many of the study sites have reengineered their work processes to reduce waiting times for appointments by offering same- or next-day access to primary care and after-hours alternatives (e.g., nurse call lines and urgent care centers) to emergency department (ED) care. Some also offer group visits that provide peer support for making lifestyle changes and adhering to self-care routines. Several of Kaiser Permanente's large medical centers offer culture-specific patient care modules allowing patients to communicate in their native language with a bilingual care team oriented to their cultural norms, which can be critical to providing effective treatment.

Prepaid care has encouraged some study organizations to offer virtual telephonic and Web-enabled visits and secure electronic messaging as convenient alternatives to face-to-face encounters for patients with non-urgent needs, and as an efficient means for care teams to reach out to patients in need of follow-up (Pearl, 2014; Reid et al., 2013). HealthPartners—an integrated delivery system in Minnesota—reported that its online clinic garnered high customer satisfaction while saving the health plan an average of \$88 for simple care episodes compared with face-to-face visits (Courneya, Palattao, & Gallagher, 2013). Several study sites use telehealth technologies for home monitoring of patients with chronic conditions or to provide remote consultations and diagnosis for patients in rural areas.

### Information Continuity and Integration

Integrated delivery systems have been leaders in implementing health information technology (IT) and electronic health record (EHR) systems that facilitate coordination of care, promote the delivery of evidence-based care with decision support tools, and make laboratory and imaging tests results available when needed. Some have created Web portals that allow authorized community physicians to view the records of their patients or to make electronic referrals into the system. Several are creating or collaborating with other stakeholders to develop networks for electronic information exchange.

Many of the study sites have developed capabilities to identify patients who could benefit from more intensive care management, and several have systems to alert physicians or care managers to follow up with patients who use hospital services or transition from the hospital. Some evidence suggests that the use of an EHR in an integrated practice environment can improve chronic care

management and reduce hospital use (Weber, Bloom, Pierdon, & Wood, 2008). Although EHRs require more of physicians' time than paper records, they create efficiencies for the care team or organization as a whole (e.g., by reducing the time to process prescription refill requests) while improving patient care.

EHRs also figure in efforts to improve access to appropriate care. For example, advice nurses at the Marshfield Clinic use the EHR to view a patient's treatment plan when speaking to the patient on the telephone and add a record of the call to the EHR for the patient's primary care physician to review and follow up as needed. Some integrated delivery systems operate walk-in convenience clinics, located in retail stores, that are linked to the system's EHR to help preserve continuity of care. Moreover, Web portals linked to the EHR can promote engagement in their care.

Study sites had made substantial investments in health information technology (IT) prior to the advent of financial incentives offered by the federal government for providers to adopt EHRs. Intermountain Healthcare's leaders observed that the organization did not realize the full value of its investment until the EHR became a key enabler of a broader clinical improvement strategy (described later in this chapter). Healthcare organizations will need to identify similar intrinsic motivations, as new technologies will require ongoing investments to support them after the federal financial incentive program ends. While some new ACOs are finding it challenging to uniformly spread EHRs among independent physicians and to integrate IT systems across organizational boundaries, their leaders observed that sharing even rudimentary data across ACO partners (e.g., a daily hospital patient census) can offer actionable insights to improve care coordination.

## Care Coordination and Transitions

Integrated delivery systems can provide a supportive environment for developing primary care "medical homes," which aim to make patient care more accessible, continuous, comprehensive, patient centered, and coordinated. They often adopt a population-management approach that stratifies patients according to their health risks and leverages physician time by enhancing the roles of other care team members to support patients in need of preventive care, disease or medication management, transitional care, and self-care education. Several sites have developed navigation programs for patients with cancer or other intensive treatment needs. Many facilitate effective "hand-overs" from hospitals to post-acute and community care settings.

In recognition of the role that psychosocial and behavioral factors play in improving health and treatment adherence, care teams may include social workers and psychologists as well as nurses, pharmacists, and case managers

to address patients' needs in a holistic manner. Care teams may be embedded in clinical sites with sufficiently large patient volumes, or they may work virtually from central locations when clinical sites are small or geographically dispersed. Referring patients to centralized care management programs, such as anticoagulation management for high-risk patients, appears to work well when those patients account for only a small number of any one physician's practice, or when such services benefit from linkage to specialty care.

### **Peer Review and Teamwork for High-Value Care**

The study sites typically convene interdisciplinary teams of clinical experts to develop and spread evidence-based guidelines and standard care processes, often by embedding them in the EHR. A robust measurement infrastructure enables routine monitoring and feedback of provider and group performance, sometimes in an identifiable or "unblinded" manner to strengthen peer accountability within the group or unit. Physicians also serve as "clinical champions" to identify and promote the adoption of best practices. They are typically involved in decision making both through formal leadership roles, often in partnerships or "dyads" with administrative leaders, and through involvement in committees that complement vertical management structures.

At its best, multispecialty group practice fosters a cohesive group culture that helps to minimize and resolve "turf battles" between disciplines and departments as physicians work together and with other staff to achieve common goals. In the words of one observer, "Everyone is in the same boat, pulling together." Working as part of a self-governing physician group appears to involve a trade-off in which physicians sacrifice some of their individual autonomy for the benefits of group practice, such as the expertise and resources to jointly determine best practice protocols. Groups that are accountable for both financial and clinical outcomes under capitated payment find that it protects their clinical freedom from outside micromanagement.

### **Continuous Innovation and Organizational Learning**

Integrated delivery systems take advantage of their scale and infrastructure to improve healthcare quality and value. They bring together experts from across medical and administrative disciplines to lead continuous improvement efforts. Many are enthusiastic about the potential of equipping frontline staff with "lean" techniques (borrowed from the manufacturing industry) so that they can design process improvements, minimize waste,

and determine measures by which their performance will be evaluated. They have discovered that clinicians are more amenable to the idea of standardizing their work processes when they can see that it avoids “wasted” time and frees them to spend more time on clinically oriented tasks with or for their patients. Denver Health, an integrated public safety-net system, used such techniques to conduct nearly 100 rapid-cycle improvement projects to redesign strategic “value streams,” thereby realizing almost \$50 million in reduced costs or increased revenue over five years.

### **System Accountability**

Typically, no single physician or entity takes responsibility for the total care of patients in unorganized fee-for-service care. Some study sites address this gap by assigning an accountable physician or a medical home for a patient. The cases documented examples where the delivery system as a whole assumed accountability for patients or members—most notably when a patient is covered by a health plan owned by an integrated delivery system. Other sites have found it is more economical to provide care management programs for all patients in need of such services, regardless of their insurance, with the cost covered by pay-for-performance or shared savings programs that reward improvements in care. Others have filled in gaps by focusing efforts on patients not eligible for programs available to those enrolled in managed healthcare plans.

Supporting a culture of accountability, the study organizations reported engaging in rigorous performance measurement—not only to promote peer accountability, but also to demonstrate the results of their efforts to purchasers, patients, and other stakeholders. Accountability is further reinforced by public performance reporting in competitive urban marketplaces such as California, where purchasers have structured the market to reward plans that deliver higher value. One leader noted that external transparency fosters honesty, awareness, and commitment to improvement throughout the organization’s workforce.

## **CASE EXAMPLES OF INTEGRATED HEALTHCARE DELIVERY**

The case study sites represent diverse types of organizations that range from fully integrated delivery systems that provide the full scope of healthcare services and insurance coverage to looser networks of physicians. The structure of an integrated delivery system may be envisioned as the framework on which its attributes or functional capabilities can be built, which in turn influences its performance and outcomes.



## Kaiser Permanente

Kaiser Permanente (KP) has grown from industrial worksite healthcare programs in the 1930s to become the largest not-for-profit integrated delivery system and group-model HMO in the United States, serving more than 9.1 million members in eight regions. KP comprises three interdependent entities that exist in a “partnership of equals” through exclusive contracts built on common vision, joint decision making, and aligned incentives.

- Kaiser Foundation Health Plan contracts with purchasers (individuals, employers, and government programs) to finance healthcare services for its members.
- Kaiser Foundation Hospitals (and its subsidiaries) arranges inpatient, extended, and home health care for Kaiser Health Plan members in owned and contracted facilities.
- Permanente Medical Groups are locally governed professional corporations or partnerships of physicians that work in Kaiser facilities and accept a fixed payment from Kaiser Health Plan to provide medical care exclusively for Kaiser members.

Working in cooperation with health plan and facility managers, KP physicians take responsibility for clinical care, quality improvement, resource management, and the design and operation of the care delivery system in each region. Permanente physicians are salaried and have the opportunity to earn bonuses based on group and individual performance.

KP’s three-tiered population-health management model builds on a robust shared EHR system and a strong primary care orientation as the most efficient way to interact with most patients most of the time, while recognizing that some patients who have—or who are at risk for developing—chronic diseases need additional support and specialty care to achieve good outcomes. Patients are stratified into three levels of care:

1. Primary care with self-care support, for those 65% to 80% of patients whose conditions are generally responsive to lifestyle changes and medications
2. Assistive care management, for those 20% to 30% of patients whose diseases are not under control at level 1
3. Intensive case management and specialty care, for those 1% to 5% of patients with advanced disease and complex comorbidities or frailty

Focusing on the entire spectrum of prevention for cardiac care management has contributed to multiple improvements in the northern California region, such as a 25% decline in the adult smoking rate, increased use of therapies

to control risk factors for cardiovascular disease, a near-doubling in blood pressure control among patients with hypertension, and reductions in hospitalization rates for cardiovascular conditions and in heart disease deaths.

Kaiser Permanente has long enjoyed a price advantage in the California market due to its integrated financial and clinical model, through which it reaps the benefits (and can reinvest the savings) from efforts to reduce the use of hospitals and other expensive services. Its competitors (such as Hill Physicians Medical Group) learned to achieve similar gains, in part by emulating KP's strategies. Financial losses in the late 1990s and the advent of public performance reporting, reinforced by unblinded internal performance feedback within the medical group, energized the organization to demonstrate the potential of its model by making a stronger push for innovation and quality (McCarthy & Mueller, 2009a).

### **Hill Physicians Medical Group**

Hill Physicians Medical Group (HPMG), founded in 1984 and northern California's largest independent practice association (IPA), contracts with health plans to provide care to more than 300,000 patients enrolled in commercial HMOs, Medicare Advantage plans, and California's Medicaid Program. HPMG contracts, in turn, with 3,800 independent providers, including some 900 primary care physicians and 38 hospitals. A subset of physician-shareholders elect a governing board, which contracts with a management services organization for day-to-day operations. HPMG receives a fixed payment from health plans and reimburses physicians on a fee-for-service basis plus bonuses (funded in part by participation in purchasers' pay-for-performance programs) for meeting performance goals for service utilization, clinical quality, and use of EHRs. HPMG engages physicians in its programs by ensuring that its members represent a sizable proportion of a physician's patient panel.

To avoid losing a very large customer base in the Sacramento market—the California Public Employees' Retirement System (CalPERS)—HPMG joined with Dignity Health (a multihospital system) and Blue Shield of California to create a commercial ACO for the Sacramento market in January 2010. The shared goal was to bring Blue Shield's premiums for CalPERS members below Kaiser Permanente's premiums. Because CalPERS structured its benefit offerings so that its beneficiaries are cost-conscious when choosing among competing health plans, the ACO partners were united by a common threat of losing health plan members—and therefore patients—to KP's HMO. To achieve the overall premium savings target, the partners set spending budgets by type of service and agreed to share any savings that exceeded the target as well as the financial risk if they exceeded their budgets.

Working together, the ACO partners decreased hospital admissions and readmissions, emergency department visits, and spending in the venture's first three years, resulting in \$59 million in savings or \$480 per CalPERS member per year. The ACO's leaders credit their success to developing a mutual understanding of one another's strengths and challenges, which they say was a prerequisite for improving care coordination, increasing patient education, and reducing duplication of services and unwarranted variations in care. In effect, market competition was structured so that the ACO partners realized mutual benefit by acting together like a virtually integrated delivery system (Cohen, Klein, & McCarthy, 2014).

### **Marshfield Clinic**

The Marshfield Clinic is a large, nonprofit multispecialty group practice that employs more than 700 physicians who practice in 41 clinic sites in central Wisconsin. The Clinic is building on its successful participation in Medicare's Physician Group Practice Demonstration—a precursor to Medicare's Shared Savings Program—to enhance and extend care management programs to benefit all patients, not just those attributed to its Medicare ACO. The Clinic's sophisticated, internally developed EHR system and enterprise data warehouse enable the identification of gaps and best practices in care and internal transparency in performance reporting, which has galvanized physician support for quality improvement efforts.

The ACO is part of the Marshfield Clinic's continuing investment in developing advanced primary care coordination and disease-specific care management capabilities, which have yielded reductions in hospitalization and readmission rates. Its track record of savings for Medicare (\$118 million over the five-year Physician Group Practice Demonstration) offers evidence that success with accountable care is possible with a strong institutional mission and a shared commitment to performance improvement among physicians in group practice. Because the Clinic is the sole sponsor of its ACO, it did not share savings with independent community hospitals, nor did it face any threat of lost revenue due to reductions in inpatient stays (Klein, McCarthy, & Cohen, 2014).

### **Group Health Cooperative**

Group Health Cooperative (GHC), one of the United States' first member-governed, staff-model HMOs, has evolved into a mixed-model health plan serving 600,000 members in Washington state and northern Idaho. More than half of its members receive care from an integrated multispecialty

group practice employing more than 1,000 physicians in the Puget Sound and Spokane areas. Other members receive care from contracted community providers.

In recent years, as GHC faced stronger competition in the marketplace, it began to see unintended consequences of a “production-oriented” approach to primary care in the integrated medical group: swollen patient panels, increasing specialty-care referrals, rising costs of hospital and emergency care, and signs of burnout in its workforce. In response to these challenges, in 2007 GHC began to design and test a medical home model at a primary care clinic in a Seattle suburb (**Exhibit 1–2**). Although many elements of the medical home were already in place at GHC, the pilot strengthened them so as to promote proactive care planning and patient engagement, using the EHR to identify and address patient care needs, expanding and enhancing the roles of the care team to reduce panel size, planning work during daily team huddles, and using phone calls and secure electronic messaging as alternatives to face-to-face visits when appropriate.

The medical home pilot site demonstrated improvements in patient experience and clinical quality, reduced provider burnout, and fewer ED and urgent care visits and hospitalizations (Reid et al., 2010). The model was subsequently extended to all 25 GHC clinic sites, leading to small declines in primary care office visits corresponding to a large increase in electronic messages

**Exhibit 1–2** Core Principles of a Medical Home at Group Health Cooperative

1. The relationship between the personal care physician and the patient is the core of all that we do. The entire delivery system and the organization will align to promote and sustain this relationship.
2. The personal care physician will be a leader of the clinical team, responsible for coordination and integration of services, and together with patients will create collaborative-care plans.
3. Continuous healing relationships will be proactive and will encompass all aspects of health and illness. Patients will be actively informed about their care and will be encouraged to participate in all its aspects.
4. Access will be centered on patients’ needs, will be available by various modes 24/7, and will maximize the use of technology.
5. Our clinical and business systems are aligned to achieve the most efficient, satisfying, and effective patient experiences.

Reproduced from McCarthy, D., Mueller, K., & Tillmann, I. 2009. *Group Health Cooperative: Reinventing Primary Care by Connecting Patients with a Medical Home*. New York, NY: The Commonwealth Fund.

and telephone encounters. Emergency department visits declined 18.5% by the second year after accounting for preexisting trends in network practices (Reid et al., 2013). GHC's leaders say these improvements are renewing the organization's culture and making it a more attractive place to work.

## **Intermountain Healthcare**

Intermountain Healthcare, a large multihospital system serving communities throughout Utah and Idaho, created an integrated medical group from scratch in a span of a few years. By recruiting community physicians with a "collaborative bent" and emphasizing core values and a common work ethic, the medical group self-selected compatible members and became a stable unit with a shared culture. Focusing on quality and service, rather than on productivity alone, allowed physicians to develop an internally motivated pride for achieving excellence both clinically and financially (McCarthy & Mueller, 2009b).

Intermountain applied the improvement principles espoused by W. Edwards Deming to develop a clinical integration strategy that seeks to reduce costs by improving quality (James & Savitz, 2011). The program rests on four pillars: (1) identifying key clinical processes to focus effort, (2) designing management information systems for integrated clinical and financial management, (3) developing an integrated clinical and operations management structure, and (4) using incentives that support improvement. Care process models support physicians with evidence-based protocols, decision-support tools, and patient educational materials. The model is used by multidisciplinary teams to design improved processes, such as the following:

- Consistent application of a protocol for elective induction of labor, which reduced inappropriate early induction, deliveries by cesarean section, admissions to the neonatal intensive care unit, and the time women spent in labor, altogether saving \$50 million
- An evidence-based mental health integration program in primary care clinics, which led to improved detection of depression, lower treatment costs, increased productivity, and greater satisfaction among patients and staff (Reiss-Brennan, Briot, Savitz, Cannon, & Staheli, 2010)

## **Geisinger Health System**

Geisinger Health System, founded in 1915, is a physician-led, not-for-profit integrated delivery system serving rural northeastern and central Pennsylvania. The multispecialty Geisinger Medical Group employs more than 1000 physicians who practice at 78 clinic sites and in several Geisinger-owned and non-Geisinger hospitals in the region. Many Geisinger patients

are enrolled in the Geisinger Health Plan, a top-performing HMO that covers 450,000 members in several states. The health plan also contracts with a large number of independent healthcare providers and community hospitals in the region.

Geisinger has defined an “innovation architecture” to systematically improve the quality, satisfaction, and efficiency of care processes (Paulus, Davis, & Steele, 2008). It involves convening teams to identify the best care model, setting targets for care model redesign, developing a clinical business case for the redesign, applying improvement approaches, and culling promising innovations for expansion. Such efforts typically begin among patients insured by the Geisinger Health Plan, where clinical and financial interests are fully aligned (McCarthy, Mueller, Wrenn, 2009).

ProvenCare is a portfolio of evidence-based quality and efficiency programs addressing acute and chronic conditions. Clinical workgroups redesign care processes to reliably deliver a coordinated bundle of evidence-based (or consensus-based) best practices that are “hardwired” in the EHR through templates, order sets, and reminders. For patients covered by the Geisinger Health Plan who are having certain surgical procedures, Geisinger charges the health plan a bundled payment that covers preoperative care, surgery, and 90 days of follow-up treatment at a Geisinger facility (in effect, a “warranty” against complications). The bundle, which is priced at a discount to create an incentive for efficiency, has led to improved clinical and financial outcomes for patients undergoing heart bypass surgery (Casale et al., 2007).

The same approach has been applied to other services. For example, in perinatal care, it led to a 32% decline in cesarean deliveries (Berry et al., 2011). The design of a primary care medical home model of care called ProvenHealth Navigator improved the quality of care, reduced hospital admissions (by 18%) and readmissions (by 36%), and lowered overall costs (by 4% to 7%) for Geisinger Health Plan’s elderly Medicare Advantage members (Gilfillan et al., 2010; Maeng et al., 2012).

## Genesys PHO

The Genesys PHO is a **physician–hospital organization (PHO)** that negotiates risk-based managed care contracts and participates in pay-for-performance programs with health plans on behalf of the nonprofit Genesys Regional Medical Center (GRMC) and a network of 160 community-based primary care physicians who serve 250,000 patients in a five-county service area around Flint, Michigan. PHO physicians refer their patients to GRMC for most inpatient care and to a closed panel of 400 specialists with privileges at GRMC who have agreed to follow the PHO’s protocols for care coordination and utilization management. Half of the primary care physicians participating in

the PHO are shareholder-members of the Genesys Integrated Group Practice (GIGP), a virtual group of small private physician practices. GIGP also owns and operates several diagnostic centers and after-hours clinics.

The Genesys PHO involves its primary care physicians in determining appropriate guidelines for clinical care and specialty referral and supports them in becoming primary care medical homes. Insurers have delegated authority for medical management under a capitated payment structure. This clinical and operational autonomy, together with a respectful relationship with the hospital that treats the physicians as true partners, appears to have given the Genesys PHO an endurance that was often lacking in other failed efforts to establish PHOs elsewhere in the United States.

The PHO partnered with the hospital and the specialty panel to participate in Medicare's Pioneer ACO program, in hopes that it would provide financial support to intensify care management for fee-for-service patients and increase risk-taking capacity as the partners prepare for a future in which value-based purchasing becomes the norm. Primary care physicians, specialists, and the hospital shared upside and downside risk in the Pioneer ACO program, limited to 10% of a benchmark in the first two years of the program.

Although Medicare requires that beneficiaries managed by an ACO maintain their freedom of choice of provider, the PHO's primary care physicians encouraged their ACO-covered patients to see their office as a medical home for routine care needs, such as monitoring chronic conditions and providing follow-up testing when a patient is stable after a heart attack. The PHO has also hired health navigators to reach out to patients at risk of incurring high costs to help improve transitions in care and connect them to needed services. Despite the fact that the ACO achieved quality targets and reduced Medicare costs during the first two years of the Pioneer program, the ACO lost money from Medicare because it did not outperform a national risk-sharing benchmark, which does not account for regional variations in spending (Beck, 2014). The PHO dropped out of the Pioneer program but subsequently joined the Medicare Shared Savings Program, which offers the opportunity to earn savings without risk of losses.

## LESSONS LEARNED

Leaders of these organizations appeared to motivate the achievement of higher performance by fostering a mission-oriented culture that appeals to common values, such as patient welfare, professional pride, and shared responsibility for quality and outcomes. Leaders balance a focus on values with management discipline by setting clear and ambitious goals, communicating with and enlisting physicians and the workforce in carrying out a strategic vision, and marshalling resources to support implementation of agreed-upon strategies.

In general, greater integration makes it possible for a system to better understand and design programs to meet the needs of a population so as to improve the quality and efficiency of care. Case study organizations are taking multiple paths to integrating care, bringing together providers and services across disciplines and settings to focus on particular conditions or care episodes (e.g., diabetes, cancer, cardiac surgery). They also may apply this strategy across time and types of care, such as using every patient contact as an opportunity to schedule needed preventive care. Experience from these and other case studies (Robinson, 2013) suggests that combining cross-service integration with service-line specialization strategies may be effective in optimizing both care coordination and efficiency goals.

Determining which delivery system components to own or contract for depends on objectives, resources, and the local market environment, among other factors (Robinson & Casalino, 1996). Kaiser Permanente has found that owning hospitals and co-locating services in its California-based medical centers promotes tighter care coordination and efficiency. Likewise, critical-access hospitals, such as those profiled in the North Dakota case study, often serve as “one-stop shops” for integrating inpatient and outpatient care for rural communities. In contrast, Group Health Cooperative found that excess hospital bed capacity in the Seattle market made it more efficient to contract and coordinate with independent hospitals for inpatient care, which has freed up GHC to focus its expertise on ambulatory care delivery.

Simply owning the pieces of a system is not enough, however. The experience of organizations such as Henry Ford Health System suggests that integrated delivery systems, however configured, must actively pursue the opportunities for integration inherent in their model if they are to achieve the desired internal alignment and coordination between parts of the system. This entails realizing efficiencies ranging from eliminating redundant layers of administration to cross-marketing and in-sourcing services to avoid “leakage” of revenues outside the system—in short, taking advantage of an organization’s core strengths.

### **Aligned Incentives**

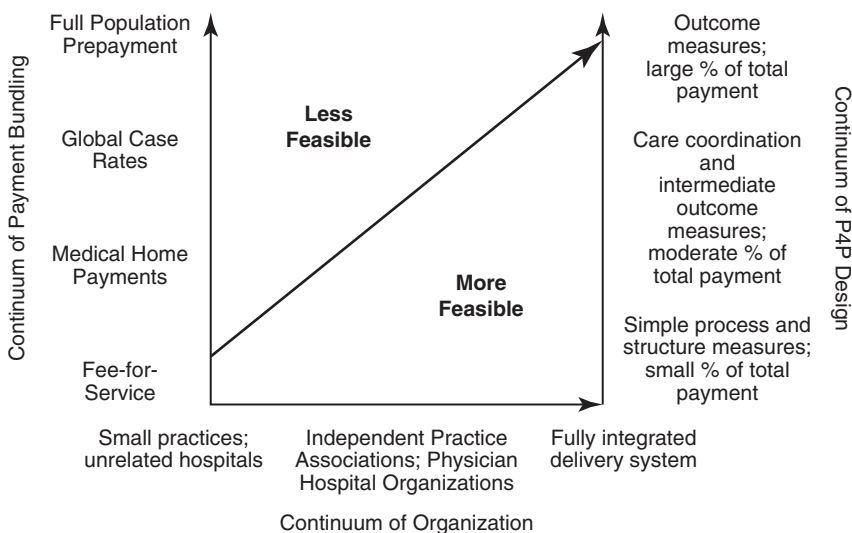
Alignment occurs at the organizational level by integrating care and coverage and/or by setting budgets centrally, so that services can be organized in ways that make the most sense operationally and clinically. For example, some integrated systems subsidize primary care services from other operations, having recognized that effective primary care delivery contributes to a more efficient system overall. Integrated delivery systems that include health plans, and ACOs that partner with commercial insurers, have stronger financial incentives to provide care coordination and care transition services that reduce overall costs because of fewer ED visits or hospitalizations. In other



cases, provider organizations are collaborating with payers and purchasers to participate in value-based incentive programs and create payment reforms that help fund care management activities, a process facilitated by a prepared infrastructure. Nevertheless, integrated systems can lose money by doing the right thing when incentives are not aligned with payers.

The relationship between organization and system-level payment methods is depicted in **Figure 1–2**. The figure shows that, as the delivery system becomes more organized, more bundled payment methods and robust pay-for-performance programs are not only more feasible, but also more desirable. Bundled payment methods reward care coordination and efficiency, which more organized delivery systems should be able to achieve. In addition, with greater organization, it should be possible to increase the percentage of total reimbursement subject to pay-for-performance programs, and to focus these programs on clinical outcomes measures. Not only would this create incentives for high performance, but it would also counterbalance the risk that bundled payments would lead providers to deliver too few services. By contrast, it is not feasible to implement these payment methods at the small provider level (Shih et al., 2008).

At the physician level, the compensation method is aligned with the organization's objectives, values, and market environment. Some entities, such as the Mayo Clinic, believe that salaried physicians are motivated intrinsically



**Figure 1–2** Organization and Payment Methods

Reproduced from The Commonwealth Fund (2009). *The Path to a High Performance U.S. Health System: A 2020 Vision and the Policies to Pave the Way*. Washington, D.C.: The Commonwealth Fund.

by professional and organizational culture to do their best for patients. Other organizations see a positive role for extrinsic rewards, including financial incentives, which may include productivity-based pay or bonuses for meeting quality and service goals. Physician payment incentives must be designed carefully, as they may have both intended and unintended consequences on behavior and satisfaction (Greene, Hibbard, & Overton, 2014).

### **Market Adaptation and Policy Evolution**

Following an evolution in the market that has demanded choice of provider, several integrated systems with health plans “opened” their networks to contract with community physicians and accept payers other than their own health plan, thereby shifting their orientation away from an exclusive reliance on prepaid practice. These organizations have adapted to the market by developing performance information and incentives to help overcome the limitations of fee-for-service payment. Several of these “hybrid” organizations report an advantage from being able to influence other providers in the community who practice in their facilities or who contract with their health plans, and of creating a spirit of “competitive excellence” within their organization as they seek the loyalty of patients who have a choice of providers.

Because the Medicare Shared Savings Program is built on existing fee-for-service incentives, it was not seen as a logical progression by study organizations with health plans that participate in the Medicare Advantage program. The Medicare ACOs profiled were challenged in engaging with beneficiaries because the program’s patient attribution model is based on care-seeking behaviors that are liable to change, resulting in turnover in the target population. Because Medicare beneficiaries are not formally “enrolled” in an ACO and cannot be offered incentives to change their behavior, Medicare ACOs must rely on patients to voluntarily comply with recommendations. That said, the sites have recognized the value of engaging patients in care management to identify personal goals for lifestyle change or treatment, and educating them about their treatment options, though all felt they could do more in this regard.

## **THE VALUE OF INTEGRATED DELIVERY**

Commonly reported results of the initiatives and programs documented in the case studies included improved clinical quality of care and control of chronic diseases, increased patient satisfaction, shorter waiting times, and reduced hospitalizations, emergency visits, and prescription drug expenses (McCarthy & Mueller, 2009b). Organizational culture and what one leader calls “pride of

purpose” appear to be key factors propelling excellent organizations to sustain such efforts over time. Although some institutions such as the Mayo Clinic have been developing their culture over decades, in other cases leaders describe how managers can engage the workforce to inculcate the behaviors and attitudes that shape a culture aimed toward higher performance, especially as it relates to keeping patients safe from harm (McCarthy & Blumenthal, 2006).

A review of the health services literature found that “more organized systems generally perform better than less organized systems on measures of clinical quality, show promise for reducing health care costs, and have a mixed record in terms of patients’ experiences” (Shih et al., 2008). Similarly, in comparison to external benchmarking data, the study organizations generally performed better on clinical quality than on patient satisfaction metrics, although several have made strides in improving the patient experience. Not all the sites did equally well across all dimensions of performance, however. While their models of care delivery work well most of the time, the case studies documented some instances when they failed to live up to their promise. Moreover, not all physicians working in integrated systems perceive that they achieve their potential for integration and care coordination (Strandberg-Larsen et al., 2010). Nevertheless, their overall experience and achievements suggest that a greater degree of integration, if well executed, can be beneficial to improving the value of U.S. health care.

## REALIZING THE POTENTIAL OF INTEGRATED DELIVERY

The cases studies illustrate that there are many ways of achieving more integrated delivery of health care. In seeking to develop or foster integrated delivery systems, managers and policymakers should adopt a flexible approach that takes into account not only what is most effective, but also what is most feasible in a local context and environment. While doing so, they should focus on building a guiding vision, integrative capabilities, and supportive organizational culture as much as the structural components of an organization.

More physicians are moving to employment relationships with hospitals (O’Malley, Bond, & Berenson, 2011)—a trend that might be harnessed to realize the fuller advantages of an employed group practice model (Minott et al., 2010). According to leaders, physicians are increasingly attracted to organized care settings and can be motivated to participate in and lead ACOs if they see that new arrangements offer a way to provide better care, sustain patients’ loyalty, and maintain control over their own destiny. In other circumstances, physicians, hospitals, and other providers may find that it makes sense to develop alternative ways to organize and integrate care through independent private practices, though they may or may not

enjoy all the levers for integration available to employed physician groups. However, the benefits of integrated care delivery may be mitigated if market consolidation results in higher prices and costs (Cutler, 2014).

The prospects for stimulating greater organization and integration of care in the United States depend in large part on continuing support for and refinement of payment policies that support delivery system reforms in the public and private sectors. For example, proposed federal legislation to revamp Medicare physician payment would create incentives for physicians to participate in value-based payment arrangements. Experts have proposed a tiered pathway for ACO evolution and qualification that would reward performance based on the degree of financial risk assumed by the ACO (McClellan, McKethan, Lewis, Roski, & Fisher, 2010; Shortell, Casalino, & Fisher, 2010). Additional changes to the regulatory, professional, and educational environments may be needed to support the infrastructure for higher performance (Shih et al., 2008).

Delivery system reforms to stimulate greater organization of care generally enjoy the support of both consumers and health system leaders (How, Shih, Lau, & Schoen, 2008; Stremikis, Guterman, & Davis, 2009). Health system leaders see that impending demographic shifts and fiscal constraints are creating an urgent need to creatively bring these approaches to scale (Dentzer, 2010). Patients also may play a role in bringing about change as they demand greater responsiveness and convenience from the care system, such as the ability to communicate electronically with their care team, and as they make use of performance information to choose their care providers. The public availability of such comparative data—especially data focusing on system-level outcomes—can enable purchasers and policymakers to calibrate better policies and motivate providers to respond for the sake of professional pride and reputation.

## ACKNOWLEDGMENT

The author is indebted to current and former colleagues and grantees of The Commonwealth Fund and staff at the Institute for Healthcare Improvement who gave advice and contributed to research from which this chapter is adapted in part. The views presented here are those of the author and not necessarily those of The Commonwealth Fund or its directors, officers, or staff.

## CHAPTER SUMMARY

The experience of integrated healthcare delivery systems across the United States demonstrates how higher performance can be attained through convenient access to appropriate care, information continuity and integration,

care coordination, team-oriented care delivery, and continuous innovation and improvement. Realizing these attributes requires the cultivation of values-based leadership and aligned incentives (both at the organizational and provider levels) supported by accountability for and transparency of results. Adapting and spreading these approaches more widely would help assure that more Americans can benefit from receiving care that is designed and delivered to assure optimal patient experiences and outcomes at a sustainable cost.

## KEY TERMS AND CONCEPTS

---

**Accountable care organization (ACO):** A group of physicians, and possibly other healthcare providers such as hospitals, who come together voluntarily to accept collective accountability for the quality and cost of care delivered to their patients.

**Health maintenance organization (HMO):** A group that organizes the financing and delivery of a range of healthcare benefits for members enrolled in a health plan.

**Independent practice association (IPA):** An organized group of independent providers who contract with one or more health plans for the purpose of providing healthcare services to a defined population.

**Integrated delivery system (IDS):** A group of healthcare organizations that collectively provide an array of health-related services in a coordinated fashion to those using the system.

**Multispecialty group practice (MSGP):** A group that employs primary and specialty care physicians who share common governance, infrastructure, and finances; refer patients for services offered within the group; and are typically affiliated with a particular hospital or hospitals.

**Physician-hospital organization (PHO):** A partnership between a hospital and all or some of its affiliated physicians for the purpose of contracting with one or more health plans to provide health care services to a defined population.

## Questions to Consider

1. Describe how health care experienced by you, or someone you know, might have differed had it been delivered in accordance with the six attributes of an ideal health system.
2. Do the case examples describe what you consider to be an ideal way for patients to receive care? Why or why not?
3. How could a physician group or hospital apply the lessons offered by the case examples to create an integrated system of care?

4. Is there anything the healthcare industry could learn from the consumer electronics industry about how to use information technology to improve operations or services?
5. In which ways can leaders shape the culture of an organization to improve performance?
6. Which behavior is each of the following methods of paying for health care likely to reward: (a) salary; (b) a fee for each service or unit of work; (c) a bundled payment for an episode of care; (d) fixed payment for all care needed in a given time period?

## REFERENCES

- Beck, M. (2014, September 25). A Medicare program loses more health-care providers. *The Wall Street Journal*.
- Berry, S. A., Laam, L. A., Wary, A. A., Mateer, H. O., Cassagnol, H. P., McKinley, K. E., & Nolan, R. A. (2011). ProvenCare perinatal: A model for delivering evidence /guideline-based care for perinatal populations. *Joint Commission Journal on Quality and Patient Safety*, 37, 229–239.
- Casale, A. S., Paulus, R. A., Selna, M. J., Doll, M. C., Bothe, A. E. Jr., McKinley, K. E., ..., Steele, G. D. Jr. (2007). A provider-driven pay-for-performance program for acute episodic cardiac surgical care. *Annals of Surgery*, 246, 270–280.
- Cohen, A., Klein, S., & McCarthy, D. (2014). *Hill Physicians Medical Group: A market-driven approach to accountable care for commercially insured patients*. New York, NY: The Commonwealth Fund.
- Commonwealth Fund Commission on a High Performance Health System. (2007). *A high performance health system for the United States: An ambitious agenda for the next president*. New York, NY: The Commonwealth Fund.
- Courneya, P. T., Palattao, K. J., & Gallagher, J. M. (2013). HealthPartners' online clinic for simple conditions delivers savings of \$88 per episode and high patient approval. *Health Affairs*, 32, 385–392.
- Cutler, D. M. (2014). Who benefits from health system change? *Journal of the American Medical Association*, 312, 1639–1641.
- Dentzer, S. (2010). Geisinger chief Glenn Steele: Seizing health reform's potential to build a superior system. *Health Affairs*, 29, 1200–1207.
- Enthoven, A. C., & Tollen, L. A. (2004). *Toward a 21st century health system: The contributions and promise of prepaid group practice*. San Francisco, CA: Jossey-Bass.
- Falk, I. S., Rorem, C. R., & Ring, M. D. (1933). *The costs of medical care: A summary of investigations on the economic aspects of the prevention and care of illness*. Chicago, IL: University of Chicago Press.
- Gilfillan, R. J., Tomcavage, J., Rosenthal, M. B., Davis, D. E., Graham, J., Roy, J. A., ..., Steele, G. D. Jr. (2010). Value and the medical home: Effects of transformed primary care. *American Journal of Managed Care*, 16, 607–614.
- Greene, J., Hibbard, J. H., & Overton, V. (2014). A case study of a team-based, quality-focused compensation model for primary care providers. *Medical Care Research & Review*, 71, 207–223.

- How, S. K. H., Shih, A., Lau, J., & Schoen, C. (2008). *Public views on U.S. health system organization: A call for new directions*. New York, NY: The Commonwealth Fund.
- Institute of Medicine. (2001). *Crossing the quality chasm: A new health system for the 21st century*. Washington, DC: National Academy Press.
- James, B. C., & Savitz, L. A. (2011). How Intermountain trimmed health care costs through robust quality improvement efforts. *Health Affairs*, 30, 1185–1191.
- Klein, S., McCarthy, D., & Cohen, A. (2014). *Marshfield Clinic: Demonstrating the potential of accountable care*. New York, NY: The Commonwealth Fund.
- Larson, B. K., Van Citters, A. D., Kreindler, S. A., Carluzzo, K. L., Gbemudu, J. N., Wu, F. M., ... Fisher, E.S. (2012). Insights from transformations under way at four Brookings-Dartmouth accountable care organization pilot sites. *Health Affairs*, 31(11), 2395–2406.
- Liebhaber, A., & Grossman, J. M. (2007). Physicians moving to mid-sized, single-specialty practices. *Center for Studying Health System Change Tracking Report*, 18, 1–5.
- Maeng, D. D., Graham, J., Graf, T. R., Liberman, J. N., Dermes, N. B., Tomcavage, J., ..., Steele, G. D. Jr. (2012). Reducing long-term cost by transforming primary care: Evidence from Geisinger's medical home model. *American Journal of Managed Care*, 18, 149–155.
- McCarthy, D., & Blumenthal, D. (2006). Stories from the sharp end: Case studies in safety improvement. *Milbank Quarterly*, 84, 165–200.
- McCarthy, D., & Mueller, K. (2009a). *Kaiser Permanente: Bridging the quality divide with integrated practice, group accountability, and health information technology*. New York, NY: The Commonwealth Fund.
- McCarthy, D., & Mueller, K. (2009b). *Organizing for higher performance: Case studies of organized delivery systems. Series overview, findings, and methods*. New York, NY: The Commonwealth Fund.
- McCarthy, D., Mueller, K., & Wrenn, J. (2009). *Geisinger Health System: Achieving the potential of system integration through innovation, leadership, measurement, and incentives*. New York, NY: The Commonwealth Fund.
- McCarthy, D., Mueller, K., & Tillmann, I. (2009). *Group Health Cooperative: Reinventing primary care by connecting patients with a medical home*. New York, NY: The Commonwealth Fund.
- McCarthy, D., Klein, S., & Cohen, A. (2014). *The road to accountable care: Building systems for population health management*. New York, NY: The Commonwealth Fund.
- McClellan, M., McKethan, A. N., Lewis, J. L., Roski, J., & Fisher, E. S. (2010). A national strategy to put accountable care into practice. *Health Affairs*, 29, 982–990.
- Medicare Payment Advisory Commission. (2009). Accountable care organizations. In *Report to the Congress: Improving incentives in the Medicare program*. Washington, DC: Author.
- Minott, J., Helms, D., Luft, H., Guterman, S., & Weil, H. (2010). *The group employed model as a foundation for health delivery reform*. New York, NY: The Commonwealth Fund.
- O'Malley, A. S., Bond, A. M., & Berenson, R. A. (2011). Rising hospital employment of physicians: Better quality, higher costs? *Center for Studying Health System Change Issue Brief*, 136, 1–4.
- Paulus, R. A., Davis, K., & Steele, G. D. (2008). Continuous innovation in health care: Implications of the Geisinger experience. *Health Affairs*, 27, 1235–1245.

- Pearl, R. (2014). Kaiser Permanente Northern California: Current experiences with Internet, mobile, and video technologies. *Health Affairs*, 33, 251–257.
- Reid, R. J., Coleman, K., Johnson, E. A., Fishman, P. A., Hsu, C., Soman, M. P., . . . , Larson, E. B. (2010). The Group Health medical home at year two: Cost savings, higher patient satisfaction, and less burnout for providers. *Health Affairs*, 29, 835–843.
- Reid, R. J., Johnson, E. A., Hsu, C., Ehrlich, K., Coleman, K., Trescott, C., Erikson, M., . . . , Fishman, P. A. (2013). Spreading a medical home redesign: Effects on emergency department use and hospital admissions. *Annals of Family Medicine*, 11, S19–S26.
- Reiss-Brennan, B., Briot, P. C., Savitz, L. A., Cannon, W., & Staheli, R. (2010). Cost and quality impact of Intermountain’s mental health integration program. *Journal of Healthcare Management*, 55, 97–113.
- Robinson, J. C. (2013). Case studies of orthopedic surgery in California: The virtues of care coordination versus specialization. *Health Affairs*, 32, 921–928.
- Robinson, J. C., & Casalino, L. P. (1996). Vertical integration and organizational networks in health care. *Health Affairs*, 15, 7–22.
- Schoen, C., How, S. K. H., Weinbaum, I., Craig, J. E. Jr., & Davis, K. (2006). *Public views on shaping the future of the U.S. health system*. New York, NY: The Commonwealth Fund.
- Shih, A., Davis, K., Schoenbaum, S., Gauthier, A., Nazum, R., & McCarthy, D. (2008). *Organizing the U.S. health care delivery system for high performance*. New York, NY: The Commonwealth Fund.
- Shortell, S. M., Casalino, L. P., & Fisher, E. (2010). *Advancing national health reform: Implementing accountable care organizations*. Policy Brief. Berkeley: University of California, Berkeley, School of Law, Berkeley Center on Health, Economic & Family Security.
- Silow-Carroll, S., & Edwards, J. N. (2013). *Early adopters of the accountable care model: A field report on improvements in health care delivery*. New York, NY: The Commonwealth Fund.
- Strandberg-Larsen, M., Schiotz, M. L., Silver, J. D., Frolich, A. Andersen, J. S., Graetz, I., . . . , Hsu, J. (2010). Is the Kaiser Permanente model superior in terms of clinical integration? A comparative study of Kaiser Permanente, Northern California and the Danish healthcare system. *BMC Health Services Research*, 8, 91.
- Stremikis, K., Guterman, S., & Davis, K. (2009). *Health care opinion leaders’ views on slowing the growth of health care costs*. New York, NY: The Commonwealth Fund.
- The Commonwealth Fund Commission on a High Performance Health System. (2009). *The path to a high performance U.S. health system: A 2020 vision and the policies to pave the way*. New York, NY: The Commonwealth Fund.
- Weber, V., Bloom, F., Pierdon, S., & Wood, C. (2008). Employing the electronic health record to improve diabetes care: A multifaceted intervention in an integrated delivery system. *Journal of General Internal Medicine*, 23, 379–382.