CHAPTER 2

THE DESIGN AND ACCELERATION OF HEALTHCARE REFORM/ACOs: THE FAIRVIEW MEDICAL GROUP CASE

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ABSTRACT

Purpose – *This chapter integrates organization design and sustainability concepts to describe an accelerated transformational change at the Fairview Medical Group (United States).*

Design/methodology/approach – *A case study of the transformation at Fairview Medical Group's primary care clinics was developed from interviews and first-person accounts of the change. Objective data regarding outcomes was used to evaluate the effectiveness of the redesign process.*

Findings – *The Fairview Medical Group developed an innovation and change capability to transform 35 primary care clinics in six months. All of the clinics were certified by the state of Minnesota as complying with their healthcare standards. Clinical outcomes, costs, and employee and*

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physician engagement also increased. All of the improved measures are sustained.

Originality/value — *Healthcare reform in the United States struggles because the organization design challenges are great and the change difficulties even greater. Fairview's experience provides important evidence and lessons that can help advance our understanding of effective healthcare and create more sustainable healthcare systems. This chapter provides healthcare system administrators evidence and alternatives in the pursuit of implementation.*

Keywords: Healthcare reform; accountable care organizations; primary care medical home; accelerated transformation

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Healthcare reform is an organization design problem. That's not our conclusion; it's the conclusion of nearly every observer, researcher, and practitioner who has commented on reform's progress or lack thereof (cf. Berwick, Nolan, & Whittington, 2008; Burns & Pauly, 2012; Crabtree et al., 2011; Porter, Pabo, & Lee, 2013). Whether it is fee-for-service models, patient-centered medical homes (PCMH), managed care, integrated delivery networks, capitation, or hospital delivery systems, there is consistent agreement that the drivers of cost, care, and health in these different programs rest on concepts of organization design. For example, changing incentive systems to align different stakeholder motivations, setting up team-based work processes to lower costs and improve quality, establishing coordination processes between providers of care, and attending to workforce skills, knowledge, and development in support of new objectives are all central concerns of organization design (Galbraith, 2002; Mohrman, Cohen, & Mohrman, 1995).

Healthcare reform is also a sustainability problem. From an economic perspective, the U.S. healthcare system is costly and unsustainable (Kellerman & Lewin, 2009). According to the World Health Organization, the United States' healthcare costs as a percentage of gross domestic production remained level at about 13% from 1993 through 2000. Then in 2002, it rose to 14.8% and continued climbing to 17.9% in 2011. Moreover, the per capital total expenditures on health has risen at a compounded rate of 6.4% between 2002 and 2011. From an ecological perspective, the U.S. healthcare industry accounts for about 8% of carbon emissions (ScienceDaily, 2009), and the U.S. healthcare built environment is the

second most energy-intensive commercial sector. The 2003 Commercial Building Energy Consumption Survey (CBECS) found that large hospitals represented about 2% of commercial square footage, but consumed 4.3% of the total delivered energy. The 2007 CBECS found that large hospitals alone consumed 458 trillion Btus or 5.5% of the total delivered energy used by the commercial sector in 2007 (Energy Information Administration, 2012). Ironically, the health sector's energy use, toxic emissions, and waste often undermine the health of the very communities the sector is meant to serve. Finally, from a social perspective, the U.S. healthcare system has been criticized for claiming outstanding clinical outcomes and delivering mediocre results, especially compared with its Canadian and European counterparts. It has also been criticized for its subtle and not-so-subtle methods for denying access to the un-insured and poverty stricken (McGlynn et al., 2003).

In 2009, the U.S. Congress passed the Patient Protection and Affordable Care Act (ACA) to address a range of financial and social sustainability issues. It provided for the phased introduction of a comprehensive and mandated system of health insurance and the creation of accountable systems of care over a four-year period. Congress delegated responsibility for implementation to the Department of Health and Human Services and the Centers for Medicare and Medicaid Services (CMS).

The purpose of this chapter is to demonstrate how organization design and sustainability practices can accelerate the implementation of accountable care organizations (ACO) and PCMH in the context of healthcare reform. The focus of the chapter is the transformation of the Fairview Medical Group's (FMG) clinical network to a PCMH. This accelerated change was part of the Fairview Medical System's ACO implementation. We begin by exploring the relevant literature related to the design of healthcare delivery systems and the change and learning implications.

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THE TRANSFORMATION CHALLENGE

The transformation challenge is illustrated in Fig. 1. The two "S curves" describe different methods for delivering value over time. The S curve in the lower left represents the old fee-for-service, volume-based business model. The S curve in the upper right depicts the new value-oriented business model envisioned by the ACA. The gray box in the middle represents the transformation challenge facing the U.S. healthcare industry today.

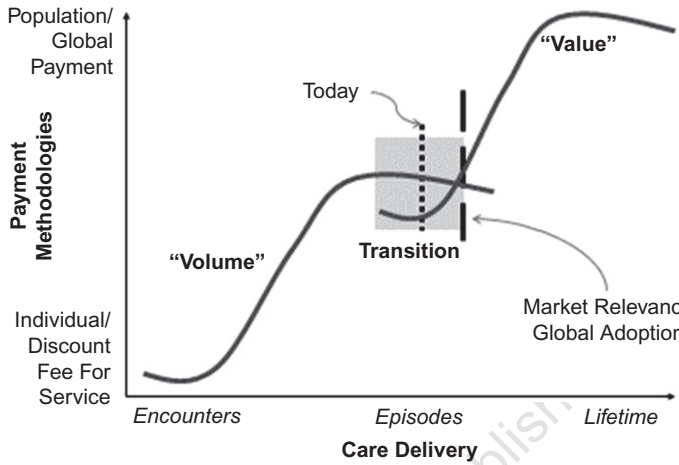

Fig. 1. The Transformational Challenge.

Executives and researchers use the term "crossing the chasm" (Moore, 1999) to describe the difficult financial commitments and organization changes that move an industry from one S curve to the next. It involves understanding, designing, and implementing the capabilities required in the new model. While this transition is more familiar to for-profit commercial organizations and represents an important source of knowledge and experience, the unique structure of the healthcare industry and the convoluted interdependencies among service providers and with the government and insurance carriers make the transition particularly risky. Healthcare systems faced with this challenge have been understandably reluctant to move too quickly as investments in the new business model may take years to pay off while their immediate effects in reducing demand for acute services will have a demonstrable and perhaps devastating impact on revenue and profitability in the short term.

DESIGN AND CAPABILITY STANDARDS OF HEALTHCARE REFORM

A key call in the ACA and a primary source of CMS activity is the design and implementation of ACOs. A January, 2010 definition on the CMS website – based on the original legislation – described ACOs as "an

organization of healthcare providers that agrees to be accountable for the quality, cost, and overall care of Medicare beneficiaries who are enrolled in the traditional fee-for-service program who are assigned to it." But the definition has shifted and drifted over time as our understanding of its design, role, and implications have evolved. More recently, the CMS defined ACOs as a "group of doctors, hospitals, and other healthcare providers, who come together voluntarily to give coordinated high quality care to their Medicare patients" (CMS, 2013).

ACOs are the latest in a long line of healthcare reform proposals. They bear a striking resemblance to physician-hospital organizations (PHO), management services organizations (MSO), health maintenance organizations (HMOs), and integrated delivery systems (IDS) or networks. For example, PHOs are legal entities formed by physicians and one or more hospitals to negotiate contracts with insurers and government organizations and share in the financial rewards of controlling costs while delivering high-quality care. PHOs can be a viable model for an ACO if they are clinically integrated, meet the physicians' professional and economic needs, and insurance payers are willing to share savings (Bader, 2009). Similarly, an IDS is a "network of organizations that directly provides or arranges to provide a coordinated continuum of services to a defined population and is able and willing to be held accountable for the cost, quality, and outcomes of care and (with others), the health status of the population served" (Gillies, Shortell, Anderson, Mitchell, & Morgan, 1993; Porter et al., 2013; Shortell & McCurdy, 2009, p. 370). ACOs and these other designs attempt to resolve what Devers and Berenson (2009) called the "chicken and egg" problem in healthcare reform. That is, to create overall healthcare reform there must be (a) changes to the existing perverse logic of paying for volume rather than value and (b) the delivery system must be reformed to produce organizations that can operate under a different payment system.

Unfortunately, Burns and Pauly (2002, 2012) and others have found that most PHO/MSO/IDS structures failed to deliver on their promised outcomes. They lacked the proper IT support, approached capitation (the practice of allocating a specific amount of money for each assigned patient) in a piecemeal fashion that resulted in mixed or conflicting incentives, and failed to take a systems approach that involved integrated organizational planning. "Instead, they bolted together various providers, such as doctors and hospitals, and mechanisms, such as disease management and population health management, hoping the combinations would work" (Burns & Pauly, 2012, p. 2409).

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But ACOs also represent new thinking about healthcare system design. They have access to more sophisticated care management tools and practices (e.g., quality measurement and management, clinical integration and design registries, and patient engagement); leverage advances in information technology and electronic health records (EHRs), and focus the incentives on performance risk (not insurance risk), shared savings, and bundled payments (not capitation) (Burns & Pauly, 2012; Deloitte Center for Health Solutions, 2010; Landon, Gill, Antonelli, & Rich, 2010; Rittenhouse, Shortell, & Fisher, 2009). Moreover, since ACOs were introduced, increased attention and considerable innovation have resulted in a set of emerging design features.

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ACO Structures

Front-running ACOs, such as Alegent Health and Bon Secours Health, are adopting complex matrix structures (The Advisory Board Company, 2012). The primary dimension and differentiator is a vertical structure organized by market/geography. The leader of a market organization reports to the CEO, has overall profit and loss responsibility, and accountability for integrating all services to meet the population health needs of that community. These services include business and partnership development to support the continuum of care, community relations, physician relations, and philanthropy.

To better identify and manage variation across the system, horizontal service-based groups also report to the CEO but are matrixed with the vertical market organizations and hospitals. This horizontal structure consists of various "centers of excellence," each of which is responsible for a number of functional units, including:

- *Innovation Centers* (Population Health, Analytics and Effectiveness, Population Risk Management, Research and Development, New Services, Technology, Planning, Marketing, and Business Development).
- *Primary and Ambulatory Services* (Prevention/wellness, Ambulatory/community Services, Retail Strategies, Home Care, Nursing, PCMH Medical Groups, Public Health Nursing Services, and Clinical Outreach).
- *Clinical Services* (Ancillary Services, Engagement Research, Quality, Standards of Practice, Acute Care Services, Post-Acute Care, Nursing, and Care Management).

- *Administration Services* (HR, IT, Government Affairs, Audit, Compliance, Managed Care, Support, Supply Chain, Corp Responsibility, Risk, Legal, Planning, Business Development, and M&A).

Finally, a third dimension in the matrix organizes around disease states and coordinates care delivery across multiple services. For example, *care lines*, such as behavioral health, diabetes, neurosciences, and palliative care, are run by an administrator and physician dyad that is tasked with looking across episodes of care to identify and reduce variation in clinical workflow, as well as a continuous dedication to the patient experience. The resulting interplay between the centers of excellence and care lines means every aspect of a patient's care is considered from both the patient's perspective and the hospital's operational perspective. This population health capability and matrix arrangement would report to the market leader of the vertical structure.

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ACO Goals, Measures, and Incentives

ACOs are expected to support and produce outcomes of high care and health at a reasonable cost, the so-called "Triple Aim" (Berwick et al., 2008) or what Porter et al. (2013) termed "value." The Triple Aim is an important outcome criterion for the design of sustainable effectiveness in healthcare. It acknowledges that there may be competing but perfectly rational individual interests that must be balanced, integrated, or traded-off. It also has the obvious analogue to the triple bottom line (Elkington, 1994) or people, planet, and profit objective often used in designing for-profit industrial organizations (Mohrman & Shani, 2011).

On the financial management and incentive side, there is wide agreement that the old system rewarded the wrong kind of behavior. "The … healthcare system, with its incentives to furnish more care, has produced highly fragmented care that emphasizes specialty and acute care over coordination, patient centeredness, and population health management" (Peikes, Zutshi, Genevro, Parchman, & Meyers, 2012, p. 6). One of the side effects of the incentive system has been a "primary care-specialty income gap." The disparity exists in part due to failures in the implementation of the resource-based relative value scale used by Medicare to set physician reimbursement rates, but equally important is how the market has valued new services and the use of technology. The large difference in reimbursement and motivation between the primary care physician and technology-based services

produces strong incentives to perform procedures that may or may not be in the best interest of patients.

The proposed solution is to engage an ACO in a performance risk sharing arrangement. Based on changes in the health of an assigned patient population and the costs to deliver that care, the government would either reimburse a share of any savings produced or come knocking at the ACO's door if costs were excessive. Such an incentive system would depend on the availability of accurate cost data associated with producing a certain level of quality in a population's health. As a result, the ability to measure the cost of primary care, specialty care, and other services, including hospital services, has come to rest on the ACO's technology system and the implementation of an effective EHR. Even more critical is the need to develop and apply analytic routines that can harvest the data to support clinical, operational, and business decisions that will generate value. For example, new innovative "activity based costing systems" are starting to emerge that follow patients through the system and integrate process and cost data. However, any new technology must be "blended into the social system, workflow, and physician culture of the organization … and involves a heavy emphasis on the implementation of parallel changes in people and work processes, and on the interoperability of information systems across care settings" (Blumenthal, 2009; Burns & Pauly, 2012, p. 2412). This socio-technical integration challenge highlights the interdependence of changes in the incentive and measurement system with the care-delivery system and the need for a systemic implementation approach.

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ACO Work Processes

Although goals, measures, and incentive systems are an important aspect of organization design, they must be designed alongside decisions about processes, workflow, decision making, and coordination (Galbraith, 2002).

Berwick et al. (2008) noted that any system intended to achieve the Triple Aim must address the issue of an "integrator" role that involves individuals and families along with care providers in decisions regarding healthcare. They positioned this part of the role strategically, suggesting that the integrator had to use tactics of transparency, education, communication, and shared decision making instead of access restriction, cost shifting, or creating administrative barriers. The integrator role must have the capability to deploy resources aimed at managing population health, engage in financial

management strategies, and support evidence-based and reliable integration with other providers.

The PCMH model has emerged as an important potential design standard for this integrator role (Reid et al., 2010) and one of the key centers of excellence in the ACO's structure. A PCMH is an important iteration on practice design and follows in the footsteps of Chronic Care Models, the Idealized Design of Clinical Office Practices, and the Clinical Microsystem (Kilo & Wasson, 2010). A PCMH comprises the core principals of primary care, including continuous access, comprehensive care, and coordination across the care continuum (Starfield, 1992), as well recent practice innovations, such as the use of EHRs, population-based management of chronic illness, continuous quality improvement, and shared decision making (Landon et al., 2010; Rittenhouse et al., 2009).

The PCMH model supports a redesigned set of delivery system capabilities as characterized in Table 1. In the old primary care model, a "one-size-fits-all" design was adapted in service of a stable delivery system that could maximize reimbursement revenues. In the search for efficiency, the practice was organized hierarchically and improvements were locally driven by a physician-centered model. This resulted in a fragmented, siloed, and specialty oriented set of practices. Insurance practices and reimbursement policies essentially turned the primary care physician into a "gatekeeper." Ironically, healthcare reform has placed primary care practice, the least valued and increasingly scarce member of the value chain, front and center in the new system.

Assuming an appropriate patient panel attached to a PCMH, the emerging model creates health and value in a flexible and tailored way. The model that best supports such a view is more network-driven and less hierarchical because it is the network of physicians and other providers that is being reimbursed and that drives a different kind of learning process to

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Table 1. Changing Delivery System Capabilities.

From	To
One size fits all design for stability and reimbursement	Flexible and tailored design for health and value
Hierarchical work at the practice level driving single loop learning	Network-based view of work at the system level driving double loop learning
Primary care as "gatekeeper"	Primary care as "coordinator and integrator"
Physician-centered, specialized and fragment delivery	Patient-centered, comprehensive, coordinated and team-based delivery

improve the way the system operates. These new healthcare systems need to be both flexible and agile, with a capacity for rapid change in response to new circumstances (Showstack, Lurie, Larson, Rotheman, & Hassmiller, 2003, p. 270). In the PCMH, a personal physician accepts overall responsibility for the care of a patient, but provides medical services within a team that comprises other healthcare providers, such as nurses or nurse practitioners, and support staff. Teams are structured around clear goals, objective outcome measures, and a patient-centered approach to medical care.

The centerpiece of healthcare reform is the ACO, an organization designed to "bend the cost curve" and drive better clinical and satisfaction outcomes. The best thinking in ACO design has also led to the conclusion that primary care redesign is central to the system's performance (Kilo & Wasson, 2010; Rittenhouse et al., 2009, p. 2301; Starfield, Shi, & Macinko, 2005). An ACO's design is critically dependent on the design of the PCMH design. The research also suggests that the design and effectiveness of the change process used to implement these solutions is critical.

> To be successful in an ACO program, providers … need to utilize and strengthen a variety of organizational, technical, and clinical skills over time. Some would describe the nature of needed provider changes as truly transformational. Even providers with the greater experience with the kinds of payment methods and programs [proposed] find that it takes time and capacity building in key areas, such as cultural change, managerial and physician leadership, teamwork, health information technology, and management process redesign and improvement. (Devers & Berenson, 2009, p. 9)

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Implementing the Transition

ACOs and their affiliated PCMHs face daunting implementation challenges. A careful reading of evaluative studies suggests that ACO or PCMH *designs* may be less to blame for poor outcomes than *execution*. For example, Nutting et al. (2011) and Crabtree et al. (2011) found that achieving many of the Triple Aim objectives depended on long-term practice transformation, an internal capacity for organizational learning, development by physicians of a willingness to collaborate and function as part of a care team, and a multiyear commitment to change. In many cases, it wasn't that the design of coordination was a problem but the ability to achieve the coordination.

Thus, the first change management challenge is that most healthcare organizations lack the change capability necessary to make the transformation. Healthcare organizations, historically protected from competitive market

dynamics, do not have the knowledge or experience to make the operational and cultural changes in response to environmental disruptions (Accountable Delivery System Institute [ADSI], 2013). Most successful ACO/PCMH implementations to date have depended greatly on these skills (Burns & Pauly, 2012; Grumbach & Grundy, 2010; Hansen, 2013; Peikes et al., 2012; Reid et al., 2010).

Sequencing is the second change management challenge. An ACO's successful implementation is unlikely without having a viable PCMH model in place. The PCMH's challenge is to coordinate and integrate the different dimensions of the ACO matrix, including financial and IT infrastructure, specialty providers, hospitals, and other sites of service. Porter et al. (2013) write that while the PCMH is an important step toward better-coordinated, team-based care and has the ability to improve outcomes and lower costs, most current primary care practices attempt to meet the various needs of heterogeneous patients with a homogenous "one size fits all" organizational approach. The PCMH does not inherently recognize or require organizing around the vertical markets or clinically oriented needs of the patient. Thus, just as an ACO cannot exist without an effective primary care system, a PCMH cannot be well designed without specifying the patient panel to which the PCMH team is attached and the access to the financial/technical system of measurement. "At worst, PCMHs could become just an overlay, in which care coordinators manage dysfunction instead of changing the underlying delivery structure" (Porter et al., 2013, p. 523). However, the PCMH does not control and has no freedom to design the incentives required to coordinate or optimize care with other service providers. In addition, the PCMH does not have the financial or technical infrastructure to share in the savings generated (Rittenhouse et al., 2009). Implementing the PCMH model involves two critical dependencies that they cannot control. These dependencies are removed if the PCMH implementation is associated with an ACO implementation (Landon et al., 2010; Rittenhouse et al., 2009) but requires simultaneous implementation.

A third change management challenge is that both the ACO and the PCMH must develop the collaboration, decision making, and information system capabilities described above although no consensus exists on these capabilities or how to build them. Moreover, they involve challenging and shifting the entrenched authority patterns of physicians. The money and time required to execute these changes (while at the same time being on the hook to the CMS for downside risk) is unclear but probably on the order of 2–3 years at a minimum, and there are tremendous changes required in the staffing levels and skills requirements of various professionals.

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Summary

The scope of healthcare reform is not incremental but transformational, requiring healthcare providers to cannibalize existing pay-for-service operations and business models with innovative and untried value-based models. The scope of the transformation is so large and the payoffs so uncertain, that many systems have focused on the incremental changes they can control, such as taking out costs through process redesign, lean-type projects, or small clinical variation projects. Similarly, too many critical health systems remain largely organized around old inpatient care models and must overcome the inertia of 100 years of operating norms. Newer value-based, population health oriented models require much greater agility in meeting patient needs prior to inpatient events.

Unfortunately, the pressure to change is increasing. Reform will force fundamental change in the way healthcare finances insurance coverage, pays for services, organizes the delivery system, and makes decisions on clinical treatment. Additional pressure is coming from disruptive innovators (e.g., venture and private equity investment and retailers like Wal-Mart in new primary care models, population management platforms, etc.) who will quickly pilot new offerings and pressure existing legacy operating models. A central strategic question facing health system leaders today is therefore how to solve the "transformation challenge" for healthcare purchasers without harming patient care and bankrupting themselves.

The transformation challenge to a sustainable ACO and PCMH model is, at its core, both an organization design and sustainability problem. In other words, the change process and the organizational structures and processes required to drive change are design based. While there is an encouraging and emerging integration of the required design features, there is still no consensus. Worse, there are too few examples of implemented models showing the kinds of Triple Aim outcomes desired. Healthcare reform will be the result of both the right strategy/design and a good change process. Crossing the chasm to achieve new standards should be designed as one would design a new product, service, or experience. This organizational approach employs iteration planning, prototyping, and market testing which has learning at its core (Lawler & Worley, 2011). This contrasts with project management, project reviews, and dashboard approaches that have optimization at their core. The strategic transformational decision facing healthcare systems is thus no longer when to "flip the switch" to a value-based business model but whether they can do so by managing the financial risks fast enough to remain the provider of choice in an increasingly

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crowded field of value-based options. The transformation of the FMG's PCMH is interesting because their efforts were integrated with the implementation of an ACO at the larger level, focused on a system design that would be able to learn and change, and achieved significant results and milestones quickly.

THE FMG CASE

On May 10, 2011, Fairview Health Services released the following press announcement:

> MINNEAPOLIS – Fairview Clinics have been certified by the Minnesota Department of Health as a healthcare home (also known as a "medical home"). To achieve this designation, 35 Fairview primary care clinics met a rigorous set of standards demonstrating that they consistently deliver care through a team approach and seek to improve the quality of care while also effectively managing the cost of care.

The announcement was noteworthy because all the other integrated healthcare systems in Minnesota seeking certification were able to get five clinics approved … combined.

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Laying the Foundation

Fairview Health Services is a 107-year-old, non-profit healthcare system in Minneapolis, Minnesota, United States. It operates six community hospitals and in partnership with the University of Minnesota, Fairview operates an academic medical center with two campuses. The hospital systems are supported by the FMG's 450 employed physicians, 40 primary care clinics, a wide range of specialty services, and home care and senior services. Fig. 2 displays a simplified organization chart showing FMG's position in the healthcare system's organization.

In August, 2007, Mark Eustis was appointed CEO and wanted to build on Fairview's reputation for excellence by facilitating fundamental change in anticipation of the healthcare reforms that were occurring at the federal and state levels. As part of that agenda, Fairview acquired the Columbia Park Medical Group in late 2007. Traditionally, physicians were fairly autonomous and reported up through the hospital structure. With the new acquisition, the organization began thinking about how to integrate the physicians into a more market facing and branded set of services.

Mark Eustis, Terry Carroll, the senior vice president of transformation, and a number of members of the executive team knew certain pre-conditions needed to be in place to drive transformational change and healthcare reform. Creating these pre-conditions and targeting FMG as the organizational vehicle for change was considered part of the "transformational logic" that drove change. Fig. 3 identifies the key milestones over the time of the transformation process, followed by Table 2 which illustrates the transformation logic that supports each milestone. The integrated transformation process was initially pursued along two parallel but related paths.

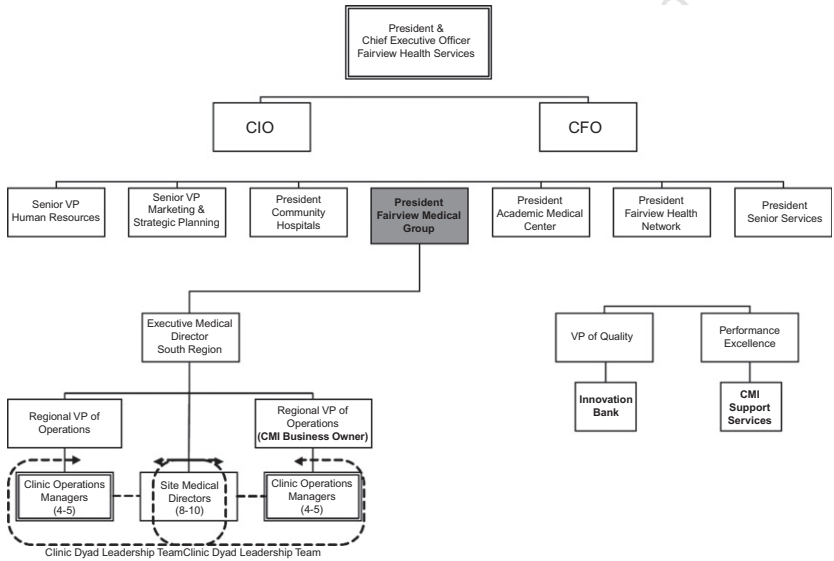

Fig. 2. Organization Chart of the Healthcare System.

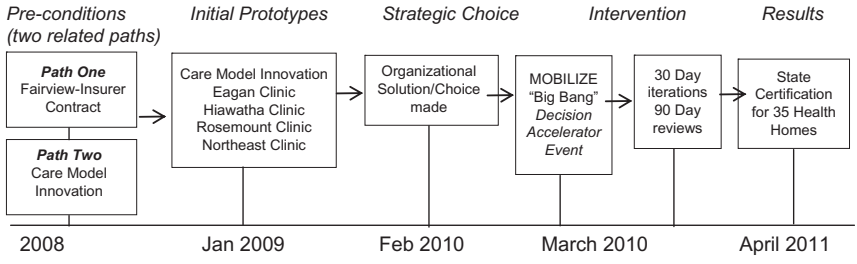

Fig. 3. Key Milestones throughout the Transformation Process.

Table 2. Key Milestones and Transformation Logic.

Date	Milestone	Logic
January 2008	Fairview-insurer contract	• To move from a "fee for service" business model to a value-based business model, a new innovative reimbursement model had to be established. The CEOs from each company (healthcare and insurance) established an "ambidextrous reward structure" to support the health home start-up experiment and represented the first key organizational design feature of the new model. • Care packages were developed as a new innovation standard for specific disease states to improve quality and reduce costs with chronic populations. Care packages could then be used in the start-up of the health homes as a key work process, another key organizational design feature of the new model.
January 2008	Care model Innovation	• Care Model innovation involved four clinics using design methods and tools to create prototype health homes. One key result was the identification of "functionalities" (organizational capability elements) to meet the performance criteria of quality, cost, and patient experience (Triple Aim). These functionalities become the design/build elements in subsequent transformation steps.
February 2010	Organizational solution/choice made	• Using an accelerated innovation diffusion method and an adaptive work system process had to be carefully discussed and understood. It represented a significant departure from traditional approaches. Sponsors needed to understand that the leadership requirements, types of resources, and allocation of resources were unique to this approach. • Once the decision was made to use an adaptive design process, internal resources and processes were quickly ramped to meet an aggressive kick-off in March.
March 2010	MOBILIZE – *Decision accelerator event*	• All 35 clinics and their supporting management infrastructure made-up a network. The transformation task was to mobilize the network with a common "product vision," set of requirements, and method of design. The March Decision Accelerator event mobilized the network and established a 30–60–90-day iteration cycles and plans for each clinic.

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Table 2. (*Continued*)

Date	Milestone	Logic
March 2010 – January 2011	30-Day iterations and 90-day reviews	• The transformation logic vested control through self-regulation at the health home unit of analysis and insured progress was made visible across all clinics, best practice performance was quickly shared, multiple iterations occurred until each clinic met requirements, and smaller community networks met on a 30-day basis between iterations. The mobilization activity set in motion a rapid learning system where all the clinics were working in parallel, learning from each other, and maintaining control in their capability planning, allocation of resources, and speed of adoption.
April 2011	35 Health homes certified by state	

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First Path: Contract Changes and the Development of Care Packages

During the 2008 contract negotiations with a major commercial insurer in Fairview's market, top executives at both companies wanted to establish an alternative to the traditional "fee for service" reimbursement model. In 2009, a two-year contract was completed that paid Fairview based on the achievement of defined outcomes for quality and total risk-adjusted cost of care for all of the insurer's members served by Fairview-employed primary care physicians. In essence, Fairview put some of their eligible reimbursement pool at risk based on quality and total cost of care. They were very early adopters in applying this thinking and the contract with the insurer existed for well over a year before other health systems engaged with payers in similar contracts.

From Fairview's perspective, success in the relationship required a new financial model based on a different set of skills, processes, and relationships with payers for reimbursement. It required an understanding of the patient population, including their current level of health and illness and the ability to measure the cost of care and clinical outcomes. The relationship allowed Fairview to access information that was vital to improving the health status of the insurer's patients. The analytics they developed helped to answer questions like: Who is about to get sicker and benefit from some kind of outreach? Which members with chronic diseases do we predict could be healthier and with improvement have a reduced need for services?

The work initiated under this innovative contract eventually resulted in the development of "care packages." Care packages are an evidence-based, regularly updated, best practice approach to delivering appropriate services to defined populations to ensure a consistent level of quality and service across multiple clinics. Care packages for asthma, diabetes, migraines, lower back pain, attention deficit disorder, and other conditions were expected to increase quality and reduce costs to take advantage of contract provisions, and the organization began thinking about how best to standardize these common procedures. For example, the clinics discovered that more than 80 different care sets existed for managing diabetes across the system. Care packages allowed the Fairview Clinics to present a standard care plan and clinical approach for chronic conditions.

Second Path: Care Model Innovation

Mark Eustis, Terry Carrol, and Dave Moen, an emergency room physician, were thinking about how to build an "innovation capability" at Fairview Health Services. As part of that process, Mark and Terry asked Dave if he wanted to move from being a physician to Medical Director of Care Model Innovation and help direct this transformation. The group worked with an external consultant (the first author) who described how innovation processes could be designed and organized. The primary output of that discussion was a decision to develop a prototype primary care clinic that reflected the emerging healthcare reform regulations.

At the time, the clinics operated according to a process where, in the best case, the patient would make an appointment through a scheduler, check-in at the time of the appointment, be shown to an examination room, interact with a provider (e.g., doctor, nurse practitioner, or physician's assistant), have the appropriate orders or prescriptions written, check out, and engage in any follow-up activity. But the process often did not go that way. Too often, when you called the clinic to ask about your sore throat, you would talk first to a scheduler. If no appointment was available, you would be referred to a triage nurse, who would send a note to the physician. Depending on how busy he or she was, the note might sit for hours before the physician would see it and send a note back to the triage nurse, perhaps telling the nurse to add you to the schedule. The nurse would call you back, and when you came in, the doctor would have to see you before ordering a strep test. Then you would wait for results, and if they were positive, the doctor would finally write you a prescription.

Such processes – good and bad – were common in primary care clinics. Nurses were there to triage, schedulers scheduled, and a physician was

someone who saw patients during the day and when they could, entered their observations and treatments into an electronic medical record. There was no coordinated plan of care for patient populations across the system, no standard processes to follow, and lots of wasted time and effort. As described by one participant, "our clinic processes looked like everyone else's; we sat in our office and waited for patients to come to us. We treated them, sent them home, and sent them or their insurance company a bill."

The structure of the clinic reflected the process. A physician and administrator team led the clinic but had different reporting relationships. The physician leadership reported to the Executive Medical Director of the FMG whereas the administrative managers reported to the vice president of operations. Reward systems followed traditional processes. Clinic staff and physicians were given annual performance reviews with differing levels of informal feedback throughout the year. For clinical staff, those reviews triggered merit pay increases while physicians were paid a salary on the basis of individual productivity and clinical outcomes.

Beginning with Fairview's Eagan Clinic in January, 2009, Moen worked with the staff under the assumption that the best people to change a system were the ones doing the work. He said, "I don't know how to fix the clinic, but I know that you know how to do it better than anybody, so let's get started." That year, four clinics – Egan, Hiawatha, Rosemount, and Northeast – became involved in the care model innovation project, and adopted the following goals:

- Reduce the total cost-of-care growth rate
- Improve patient satisfaction
- Increase the number of patients cared for by clinic physicians
- Improve quality of care measures

While the goals were clear, the means to achieve them were not. The clinics had to develop a more patient-centered model, use resources more efficiently, learn how to coordinate care better, understand the role of virtual care, and so on. Based on research by Thomas Bodenheimer and others (Bodenheimer et al., 2004), the clinics began to think about the formation of "care teams" that might view health in a more systematic and systemic way. Eventually, each of the four prototype sites reorganized its workforce into clinical care teams, which included about three providers (physicians, nurse practitioners, and physician assistants), nurses, medical assistants, and schedulers. Patients maintained their relationship with the primary care provider but were able to access the entire care team and each team was responsible for a panel of patients assigned to the provider on the

team. The number of teams in a clinic was a function of the size of the clinic; small clinics might have only one or two teams while large clinics could have as many as five teams.

The effort to convert the four clinics took about 14 months, and considerable effort went into measuring if costs could be pushed down or clinical measures improved. Overall, the early data was mixed. On the positive side:

(1) The Eagan Clinic reported that the percentage of patients obtaining needed immunizations and screenings increased significantly within five months of launching the new team-based approach,
(2) Reassigning duties within the teams improved patient access to care and overall efficiency (e.g., primary care physicians saw their end-of-day duties – patient messages, lab result review, and charting – decrease from an average of 90 minutes to zero because other team members were now handling that work and another clinic reported the percentage of patient messages that required a physician's response fell from 30% to 3%, as other team members were empowered to address patient needs themselves), and
(3) The prototype sites developed new ways to serve patients, including nurse-only visits, group appointments, team appointments, and virtual care visits via e-mail and phone conversations. In the traditional model, a patient being monitored for high blood pressure was routinely scheduled to see a physician; now hypertension patients could be seen by a registered nurse if clinically appropriate.

On the other hand, there were some initial costs involved in the primary care transformation. The cost of hiring additional staff members for the physician-led teams in the clinics and the short-term drop in productivity increased the cost-per-patient in these clinics by more than 15% during the transition to the new care-delivery model. Patient satisfaction changes were also mixed.

Val Overton, vice president of Quality and Innovation, noted that, "Some quality and other measures did take a hit but we also began to see the possibilities because there were signs of quality improvement and cost declines. Although it was hard work, the engagement was very high. Our staff surveys clearly indicated that nobody wanted to go back to the old model. There was lots of anecdotal evidence of how much better this model was." The physician reaction was quite varied. Conceptually, the idea of managing the health of a population and taking care of them in between visits before they got sick appealed to primary care physician, but changing habits and processes was a challenge.

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As the two paths of change – care package and care model innovation – matured, Minnesota's Department of Health announced the criteria, process, and accelerated deadline for certifying primary clinics as healthcare homes. Fairview Clinics leadership estimated that there was an 80% overlap between the care package and care model innovation work and the requirements of the certification process. The challenge facing Terry Martinson, Executive Medical Director, and Fairview Clinics was "how do we scale this?" and "how do we set up a way to continue to learn, improve, and address the health of a population of people?"

Establishing the Innovation and Learning Network

Similar to the care model innovation work, the goal was clear but the means to achieve it was not. How was Fairview Clinics to diffuse the knowledge, skills sets, and capabilities developed in the pilot clinics over 14 months to 30 other clinics in less than 10 months?

The consultant earlier had introduced Fairview Health Services to innovation design and "decision accelerators" (DA), a large-group conference model that was useful in quickly generating and refining innovative ideas, visions, strategies, and action plans (Shmulyian, Bateman, Philpott, & Gulri, 2010; Worley, Mohrman, & Nevitt, 2011). His work in early 2009 as part of the care model innovation project focused on DAs to develop criteria selection processes around the electronic medical record. Carroll, Martinson, and Moen again enlisted the consultant's thinking about the design of an innovation network.

The Adaptive Work System model, shown in Fig. 4, was the core platform for a Work Innovation Network (WIN) that could design, develop, optimize, and diffuse a variety of innovations. The model is scalable in that it can be applied by small groups thinking through an issue to extremely large groups diffusing innovations. For example, a physician leader (1) can become aware of an emerging problem with a key account and want to develop a strategy (2) to address it. She puts a few ideas on paper and begins to mobilize (3) and engage different stakeholders to refine the strategy. As she shows the strategy to different people (5 and 6), they propose changes to the plan (6 and 7) until the plan is ready for action.

At a broader scale, a leadership team (1) can recognize the need for change and propose the development of an ACO (2) to improve the healthcare system's readiness for healthcare reform. The idea of an ACO is shared with a large number of stakeholders in a DA conference setting

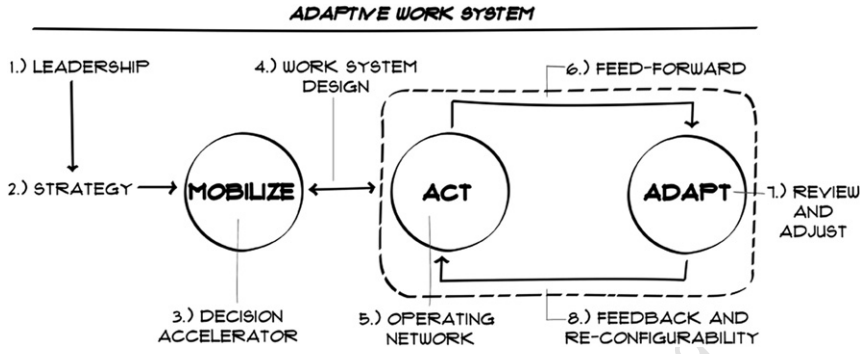

Fig. 4. The Work Innovation Network (WIN) Model. *Source*: ©2013, Spring Networks.

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(3) and a plan for organizing the group (4) is developed. The teams work on their part of the plan (5), share it with others (6), receive feedback on the quality of their part and how it aligns with other parts (7 and 8) until such time that the large group is ready to meet again to determine the next steps. Such a process held the promise of routinizing the development, formalization, and diffusion of innovations as well as provides the basis for large-systems learning.

Leading and Strategizing

In March, 2010, Carroll, Moen, Martinson, and others began to discuss whether the idea of a WIN might apply to the rapid diffusion of the new team-based care model and care packages. The consultant encouraged them to think of the clinics as a network and about establishing a "learning collaborative" where good ideas were tested, formalized, and spread. The result of these meetings was a decision to accelerate the change and attempt to certify all of the Fairview Clinics.

Over the next couple of weeks, Julia Harrington, Director of Performance Excellence, and her team began to work with the consultant to plan the first "mobilize" event. Eventually, it became known as the "Big Bang."

Mobilizing the Clinic Network

According to the model, the next step was to mobilize the clinic community with a DA. On May 27, 2010, approximately 150 physicians, clinic staff, and other stakeholders from the 40 clinics met at the Minneapolis

Convention Center. The purpose of the event was to educate the clinics on the care package and care model innovation design by the prototype clinics and help them develop work plans to implement the requirements with speed and quality. The agenda for the Big Bang event is shown in Table 3.

Following opening comments, members from each of the clinics spread out to participate in one of six "trade show" events. At each trade show station, representatives from one of the pilot clinics would describe one aspect of operating "functionality" according to the new model.

"Functionality" was defined as "shippable product," something that a customer would see as valuable. For example, a functionality could include a process that made making an appointment easier as well as processes to support internal capabilities, such as being able to complete paperwork for reimbursement. The functionalities were grouped into four increasingly sophisticated phases that were expected to meet the requirements for certification under both the Minnesota model of Healthcare Home and the federal model of ACOs (see Table 4).

Following the first round of trade shows that were focused more around Phase 1 functionalities, each clinic team met to develop a 30-day "iteration" plan. An iteration plan described the functionalities the clinic hoped to

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Table 3. "Big Bang" Agenda.

Activity	Description	Deliverable
Introduction	Objective setting, overview of the conference	Understanding of the activity flow, clear expectations
Trade Shows	Small group presentations of specific functionalities required to meet the healthcare home requirements; each clinic visits all six topics	Understanding of the functionalities
Iteration Planning (I)	Clinic teams develop a 30-day "iteration" plan to implement selected functionalities	30-day action plan
Iteration Planning (II)	Clinic teams develop a 60-day "iteration" plan to implement selected functionalities	60-day action plan
Trade Shows	Small group presentations of specific functionalities required to meet the healthcare home requirements; each clinic visits all six topics	Understanding of the functionalities
Iteration Planning (III)	Clinic teams develop a 90-day activity plan to implement selected functionalities	90-day action plan
Balancing the Operating Model	Planning for implementation while respecting operating conditions … balancing the load	Implementation plan

Table 4. Key Clinic Functionalities.

Phases	Functionalities
Phase 1	• The clinical care team model • The adult preventative care package • A set of minimum standard processes, including team "huddles," operations meetings, message handling, telephone routing, in-basket management, etc.
Phase 2	• 10 additional care packages • Achievement of the clinical health home requirements as stipulated by Minnesota regulations • Establishment of dedicated population panel management resources
Phase 3	• Implementation of appropriate and well-managed care transitions • A referral management process • Processes to minimize and manage hospital admissions
Phase 4	• Programs for measuring diabetes, Chronic Obstructive Pulmonary Disease (COPD), asthma, Coronary Artery Disease (CAD), and Chronic Heart Failure (CHF) treatment quality • Standardization of chronic patient care management processes

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accomplish over a particular time frame according to the accountable care or healthcare home model. It was called an "iteration" plan because the expectation was that the clinic could only go so far, on its own, before it needed the opportunity to share its progress with other teams, learn from their experiences, ensure that the capabilities they were building were complementary with the other functionalities in the network, and then move onto the next iteration of capability building. This 30-day effort was followed by the development of a 60-day iteration plan. The teams then engaged in another round of trade shows, focused more around Phase 3 and 4 functionalities, as well as final rounds of iteration planning were performed. Each clinic left the meeting with a 30–60–90-day plan for achieving certification. The goal was to establish these functionalities in all 40 clinics by September 28, 2010, when the large group of 150+ people from across Fairview Clinics would reconvene to discuss and learn from each other the challenges and benefits of large-scale implementation and innovations.

The change process used a wide variety of learning mechanisms designed to carry out the transformation. One of the most effective was the use of identifying best practices in the design and performance of a specific functionality and then communicating that design to the network. Each clinic could then pull that capability into their design. These discoveries were not pushed but pulled. That is, the clinics were "on the lookout" for designs implemented by others so that they could rapidly change without having to

"reinvent the wheel." In addition, FMG provided information resources and training to leverage the best practice. Other effective learning mechanisms included a central website that transparently tracked the progress of all the clinics and case study events the clinics could attend. Essentially learning was the fuel to improve speed and performance of the transformation.

Acting and Adapting: Leveraging the Network for Learning

The work system design that supported the Act and Adapt cycle was based on a community metaphor. As shown in Table 5 each clinic was conceived of as a "block" in a town that was composed of several houses (clinical care teams). Multiple clinics became neighborhoods, and multiple neighborhoods became a town. The logic of the act and adapt cycle was that more frequent meetings should occur at the block level than the town level to increase information sharing and learning at the local level. Shared learnings at the local level were raised to the neighborhood and the town.

According to the care team model, care teams came together for daily "huddles" to discuss issues about individual patients as well as ways to improve patient flow and care processes. On a weekly basis, the "block" (e.g., clinic) would meet. At each point in the 30–60–90-day iteration

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Table 5. Work Innovation Network Nodes and Learning Activities.

HOUSE = 1 Clinical Care Team
- Huddles daily; may utilize twice-a-day iteration opportunities
- How is work changing? How are we working together?
- What are we learning together? Fail fast
- Team Building/Panel Management (Phases 1 and 2)

BLOCK = 1 Clinic
- Weekly Meetings – how do we learn from other teams?
- How is overall clinic changing/adapting?
- Team Building/Panel Management (Phases 1 and 2)

NEIGHBORHOOD = 4–6 Clinics
- Meet every 30 days – it's an opportunity to "Catch your breath"
- What can we learn from other clinics?
- How is our learning progressing?
- Local innovations/optimizations to tie in additional clinic sites

TOWN (FMG) = Multiple Neighborhoods
- Meets every 90 days – Town hall meeting
- What has been learned in neighborhoods?
- What best practices can be adopted by the entire town?

plan, the neighborhoods would come together to see what functionality was approved, reflect on how and why changes were implemented, and help each other plan for the next iteration. Finally, town meetings were convened every 90 days.

Even with the 30–60–90-day iteration plans in place, a considerable amount of support was necessary. Harrington noted that, "Coming out of the 'big bang' event, one of the things we did to get the WIN up and running was assign a performance excellence person to each clinic to help deploy the new care model. This helped to meet people's expectations that resources would be made available to support the changes." Each performance excellence person was assigned a "neighborhood" (about 5 clinics). The neighborhoods then became the 30–60–90-day context for diffusion.

The execution of all the changes in a short period of time was an overwhelming amount of work. Through the 30–60–90-day iteration plans and neighborhood meetings, a lot of effort went into keeping track of where the "heat" was. The neighborhoods were on the 30-day cycle and the first meetings varied widely in their effectiveness. By the time of the 60-day neighborhood meeting, a common agenda and a "tell us what you are learning, how do we rely on each other" methodology had formed that was extended to the 90-day meeting. The local clinics were very proud of their accomplishments and it was difficult to establish a balance between "this is the best practice, adopt it" and "that won't work here, our way is better." Harrington's team created the "True North" dashboard that scored each clinic on how well they were meeting their 30–60–90-day objectives and rolling that up to track overall progress.

As the system approached the end of the 90-day cycle, everything and everyone became overwhelmed; there was a need to slow down and consolidate progress. The clinics were encouraged to agree on what had been done and to prepare for the healthcare home certification visits. By the time the state of Minnesota surveyors came out, the clinics were able to show how the new work processes actually operated. The certifiers went to 10 random clinics, asked the same questions, and kept getting the same answers. They were so surprised by the consistency that, despite invitations to visit the other clinics, they did not. They were amazed that the work had been accomplished in all 40 clinics.

From Accelerated Innovation to an Optimized Learning Network

Following the certification announcements, the clinics entered into what Martinson, Overton, and Harrington called the "optimization" phase. Any innovation is always characterized by a lot of variation in the way a process

or activity is carried out and requires time and effort to optimize. Once a process is optimized and formalized, it is more programmable and can be diffused as best practice more easily. Moreover, while the WIN project accelerated change in 40 individual and geographically distributed clinics, the clinic network needed to start acting like a system if it was going to learn and address population health issues.

The optimization process included the following activities:

- Setting up and formalizing coordination and communication
- Establishing a WIN bank for best practice sharing and diffusion
- Establishing supportive systems and processes to round out the design

First, since the certification process, Fairview Clinics has been developing the data management and communications process to enable the measurement of population health metrics and the sharing of best practices. Measuring the health of served populations is a critical ingredient to laying claim to health savings reimbursements. With the establishment of the database, Fairview Clinics could start to drive medical care from the center by identifying high risk patients, where the system was performing (and where it was not), building appropriate care plans, establishing responsibility for executing certain protocols, and generally supporting clinics in the delivery of care.

Prior to this work it was difficult to identify which patients considered a Fairview Clinic their home for care. Working with our payer partners we were able to identify populations "attributed" to FMG. An FMG metrics team applied the Episode Treatment Group (ETG) methodology to identify our most at-risk patient populations. An advantage the medical group had was access to clinical data as well as claims data from payers to enrich the risk stratification process. Additional metrics included identifying the burden of chronic diseases, such as diabetes, cardiovascular disease, lung disease, and depression in our population, frequency of age appropriate screening and preventive services, and gaps in care.

A second important activity was the establishment of the "bank." The bank was an electronic depository of care packages, clinic procedures, functionalities, and other learnings for development and diffusion. The neighborhoods and towns continued to serve as a communication and learning infrastructure, but the bank represented a central location where changes and best practices can be documented and formalized. Fairview Clinics is currently working to encourage people to both push information into the bank and pull information from it.

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While the terminology has changed and the focus has shifted to optimization activities, FMG still utilizes a central electronic repository to capture and diffuse the collective knowledge and experience of the medical group. Standard rooming processes for medical assistants and pre-visit planning questionnaires are recent examples of optimization work generated by the network capability and diffused via the "bank."

Finally, the certification work was primarily oriented toward implementing new care-delivery processes. The Fairview Clinics had to begin focusing on other aspects of organization design required to sustain these changes. Among the systems, structures, and processes adopted were:

1. Physician leaders were trained through the Fairview Leadership Academy on principles of adaptive leadership (Heifetz & Laurie, 1997) and the skills needed to inspire culture change. These became important components of leadership responsibility and accountability in the system. More than 1,200 physicians, nurses, and other staff members have participated in simulations designed to foster teamwork and behavior changes.
2. FMG redesigned physician and staff compensation and recognition. The new primary care compensation model rewarded performance that drives success toward the "Triple Aim." Productivity is measured by the acuity-adjusted patient panel and significant portions of provider salary are based upon clinical quality, patient experience, and total cost of care. This created a line of site between provider behaviors and the Triple Aim. Rewards were also based upon how the team performs in addition to individual performance. By receiving a base salary with incentives for their performance on quality and cost measures, the physicians are better aligned to the new contracts and way of working.
3. Performance management changes for the staff have focused on recognition more than compensation, although some bonuses have been arranged for front line employees if the patient satisfaction scores improved. For example, the organization has focused on recognition at the local level for achieving different quality targets, implementing challenging work processes, and so on. Neighborhood and Town Hall meetings celebrate and recognize Fairview Clinics accomplishments.
4. Formal IT systems reporting processes were augmented with an informal system that posted work and team results for all clinics. The transparency and visibility of these results supported sharing and learning of best practices as well as creating a level of accountability.
5. A variety of flexible resource allocation systems have also emerged or been implemented. For example, the FMG executive team has adopted

weekly updates on the network's performance and these updates are the source of problem solving discussions and decisions to shift resources to their best use. This has happened frequently and results in a system for moving performance improvement resources to support teams that are struggling. This active process has demonstrated senior leadership commitment to the process and facilitated the shortening or lengthening of implementation cycle times if teams were overwhelmed or had had slack capacity.

Results

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As with most large healthcare systems, Fairview has a comprehensive data collection, analysis, and reporting capability allowing detailed measurement of performance over time. The primary focus of this project was to implement the PCMH model, certify the clinics, and simultaneously improve the three critical performance objectives of the "Triple Aim:" (1) the health of the population served, (2) the affordability care, and (3) the experience of each patient.

- In terms of improving the health of the population served, FMG's clinical outcomes across a broad range of measures, has shown a steady trend of improvement in six of eight categories shown in Fig. 5, albeit small in some cases.
- Affordability, as measured by the total cost of care per member per month (PMPM) has also improved. Data from one large commercial payer is reflective of results across a broad range of payers in demonstrating decreased total cost of care compared to trend. Fig. 6 illustrates a less than 1% variation in cost of care over the last four quarters and represents a significant flattening of the cost curve. Fig. 7 demonstrates for the most recent measurement period (Q2 2013), that FMG's costs were $20 below expected target for year-to-date performance and a year-end trend of at least $10 below target. Much of this improvement was driven by decreased utilization of hospital-based services, such as emergency room and in-patient utilization rates, which are central goals of the medical home (Figs. 8 and 9).
- Patient satisfactions scores have shown a steady improvement from 67.4% favorable in 2008 to current scores of 79.5% in late 2013. The largest gain in patient satisfaction, 7.4 percentage points, occurred during and shortly after the project, suggesting a real and stable increase.

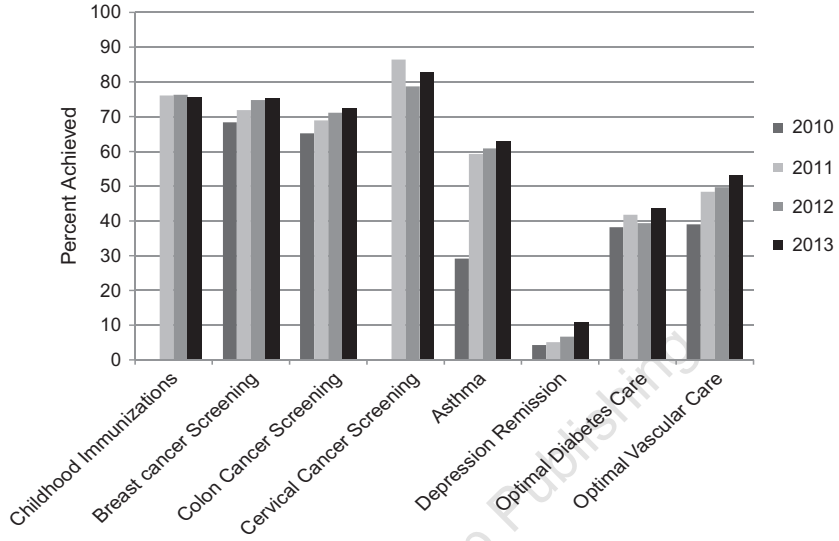

Fig. 5. Clinical Quality Trends.

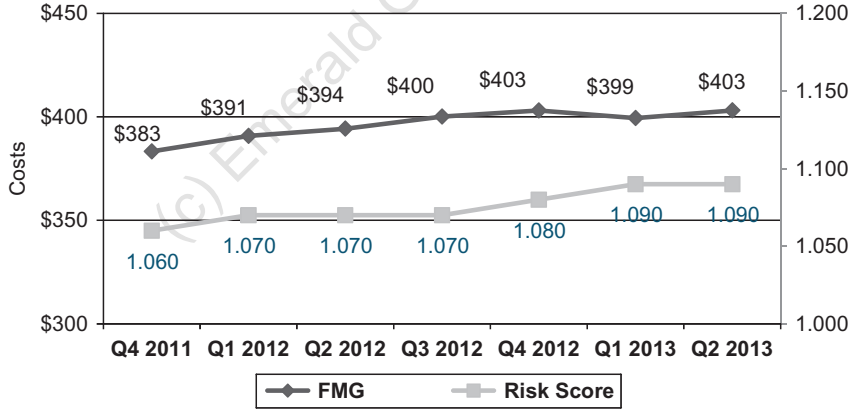

Fig. 6. Acuity-Adjusted Cost Per-Person-Per-Month (PMPM) and Risk Scores.

The most notable performance outcome for FMG was its accelerated time-to-value performance. As presented in the introduction to the case, 35 Fairview primary care clinics were certified by the Minnesota Department of Health as healthcare homes in 10 months compared to all other

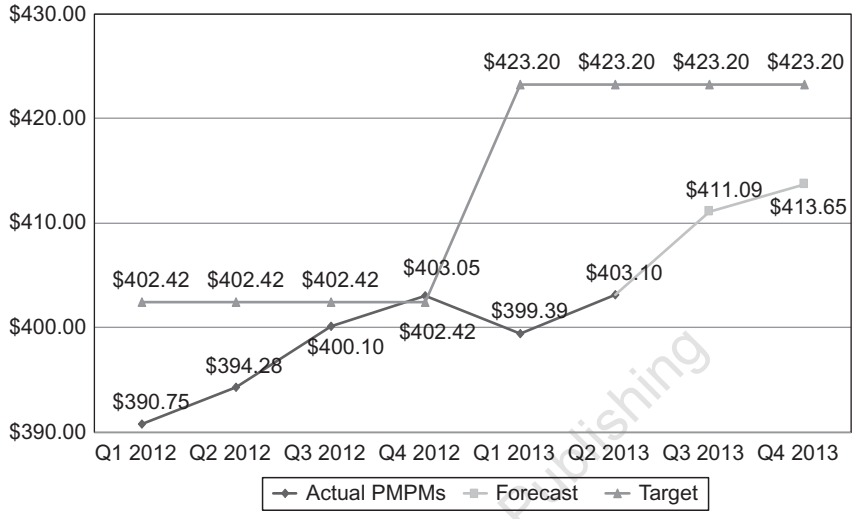

Fig. 7. Total Cost of Care versus Target.

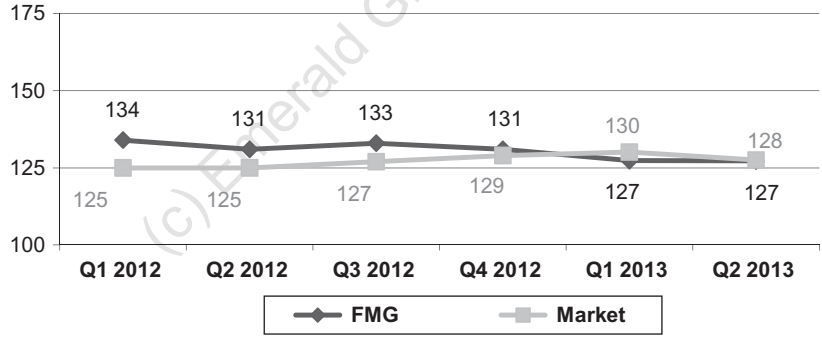

Fig. 8. Emergency Room Visits (per 1,000 Patients).

providers in that state who were only able to certify a few clinics. This suggests a 5–10 times improvement in the number of certified health homes in the same period of time that can be directly attributed to the change and redesign process.

Supporting that time-to-value performance, the adaptive work system methodology has continued to reap rewards for FMG as the work shifted to optimization activities. Using two groups of two to four clinics as the

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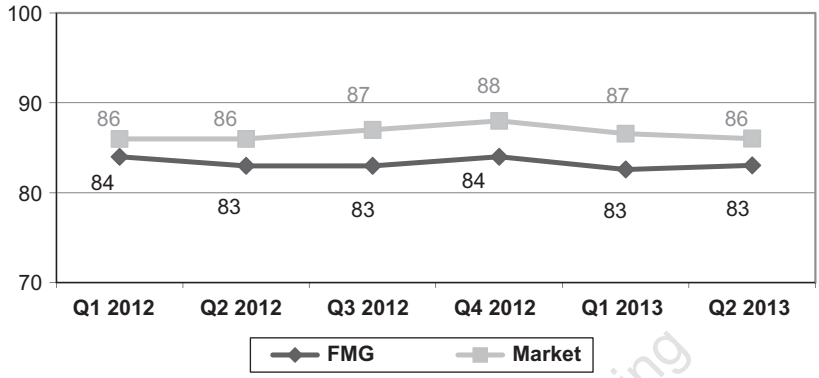

Fig. 9. Inpatient Admission Rates (per 1,000 Patients).

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base unit for work optimization, the clinics moved the neighborhood sharing and huddles process to a virtual platform via conference calls. During the calls, one group would share work process improvement ideas and the other group would test and confirm the work of the other group. Weekly neighborhood meetings were also done virtually where the other FMG clinics could react to the activities of the other clinics and provide input as standard work was developed and tested. The final product would then be released to the innovation bank and socialized at the next Town meeting. The products of these optimization cycles included standard work processes for pre-visit planning, medical assistant rooming, patient questionnaires, and panel management. The pre-visit planning and "super-roomer form" processes were estimated to save a medical assistant approximately 3–5 minutes per patient, the equivalent of one hour per day. The original innovation and learning network thus transformed to a more efficient operational model to leverage technology, manage the cost of transformation, and still deliver "shippable product" across a large network rapidly. As the organization reflected on its process, the clinics recognized how much the workflow changes increased their capacity to take on new work at the individual clinic level but also at the FMG level.

DISCUSSION, REFLECTIONS, AND CONCLUSIONS

The ACA and its derivative organizational and systems implications were the context for a transformational change at the Fairview Health Services

and more importantly for the FMG. The adaptive work system and work innovation models were formalized as an innovation engine that created and delivered new value. Both in FMG and elsewhere at Fairview Health Services, work was initially organized through a large-group mobilizing session called a DA and followed up by a series of activities that reflected the iterative act and adapt implementation cycle. This approach to work organization has increased the system's speed to value, agility, innovation, and social capital, and it has significantly increased FMG's ability to learn.

Discussion

FMG's successful implementation of an ACO and primary care medical homes (PCMH) redesign can be attributed to a number of factors, including unwavering leadership commitment, full visibility and transparency for the work and results, the flattening of the normal hierarchy found in medical groups, the Big Bang event and the way the iteration plans were implemented, attention to the socialization of the change process, and the agility and flexibility to shift direction, adjust pace, and redeploy resources to keep teams engaged to do the work. These different elements reflect and support the prior research on healthcare reform. In particular, research suggested that the relationships between an ACO and PCMH were such that implementation should happen together to improve the likelihood of success. This study confirms the advantages of that thinking. FMG and the larger Fairview Health Services worked together, shared resources and information, and coordinated efforts that facilitated the transformation.

Prior research also supported the importance of a team-based integrator role. The "house," or clinical care team within a particular "block" or clinic, was an effective basis for patient care, innovation development and diffusion, practice development, and coordination of services. The reduced emergency room and in-patient admissions are one indicator of that effectiveness. More specific data on patients' perceptions of coordination and feedback from specialist physicians involved in a patient's treatment would help to confirm this observation.

Finally, we induced from the literature a suggestion that the implementation process was as big an issue as the PCMH's financial structure or care-delivery design in explaining outcomes. This study, with its explicit emphasis on integrating design changes and the implementation process together in support of network learning, is an important affirmation of that belief.

The Big Bang, 30–60–90-day iteration plans, and optimization processes supported Triple Aim objectives as well as culture change within the Fairview Clinics. Beginning with the Big Bang, FMG's physicians and staff worked together in completely new ways. It is a story of comprehensive, high-involvement, dynamic, and accelerated change and learning. For example, technology or care-delivery process changes were only one piece of the implementation effort and cultural change process. The technological and work-related changes had to be integrated with other organizational design and talent management changes to create a system of activities. The Fairview Clinics has learned that there is a lot of adaptive culture change that needs to happen concurrently and they are doing that through Heifitz's Adaptive Leadership model. Physicians in particular are giving up pieces of work they had traditionally identified as their own but really could be done by someone else. The WIN process was critical, but so too is the need to help people adapt from change to change. The structural changes, planning and goal setting, communication, and performance management changes are complimentary to the work changes and will ensure that the system drives the required cultural changes.

In addition, focusing on the social and cultural impact of change has been critical to the long-term sustainment of the learning network. While FMG embedded structure and process to support socialization of the change process within the WIN, the organization has identified this as an area where more work needs to be done. The organization has learned that an important cultural artifact of the old model was the reticence, reluctance, and lack of skill in raising difficult subjects, including feeling regarding a loss of control, fear in challenging results or authority, or expressing stress and frustration. An important key to continued progress is figuring out how to draw out those tensions from professionals who have been socialized to internalize those emotions in service to patients.

Reflections and Conclusions

This case suggests several important alternative views regarding the logic of system-wide change and transformation. For example, the FMG case suggests that organization change might best be viewed from a product design perspective. Like good product design, organizational capabilities can be viewed as a bundle of integrated functionalities where a functionality represents a product or service to be designed and developed through multiple iterations. It eventually delivers and performs to requirements

(e.g., quality, cost, experience) and is accepted as valuable by the customer or end user. When transformation is driven by customer requirements, an iterative methodology compared to a hierarchical, linear, and traditional project management methodology may be preferred. The Fairview case suggests that the adaptive approach to building new organizational capabilities is superior to traditional change approaches.

The case also suggests that the concept of a network can be usefully adapted and applied to complex work and change situations. A healthcare work system organized as a network whose parts continually interact and self-organize is able to discover the fastest solutions to creating new value or organizational functionality. Sponsors enable this adaptive process through the design of the adaptive work system. In most traditional change processes, the system is organized into vertical and lateral designs with specific points of accountability (i.e., steering committee and design team) that "drive" the change process. However, by organizing multiple network nodes that self-organize and design in parallel, the system leverages fast learning and discovery, empowers the individual nodes themselves, and speeds-up the design process with best practices standards. Traditional approaches typically have a small number of design pilots, and in most cases one design pilot, and then try to scale or diffuse the change through the hierarchy, only to be resisted as "not invented here."

In general, system-wide information processing is significantly greater using a network model and allows a level of participation and involvement that is much greater and more meaningful than a vertical–lateral model. In the adaptive work system, networks behave under adaptive principles, such as self-organization, interactions defined by information exchange requirements, iterative learning, discovery, and emergence, that are different from an optimization set of principles that are prescriptive, top-down, expert, and milestone driven.

The difficulty FMG ran into was wrestling with the tension of needing to operate as a system and empowering its clinics and people. Care model and care package innovation began, reflecting Moen's beliefs, with the assumption that local participation in the change process was critical to success. As that success was achieved at the local level, the need to leverage the system and address population health issues emerged but had to be approached in a manner that did not violate the assumption. Instead, the organization had to learn how innovate, optimize, and diffuse knowledge and learning with the same values of participation and involvement, but did so in a way that resulted in coordinated outcomes. Such an

"ambidextrous" organization must find a way to balance innovation, change, and creativity with reliability, efficiency, and predictability. The Fairview Clinics are working to build the capability to drive innovation and optimization in local clinics, but to also build the mindset that what is innovated and optimized in one clinic, on behalf of the network, is worthy of acceptance and adoption by the whole. Extreme ownership of work processes at the local level can sub-optimize system performance at the network level. Building that mindset and cultural change is a primary area of focus.

In a world of increasing uncertainty, complexity, and task interdependence we will most likely see an increase in adaptive work designs. The challenge, however, is how to balance the right mix of optimization and adaption into the organizational design. Upon reflection, Fairview found this to be their greatest challenge, a challenge that many scholars, researchers, and practitioners can identify with. However, ambidexterity is not simply about whether a firm can pursue efficiency and innovation but about developing the dynamic capabilities necessary to compete in new markets and with technologies that enable the firm to survive in the face of changed market conditions. The Fairview case illustrates the notion of dynamic capabilities at work. The adaptive work design process allowed FMG to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments. FMG built new organizational capabilities to support a new emerging healthcare reform value-based business model. Essentially, this novel approach to organizational design, manifest in the decisions of FMG's leadership, helped FMG reallocate and reconfigure organizational skills and assets to permit Fairview to both exploit existing competencies and to develop new ones. FMG was able to make the transition from operating in its pay-for-service business while orchestrating its assets to allow them to develop the requisite new capabilities to compete in the new value-based business.

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