FROM VOLUME TO VALUE

THE TRANSITION TO ACCOUNTABLE CARE ORGANIZATIONS

April 2011
What issues and challenges are hospitals, health systems and medical groups encountering as they position themselves to perform well as accountable care organizations (ACOs)? What are the lessons learned? What are the implications for strategy? What are the policy implications? Addressing these and related questions is the subject of case study research conducted by McManis Consulting for the American Hospital Association.¹

¹The four case studies were conducted between June 1 and December 31, 2010. Responsibility for any errors in the case studies lies with McManis Consulting, not with the sponsoring organization, the American Hospital Association.

### OVERVIEW OF CASE STUDY ORGANIZATIONS

The case study organizations were selected to represent a variety of organizational structures, sizes, market conditions and approaches; however all four have taken significant steps to position themselves as ACOs.

**New West Physicians (New West)**
- A 68-physician primary care group operating in the western and southern portions of the Denver, CO, metro area.
- Was developed “from the ground up” to manage care for a defined patient population.
- Has already demonstrated the ability to meet quality standards and “bend the cost curve” substantially (working with a Medicare Advantage plan, accepting and managing full medical risk for primary and specialty physician care).
- Drives the care process, working with specialists, hospitals and others as needed.
- Employs its own hospitalist group.

**Metro Health**
- A single hospital system (208 beds), with an integrated primary care group, operating in the Grand Rapids, MI, area.
- Developed strategically located ambulatory care plazas around the service area, including offices for its integrated primary care group.
- Installed a single electronic health record (EHR) (Epic) in ambulatory as well as inpatient care locations.
- Is leading its contracting strategy with its primary care group – beginning with gain-sharing with commercial payers.
- Is countering its size disadvantages by leading the development of a western Michigan strategic alliance – including a regional ACO, and supply chain and revenue cycle management capabilities.

**Memorial Hermann Healthcare System**
- The market-leading health system in the greater Houston area, with nine hospitals, 120 care locations, 3,600+ physicians, and a close alliance with the University of Texas Medical Branch – Houston and its faculty.
- Is working to “transition the entire system on the fly” to an organization that can thrive under performance-based contracting.
- Has facilitated development of, and is working in close partnership with, a 2,000+ physician clinically integrated network (MHMD).
- Has pilot tests under way to manage the care of the health systems' employees and self-pay patients and is in negotiations to contract directly with a major employer.

**Catholic Medical Partners**
- A clinically integrated network operating in and around Buffalo, NY, including 900+ physicians, Catholic Health System (three hospitals, 1,083 beds), and Mount St. Mary’s Hospital (179 beds).
- Is receiving the majority of its start-up funding from the three health plans with the largest market share in Buffalo.
- Assists independent member practices by funding and training care coordinators (typically RNs), who work in physician offices, improve patient flow and assume key responsibilities in patient communication and chronic disease management.
- Is participating in a Buffalo area-wide health information exchange designed to achieve interoperability between all commonly used EHRs in the area.
The case study organizations began their transitions several years ago – driven by a conviction that the future held changes in the organization and management of health care, regardless of the details of federal and state reform legislation. Key characteristics of the case study organizations are described below and summarized in Exhibit 1 on the previous page.

**New West Physicians (New West).** New West was formed primarily by merging smaller primary care practices. The group has contracted with Secure Horizons, United Healthcare’s Medicare Advantage plan, for a fixed payment for professional (primary care, plus specialty care) services for approximately 10,000 lives for the past 10 years. Performance has been excellent on the established quality and patient service measures. Substantial cost savings have accrued to Secure Horizons, and substantial performance payments have gone to New West’s physicians.

New West was selected as a case study of a primary care physician group in part because it: (a) already has many of the characteristics that are envisioned for ACOs; (b) has a track record of improving quality and lowering costs (i.e., “bending the cost curve”); and (c) has done this without formal affiliations with specialists or acute care hospitals.

New West’s physicians use a common electronic health record (EHR) and operate with support systems and an incentive structure designed for performance-based reimbursement. New West employs its own hospitalists and attributes part of its success to this strategy. The group also works closely with a carefully selected group of specialists who participate in the development of protocols and chronic care management strategies and then receive and manage referrals.

**Metro Health.** Metro Health recently developed a replacement campus and moved from downtown Grand Rapids to Wyoming, MI, a nearby suburb. Metro operates a geographically distributed network of primary care practices and ambulatory facilities, all linked with a common EHR.

Metro was selected as a case study of a single-hospital health system in part because it: (a) is effectively leveraging its closely aligned primary care group and its information technology backbone; (b) has a track record in working under pay-for-performance reimbursement with health plans; and (c) is working to offset the disadvantages inherent in its relatively small size through a series of strategic alliances.

Conscious of its relatively small scale, Metro is working to organize a regional Epic service center, owned by multiple hospitals, where economies of scale can be achieved and sophisticated Epic-knowledgeable staff can be attracted and retained.

Metro has also played a leading role in establishing Pennant – a regional strategic alliance that includes Trinity Health (the nation’s second-largest Catholic system) and the University of Michigan Health System. Pennant envisions passing on Trinity Health’s scale economies in areas such as supply chain and revenue cycle management to smaller, independent hospitals and medical groups in Western Michigan. Pennant also anticipates developing a regional ACO.

**Memorial Hermann Healthcare System.** Memorial Hermann has facilitated the development and evolution of MHMD, the system’s closely affiliated independent practice association. MHMD has 3,600 physicians and includes virtually all physicians who practice regularly at the system’s hospitals. As of October 2010, 2,023 of MHMD’s physicians also had become members of MHMD’s clinically integrated network (CIN).

Memorial Hermann was selected as a case study of a large health system in part because it: (a) is it is a complex health system that is working to maintain its market leadership while “changing on the fly” to value-based purchasing; (b) offers an example of the issues involved in developing a clinically integrated network under challenging, highly competitive market conditions; and (c) offers an example of a staged approach to accepting and managing risk.

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2The term “clinically integrated network” is used in this report to mean a group of physician practices and/or other health care provider organizations that share information and conduct joint analyses, use common care protocols and care management strategies, and are sufficiently integrated to meet the Federal Trade Commission’s standards for negotiating as one organization with payers.
As a first stage in preparing for value-based reimbursement, Memorial Hermann has entered into a performance-based agreement with MHMD’s clinically integrated network to manage the health needs of its employees and its indigent (self-pay) patients. Memorial Hermann and MHMD are also negotiating with a major Houston employer to manage the health of a large segment of employees and families.

Catholic Medical Partners. Catholic Medical Partners was initially formed with the merger of five smaller independent practice association (IPAs). A high percentage of Catholic Medical Partners member practices have one to three physicians; more than one-third of the member physicians are primary care practitioners. Catholic Medical Partners includes the Catholic Health System (a three-hospital system) as a member and a close strategic partner. Mt. St. Mary’s Hospital, an independent hospital, is also a Catholic Medical Partners member.

Catholic Medical Partners was selected as a case study in part because it: (a) is advanced in developing the infrastructure required to perform well as an integrated system; (b) has developed close, cooperative relationships not only with health systems but also with commercial health insurers; and (c) illustrates the leadership issues and challenges involved in transforming independent practices into a cohesive care delivery organization.

Health plans in the Buffalo, NY area have entered into agreements with Catholic Medical Partners. These agreements involve not only performance-based payments for care but financial support for Catholic Medical Partners’ care management infrastructure. Collectively, the health plans have provided the majority of the up-front funding required to implement Catholic Medical Partners’ care coordination, disease management and electronic health record strategies.

Readers are encouraged to consult the four case study reports.3

As a group, the four case studies illustrate a variety of different approaches to providing accountable care. The case studies also illustrate many of the common requirements and hurdles that the journey entails, and some common lessons learned.

DEVELOPING CARE NETWORKS
The case studies represent alternative forms of care networks and different development paths. New West Physicians and Metro Health embarked on their journeys in the 1990s. New West was established in 1994. CEO Ruth Benton points out that New West was built “from the ground up” as a primary care group capable of managing care for a defined population and entering performance-based contracts. Metro’s vision since 1993 has been to develop a system capable of coordinating and seamlessly delivering ambulatory and inpatient care, tied together with an EHR.

Memorial Hermann’s system was formed from the merger of two existing health systems in 1997. Memorial Hermann immediately set out to build a geographically distributed, market-leading, sustainable health care system in a fee-for-service environment. The push to transform the system so that it can continue to thrive under performance-based payment began in 2005. As CFO Carroll Albaugh observed, “In our early years, we were about building a system and building financial strength. Now, although we are not averse to bricks and mortar, and we continue to build our finances; our clear focus is on IT, care management and physician networking.”

Catholic Medical Partners began as five physician hospital organizations, each of which thought of itself as a contracting entity. Catholic Medical Partners’ current vision – to be a continually improving care management organization – was initiated in 2005.

Despite their differences, each of the case studies includes five common factors that appear to be critical to their success.

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3The companion white paper and case study summaries are available at www.aha.org/ACOcasestudies.
Strong, consistently committed leadership was present in each of the case study organizations and appears to be an essential ingredient. New West Physicians’ founding physicians – including Dr. Tom Jeffers – had the vision and were fully committed from the outset to forming a group that would be capable of accepting and managing risk for a defined patient population. The selection of Ruth Benton as CEO also was a critical factor in the group’s development. Benton has been a strong driver and an ongoing source of technical expertise, follow-through and innovation.

At Metro Health and Memorial Hermann, the system CEOs – Mike Faas and Dan Wolterman, respectively – provided the initial vision and led the learning and commitment processes of their boards, key physician leaders, key staff members and others. Both CEOs continue to set the tone and direction and are now seen as “the face and voice” of their organizations’ initiatives in this area. In each case, a highly credible physician leader (Dr. Frank Belsito in the case of Metro and Metro Enterprises Physicians, and Dr. Doug Ardoin for Memorial Hermann and MHMD) has emerged as a “second face of the transition” and a key leader of day-to-day change.

Catholic Health CEO Joe McDonald organized the system to support its physician network. The selection (by McDonald and key physician leaders) of Dennis Horrigan as Catholic Medical Partners’ CEO was key in determining its direction. Horrigan, who had been responsible for provider network development at one of the major health plans, had personal credibility with physicians, health system executives and health plan leaders. This positioning and personal credibility played a key role in determining Catholic Medical Partners’ path and pace of development. Soon after his arrival, Horrigan recruited Dr. Michael Edbauer as chief medical officer. Horrigan and Edbauer have become the “face of Catholic Medical Partners,” with McDonald as their close and committed supporter.

In each case, the key leaders have surrounded themselves with a multi-disciplinary team of physicians, practice managers, financial managers, IT experts and others.

Each case study organization has one or two leaders who serve as the “face and voice” of the care network. The personal characteristics of these leaders appear to be important; they must be trusted by multiple parties. At least one of the top two may need to be a physician.
Organizational commitment(s). Each of the case study organizations developed over several years, required substantial up-front investments, and involved significant risk-taking. And, leaders of each organization would readily acknowledge they still have a considerable distance to go.

New West Physicians was founded in 1994 and took increasingly aggressive steps each year to integrate its physician practices, but only installed its EHR in 2009. Metro Health began developing Metro Enterprises physicians in strategically located ambulatory sites in 1999 and installed its EHR in 2005. Memorial Hermann initiated its clinically integrated network in 2004 and is still quite a ways off from having all physicians participating in its clinically integrated network on an EHR.

Catholic Medical Partners began transitioning to an integrated network in earnest with the arrival of Horrigan and Edbauer in 2005 and expects to be ready to become a Medicare ACO in 2012. The required investments and related risks undertaken by the case study organizations are discussed later in this White Paper. Other forms of commitment – including leadership commitment and risks of changes in relationships with payers, specialty physicians and others – are substantial.

In several of the case studies, sustained commitments by multiple organizations are required. For example, Catholic Medical Partners’ success to date has required the ongoing commitment of many physician groups, a health system and seven health plans. The collective experience of the case study organizations is that this type of “virtual integration” requires the development of trust early in the process.

During the development period, many relationships shift. For example, New West’s physicians have identified hospitals, specialists and other organizations (e.g., post-acute care providers) that they want to work with. However, performance data are continually being received and analyzed, new care management strategies are proposed, and expansion plans are developed. Any and all of these activities lead to changes in satisfaction with the relationships, and ultimately can lead to changes. Similarly, Metro

Health’s relationships with specialists and allied organizations such as home health are also routinely re-evaluated and changed.

Memorial Hermann is working with the physicians who are part of its clinically integrated network to plan for adding primary care practices. The physicians who are currently part of the network are making the decisions as to which practices will be invited to join. Meanwhile data are being analyzed and made public regarding physicians’ quality and patient satisfaction performance. Memorial Hermann’s hospital leaders fully understand that these new interactions with private practices will change traditional hospital-physician relationships. Over time, they expect that the clinically integrated network and the physicians on its medical staff will be the same.

Taken together, these relationship changes are very significant, and they require intense, sustained commitment by Memorial Hermann’s leadership and its governing board. The same is true for the other case study organizations.

Notably, Dan Wolterman, CEO of Memorial Hermann, and Joe McDonald, CEO of Catholic Health System (the system sponsor of Catholic IPA), used the same language to describe the shift that was taking place toward leadership of their health system by physicians in their clinically integrated networks: “We are basically turning over the keys.”
### UP-FRONT INVESTMENTS

**Substantial up-front investment is required. In the case of health systems, some of these investments are already in the pipeline, but many are not. Many of these costs continue over time.**

**Uses of Funds (examples)**
- Information technology (EHR, interoperability, obtaining and analyzing claims data, etc.)
- Staff (umbrella organization management, quality leadership, analytical team, liaison team, IT support, financial management, contracting and risk management, etc.)
- Support for governance and quality processes
- Care coordination in physician practices
- Developing medical homes
- Obtaining the right ambulatory network configuration (right locations; right sized, cost effective practices, optimized ancillaries, etc.)
- Professional support (legal, IT, other)

**Sources of Funds (examples)**
- Investments by health systems (from prior earnings, or from borrowings)
- Health plans
- Grants
- Offsets from early years' operating revenues
- Private equity capital
- Bank loans to medical practices

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**Up-front investments.** All four case studies have spent millions in start-up costs. Example sources and uses of funds are shown in Exhibit 3 above.

While the capital and operating funds needed for IT and care coordination are the largest items, staffing and organizational costs are significant. And, these costs need to begin several years in advance of the arrival of any offsetting revenues.

Three important cost elements relate to the primary care practices in the network: establishing effective care coordination in the primary care practices; having the practices become medical homes; and developing the practices in efficiently sized units. As discussed later (under Care Management Strategies), Catholic Medical Partners has taken several actions to “jump start” its primary care practices. One of its most significant actions is to cover the cost of adding care coordinators in its primary care practices. Care coordinators (usually registered nurses) communicate with patients, off-load selected patient intake and follow-up tasks from the physician, implement chronic disease management strategies within the practice, and serve as an important point of coordination among primary care practices and across other post acute-care providers.

Catholic Medical Partners, New West and Metro Health all either have their primary care practices certified as medical homes, or expect to have them certified within the next 24 months. All three organizations have also worked to right-size their primary care practices. Leaders in each organization believe the best size for a primary care practice is two to four physicians (plus physician extenders). Achieving these sizes (usually through recruitment and/or practice mergers) has required investment of time and dollars.

For New West, the required start-up funds came from a private equity firm ($5 million) and a bank loan ($600,000). Most of these funds were used to aggregate existing practices and get them into an efficient configuration. Metro and Memorial Herman funded their network-related costs with revenues from existing health system operations.

Catholic Medical Partners used a mix of funds (including membership dues from physicians and hospitals), plus financial support for infrastructure from health plans.

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The collective advice of case study leaders is that internal incentives must be:
- (a) carefully designed to evoke desired behavior patterns; and (b) significant enough to get physicians’ and other network participants’ attention right away.

Not all incentives to participate were financial. For example, in two of the case studies, specialists were motivated to participate by the opportunity to receive/retain referral relationships from a large, highly regarded group of primary care physicians.
Incentives. Leaders in all four case study organizations stressed the importance of carefully designed incentives. Several aspects of incentive design were mentioned:

- Carefully negotiated performance-based terms for reimbursement (consistent with the organization’s stage of development);
- Carefully designed incentives for physicians (including integrated physicians, independent primary care practices, independent specialty practices, hospitalists …);
- Incentives for other network components (e.g., home health, rehabilitation, hospice care).

New West was in the strongest organizational position to establish incentives in that all member physicians were in the same organization and were subject to a single board of directors. Also, New West places a strong emphasis on keeping incentives aligned with desired behavior. The incentives in place for individual physicians (e.g., quality, patient satisfaction and group cost performance) mirror those in New West’s Secure Horizons contract. Also, as a primary care group, New West did not face conflicting incentives when working to reduce hospital and specialty care.

Metro Health’s primary care group also has incentives built into its physician compensation structure; however, Metro is just beginning to develop structures that include other physicians and members of the team.

Catholic Medical Partners reimburses physician groups for their care coordinators and pays a bonus for primary care groups that achieve medical home certification.

All four case study organizations have standards of behavior that must be met, and consequences (ultimately including expulsion) if they are not. However, leaders of the three case studies that involve hospitals all acknowledge that thorny compensation issues lie ahead – the division of revenues, and performance payments, between specialists and hospitals.

Pilot projects.

Early pilots must be substantive, and large enough to test systems and to provide a significant financial incentive to participating physicians. However, they must not be so large as to pose an unacceptable financial risk to the sponsoring organization(s).

Sources of Pilot Projects (examples)

- Performance-based contracts with existing payers and patient populations
- Medicare Advantage programs
- Medicaid programs
- Gainsharing and other pilots with commercial insurers
- The health system’s employees
- The health system’s self-pay patients
- Large self-insured employers seeking to experiment with new models of care and financing

Pilot/market entry opportunities. All four case study organizations saw a need to manage their transition from fee-for-service to accepting performance risk, and potentially to partial or full capitation, to get systems and processes in place and test them before becoming over-exposed financially to the newer approaches. All were looking for the most comfortable places to begin, and for a group of pilot projects over time. (See Exhibit 4.)

For New West, the Secure Horizons Medicare Advantage program provided an excellent place to begin. New West’s Secure Horizons contract represents 20 percent of New West’s patients, and the contract has the effect of capitating New West for the performance risks (but not the medical insurance risks) associated with primary care and specialty physician costs for this population. The agreement has proven highly beneficial to both parties. In the process, New West has proven that it can “bend the Medicare cost curve” substantially while achieving very high quality and patient satisfaction scores.

Secure Horizons pays New West directly for primary and specialty care costs on a per member per month basis. The payment amount has been adjusted to take into consideration the age, gender and health status of New West’s Secure Horizons’ patients. Secure Horizons acts as the claims processor for specialists who care for the designated population, and these costs are debited against New West’s account. There is a settle-up process where New West receives the difference between the capitated rate and the costs of the paid specialist claims.
This provides New West with the experience base needed to go further. Next logical steps include developing similar agreements with other commercial carriers; accepting more risk (i.e., contracting to also manage hospital and drug costs); entering a pilot agreement with a state-level exchange; entering a pilot with Medicare; and/or geographic expansion.

For Metro Health, the natural place to begin was to accept offers of gain-sharing agreements with its two largest commercial carriers – Blue Cross Blue Shield of Michigan and Priority Health. The two carriers represent more than 30 percent of Metro’s patients. However, these initial agreements cover primary care physician costs only and essentially have no downside risk. The agreement has shown that Metro Enterprises physicians can perform under this type of agreement and benefit from bonuses. The next logical step may be to enter broader agreements (e.g., agreements that include hospital and specialist costs) with these two carriers, and/or to enter a Medicare pilot.

In 2010, Memorial Hermann contracted with its affiliated clinically integrated network of physicians (MHMD) to manage a substantial population of the system’s own employees, and to manage the system’s self-pay patient population. This agreement has led to lower costs, and physicians just received their first payment checks (averaging $2,500-$4,000 per physician). Dr. Doug Ardoin, MHMD’s chief medical officer, indicates that these first payments represent a major step forward in perceptions of participating physicians. (“This makes it real,” he said.)

Thus far, Houston’s major commercial carriers have not shown an interest. However, MHMD has drawn the interest of large employers. Memorial Hermann and MHMD are in negotiations with a major employer to accept and manage hospital + primary care + specialist care + drug-related risks for a defined population of somewhere between 10,000 and 60,000 employees and their families.

As discussed previously, Catholic Medical Partners has gainsharing agreements (in addition to financial support for clinical integration) from health plans. Catholic Medical Partners plans to become a Medicare ACO in 2012. In addition, the organization sees the next logical step as contracting with health plans based on population health and a defined medical budget.

INFORMATION FLOWS AND TECHNOLOGY
Case study leaders unanimously agree that access to all clinical and claims data across the care continuum for their patient population was critical to success. Four key components are required: EHRs; timely claims data; a health information exchange (HIE); and supporting analytic software and staff. (See Exhibit 5 on the following page.)

Electronic health records (EHRs). All case studies believe that EHRs are an essential component of a successful ACO. Having as many of the core units as possible on the same medical record is a goal; however, no case study organization expects to receive all of the information it requires from a single EHR platform.

New West has all practice locations on one EHR (Allscripts). Customized interfaces are being developed so that New West can send and receive medical record data to the EHRs used by its hospital and specialist strategic partners. (Some of this work is being funded by the hospitals.) Hospitalists can access the New West EHR from the hospital.

Metro Health has all of its primary care group and ambulatory sites, plus its hospital, on a single EHR (Epic). In 2010, Metro began to use Epic’s capabilities for patients to access their own health records via the Internet. This initiative has been met with very positive patient feedback.

New West and Metro are beginning to leverage the capabilities of having so much basic information on the same EHR; however, both acknowledge they are just

5 A quick glossary of selected information technology terms used in this section:

- Electronic health records (EHRs) are computer-based, digitized records maintained for each patient. Different EHR vendors (e.g., Epic, Allscripts, Cerner) have differences in their software, or “platforms.” They often provide information in different formats and are not necessarily fully compatible. EHRs sometimes include information from multiple EHRs and other sources about a patient’s health. (Footnote continued on the following page...)
scratching the surface of their systems’ capabilities. New West and Metro’s leaders believe, however, that they have a significant leg up by having so much of their network on a single platform. “We wouldn’t be able to do the quality studies we do if we didn’t have all our physicians on the same platform,” notes New West’s Ruth Benton.

Neither of the two large clinically integrated networks – Memorial Hermann and Catholic Medical Partners – expects to be able to get all their physician practices on a single EHR. These organizations are providing funding assistance for their independent practices to install an EHR, regardless of which EHR they choose. Both expect to rely heavily on health information exchanges to receive and integrate information from multiple EHRs and retain it in a form that can be used for analysis.

Memorial Hermann and Catholic Medical Partners have special offers for member practices adopting EHRs. Memorial Hermann has negotiated an arrangement whereby physician practices pay only $350 per physician per month for Cerner’s EHR software and Dell hardware.6

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**Footnote continued…**

- Health information exchanges (HIEs) receive and integrate data from multiple EHR platforms and other sources (e.g., diagnostic reports). This process of combining information from different platforms is often called "interoperability." In many cases, organizations in a region are collaborating with one another to create a single HIE that includes all patient data. Organizations that are collaborating to achieve a single HIE in their region are referred to as regional health information organizations (RHIOs).

- The offer is for Cerner’s ASP model, which means the EHR software is hosted remotely and accessed by the physician’s office via the Internet.

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**Health Information Exchanges (HIEs)**

- The two case studies involving large clinically integrated networks of private practice physicians (Memorial Hermann and Catholic Medical Partners) are relying heavily on temporary measures to aggregate and analyze data. Over time, they expect to rely heavily on health information exchanges.

- Metro Health and Catholic Medical Partners are leading the development of HIEs that are accessed by all providers in their service areas (not just those with a relationship with the case study organization).

- The development of each link in the HIEs between the data repository and an EHR platform (Epic, Allscripts, Cerner, etc. …) is a time-consuming process.

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**Analysis Processes and Tools**

- Software packages are used to “drill down into the data” and analyze patterns. New West uses Allscript’s Analytics product. Metro Health uses the Advisory Board’s Crimson.

- Current processes are admittedly cumbersome, requiring integration of data from multiple sources. Case study CIOs see these capabilities being accessed directly from the EHR in the future.
Using a portion of the funds contributed by health plans, Catholic Medical Partners actually reimburses practices for adopting an EHR. The practice chooses the EHR package it wants; Catholic Medical Partners reimburses the practice $350 per month for three years (a total of $12,600) for installing an EHR.

**All-payer claims data.** All four case study organizations rely heavily on insurers’ claims data at this point in time to provide many of their supporting analyses. These data are critically important in the time period before HIEs are operational. And, they will always be useful in filling in gaps in information on treatments and procedures not included in the EHR and HIE.

New West and Catholic Medical Partners are receiving downloads of claims data as soon as they are available. New West goes online monthly to download data from Secure Horizons. All four case study organizations emphasized the need for timely data in order to provide optimal care management.

**Health information exchanges (HIEs).** CIOs in all four case study organizations recognize that, no matter how much of their network they are able to get on a single EHR, their physicians and other providers will need to access information from other electronic platforms.

## CARE MANAGEMENT STRATEGIES

<table>
<thead>
<tr>
<th>The case study organizations see similar journeys ahead with respect to improving quality and patient satisfaction while lowering costs. Some are further along on this journey than others.</th>
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<tbody>
<tr>
<td><strong>Chronic Disease Management</strong></td>
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<tr>
<td>• This area is seen as having substantial potential for achieving the “triple aim.”</td>
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<tr>
<td>• New West initiated its quality program in 1997; the first study was of patients with diabetes. New West currently performs three quality studies per year. Recent studies include congestive heart failure, Hyperlipidemia, coronary artery disease/stroke, cancer screening, tobacco cessation, hypertension and osteoporosis screening.</td>
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<tr>
<td><strong>Limiting Hospital Readmissions</strong></td>
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<td>• Metro Health and Catholic Medical Partners report some of their biggest improvements in readmissions come from effectively intervening at home within two weeks of patients’ discharge (discussing meds, reviewing post-discharge instructions, scheduling follow-up office visits …) Patient motivation is seen as a key factor. Catholic Medical Partners’ care coordinators play a big role.</td>
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<tr>
<td>• New West has lowered its readmission rate to less than one percent.</td>
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<td><strong>Use of Hospitalists</strong></td>
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<td>• New West employs its own hospitalist group. This strategy has been highly effective in improving quality and reducing costs. The group is a department of New West, but has its own incentive structure (aligned with optimizing inpatient care). One key is intervening early with emergency department patients. Another key is coordinating effectively with physician office staff and staff making at-home contacts.</td>
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<tr>
<td><strong>Protocols / Care Pathways</strong></td>
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<td>• All of the case studies include the development of protocols and pathways. MHMD (Memorial Hermann’s clinically integrated network partner) has established 14 specialty-based groups under its Clinical Programs Committee. Physicians in these groups develop inpatient and ambulatory protocols for the entire system.</td>
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<tr>
<td><strong>Medical Homes</strong></td>
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<td>• All of the case study organizations are moving to establish and certify their primary care practices as medical homes.</td>
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<td>• Catholic Medical Partners and Metro Health provide financial rewards for achieving medical homes status; the funds come from health plans.</td>
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<td>• Some medical homes practices – such as the all-staff morning preview of the day’s patients – are reported to have led to significant improvements in quality and patient satisfaction.</td>
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<td><strong>Patient Education</strong></td>
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<td>• New West employs its own diabetes education staff. The diabetes education group loses $80,000 to $100,000 per year on New West’s books; however, leaders are clear that the group results in a substantial savings once the performance-based payments are taken into account.</td>
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<tr>
<td>• New West also has a very successful smoking cessation program boasting a 30 percent reduction in tobacco use in the first year.</td>
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Metro Health and Catholic Medical Partners are participating in the development of regional health information exchanges that combine data from multiple sources, including not only their network but also their competitors’ networks. These regional health information initiatives are receiving funding from multiple sources.

Memorial Hermann is working with Cerner (as a pilot site) to develop Cerner’s HIE product. (Memorial Hermann’s hospital and many of its practices are also expected to use Cerner’s EHR.)

All acknowledge, building each link in an HIE (between the data repository and each EHR platform) is a tedious and time-consuming process.

**Analysis processes and tools.** Each organization maintains a staff to analyze the data and prepare quality studies, cost studies and other reports. For example, New West has a team of four engaged in these activities (one analyst per 17 physicians). One of the four is engaged full-time in analyzing Secure Horizons data. (Secure Horizons is the Medicare Advantage program for which New West is reimbursed on a per member per month basis for primary and specialty care.) New West reports that they frequently use the results of these analyses to make adjustments in specialty referral relationships. The organizations use tailored software to “drill down” and analyze the data. New West uses Allscripts’ Analytics; Metro Health uses the Advisory Board’s Crimson software.

**CARE MANAGEMENT STRATEGIES**

Care management strategies employed by the four organizations are summarized in Exhibit 6 on the preceding page. All of the case studies include initiatives across inpatient, ambulatory and home settings to improve chronic disease management. All are working to limit hospital readmissions, developing protocols that span the inpatient and ambulatory setting. All are employing patient-centered medical home concepts in their primary care practices, and moving to have these practices certified. “The medical home is just one of the tools in our toolkit for managing the care of a patient population more effectively,” notes Catholic Medical Partners CMO Michael Edbauer, DO.

New West employs several additional strategies, including: the use of hospitalists; an employed diabetes education staff; smoking cessation classes; and the establishment of a behavioral health clinic.

**CONCLUSIONS**

These case studies demonstrate that care networks and coordination strategies have the potential to produce gains in quality, patient satisfaction and efficiency. However, the process of: (a) developing effective networks; (b) putting in place the required infrastructure; (c) developing the needed trust and culture; and (d) achieving the expected results takes time and significant investment.

Leadership is critically important to achieve the type of organizational change required, particularly strong physician leadership. Care management strategies are still developing, which means that the return on investment may not accrue for several years after the management, staff and infrastructure is in place – especially since the reimbursement structures that will reward success in this area are still largely in the pilot phases.