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Norton Healthcare: A Strong Payer–Provider Partnership for the Journey to Accountable Care

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ABSTRACT: Norton Healthcare, an integrated delivery system based in Louisville, Ky., is one of the provider groups taking part in the Brookings–Dartmouth ACO Pilot Program to form accountable care organizations, which assume responsibility for improving patient care and lowering total costs and, in turn, share in the savings achieved. This case study explores the characteristics of Norton and its partners, including the insurer Humana, that have contributed to the development of the ACO, including: a strong payer–provider relationship bolstered by a joint ACO implementation committee, a focus on performance measurement and reporting, an expanding heath information technology infrastructure, and an integrated system that facilitates communication and collaboration across the continuum of care.

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OVERVIEW

This case study examines the progress Norton Healthcare, an integrated delivery system based in Louisville, Kentucky, has made in its efforts to become accountable for the quality and overall cost of care for its patient population. Norton is one of the four provider groups participating in the Brookings–Dartmouth ACO Pilot Program that are profiled in the Commonwealth Fund case study series *Toward Accountable Care.*

Accountable care organizations (ACOs) have been proposed as a new delivery model to encourage clinicians, hospitals, and other health care organizations to work together to improve the quality of care and slow spending growth. The Affordable Care Act's ACO program is intended to promote better management and coordination of care for Medicare beneficiaries by enabling providers working in ACOs to share in any savings they achieve. However, there is little evidence from the field on how health care organizations progress from traditional payment models toward the ACO model. To better understand this process,

this case study documents Norton Healthcare's journey to develop an ACO.

Norton Healthcare is an integrated delivery system comprising five hospitals, one medical center, 12 immediate care centers, 18 specialty centers, and more than 90 physician practices. It is the dominant market shareholder in the greater Louisville area. It employs over 475 inpatient and outpatient providers, and its hospitals receive more than 1.4 million patient encounters annually. Norton has been working with the insurer Humana since April 2009 to design an ACO that will serve roughly 7,000 Norton and Humana employees.

Norton's ACO was created within the organization's existing hospital-led and risk-averse system. An executive steering committee is overseeing the ACO implementation process and a governance board will manage its strategic direction and activities. In order to establish the ACO as a legal entity, the steering committee amended three existing Norton and Humana contractual agreements (Exhibit 1). These amendments stipulate the use of the Brookings–Dartmouth patient attribution methodology, a 2 percent risk corridor, and a 60/40 shared savings split for the first year. The amendments also link shared savings to performance on quality measures, starting in the second year. Norton is working to develop a patient notification strategy and is addressing provider concerns through open forums.

Several factors appear to have contributed to the successful development of Norton's ACO. These include a strong payer–provider relationship (including a joint ACO implementation committee), a focus on performance measurement and reporting, an expanding health information technology infrastructure, and an integrated system that facilitates communication and collaboration across the continuum of care. Norton has worked to overcome challenges associated with integrating a value-based payment framework into a risk-averse system, garnering provider support and participation, and developing care management capabilities across care settings.

Exhibit 1. Norton's ACO Milestones

Oct. 2009	First official Norton and Humana meeting
Feb. 2010	Began weekly status meetings
June 2010	Completed attribution process: defined ACO population
June 2010	Initialized reporting process: Clarified timelines, data sets, delivery mode, and test reporting
Aug. 2010	Signed initial ACO letter of agreement
Sept. 2010	Established clinical re-engineering workgroup
Oct. 2010	Completed baseline analysis: population analysis based on prior year data
Nov. 2010	Began contract amendment process
March 2011	Began development of second-year methodology

This case study describes the progress that Norton Healthcare has made to become accountable for the overall quality and cost of care for its patient population. It focuses on identifying how Norton embarked on its journey to 1) develop the internal capability to be accountable for the quality and cost of care of its patient population through an ACO, and 2) to develop a contract with Humana for this global quality/cost payment model. The case study outlines the key characteristics of the organization and its partners, its rationale for choosing to develop an ACO, steps taken to implement the model, and lessons learned in overcoming challenges and facilitating early changes.

It is so easy to get caught up when someone says "accountable care organization"—everybody thinks that is an entity. In reality, I look at it as how our organization provides accountable care. That is the thing our organization, for a long time, has done [and is] trying to do more and more as we go along.

Steve Hester, M.D., senior vice president and chief medical officer, Norton Healthcare

NORTON HEALTHCARE: ORGANIZATIONAL CHARACTERISTICS

Over the course of a century, Norton Healthcare, based in Louisville, Kentucky, grew from a hospital-based network into an integrated delivery system that encompasses a network of health care organizations (Exhibit 2). Mary Louise Sutton Norton and a small group of women called the Home Mission Society of St. Paul's Episcopal Church established the Norton Healthcare infirmary in 1886. At a time when access to health care was limited primarily to the wealthy, the founders built the infirmary to provide health services to the most needy. It soon grew into a full-fledged hospital and, in the 1960s, began acquiring other Louisville hospitals. Norton's commitment to establishing an extensive integrated delivery system paved the way for it to become Kentucky's largest health care system, with more than 40 locations in and around Louisville.

Norton now owns hospitals, medical centers, specialty centers, immediate care centers, and physician offices. The organization has employed physicians for more than 14 years, and has the largest network of employed physicians and specialists in the region. In 2011, Norton employed over 475 inpatient and outpatient physicians from nearly 40 specialties, with about 2,000 medical staff (including affiliated physicians) supporting them. It also owns and operates five nonprofit hospitals, which receive approximately 60,000 admissions per year.

Exhibit 2. Core Characteristics of Norton

Type: Integrated delivery system
Legal structure: Non-profit, 501(c)(3)
Location: Louisville, Jefferson County, Kentucky
Patients served annually: 1.4 million patient encounters; 444,261 unique patients
Physicians, employed: 475 primary care physicians and specialists
Physicians, affiliated: NA
Hospitals owned: 5 hospitals
Electronic health record system: Epic

Matrix Structure

Norton created a matrix organizational structure as it evolved into an integrated delivery system. In contrast to a simple hierarchy, a matrix consists of crosscutting organizational structures, with a horizontal flow of skills and information. Employees work in project teams for a discrete period of time, while fulfilling their main occupational roles. This results in an environment in which employees comply with multiple lines of authority, rather than a single chain of command. Matrix structures are designed to facilitate decentralized decision-making, pooling of skills and expertise, and improved coordination and communication across an organization. In Norton's case, the matrix structure enabled Norton to diversify its service offerings, but it also led to the formation of organizational silos.

In 2000, Norton launched service lines into its matrix structure to streamline care delivery and

Study Methods

In April 2011, a team from The Dartmouth Institute for Health Policy and Clinical Practice conducted a two-day site visit to Norton Healthcare, located in Louisville, Kentucky. Interviews were conducted with executive leaders, physicians, and directors of technical areas involved in the ACO.

Information in this case study was collected through on-site and telephone interviews with executive and physician leaders. The evaluators also met with individuals overseeing some of the technical areas that directly affect the development of the ACO, including the following departments: clinical effectiveness and care management, physician services, hospital services, and data analytics and technology. Additional information was derived from presentations produced by Norton and Humana and other sources.

drive growth. The service lines also helped to mitigate the effects of organizational silos and enhance systemwide integration. The service lines are designed to coordinate the delivery of care for Norton's six major service areas (orthopedics, neurology/spine, pediatrics, cardiovascular, women's services, and cancer). Currently, each service line cuts across most of Norton's hospitals and medical facilities. Further, each service line has its own management structure that functions separately from the management structure overseeing each of Norton's facilities. The combination of the matrix structure and service line approach is a product of years of culture change, according to the ACO leadership team. Some believe the service lines have propelled Norton into a more integrated system, while others believe they have added another layer of bureaucracy.

Norton's organizational structure is a source of both frustration and pride. On the one hand, individuals likened Norton's structure to working in the United Nations, since all decisions need to be vetted across service lines and facilities. Yet, individuals commented that the matrix structure supports and requires consensus building and coordination among various departments. The leadership team remains steadfast in promoting the matrix structure, which they see as promoting "system-ness" without threatening the uniqueness of individual hospitals.

Norton is supported by a strong and stable leadership base, which includes executive leaders, medical leaders, and board members. Each leadership team is charged with overseeing different aspects of Norton's delivery system. For example, the Medical Staff Officers generally handle matters related to ACO implementation.

Market Leader

Norton is the dominant (45%) market shareholder in the greater Louisville area. It is the market share leader in five areas, including inpatient admissions (46%), births (61%), emergency department visits (53%), outpatient visits (41%), and total surgeries (50%). Norton's competitors in the Louisville area include Baptist Healthcare System and Jewish Hospital & Saint Mary's HealthCare.

Norton's main mode of reimbursement is fee-for-service payments. The surge of managed care in the 1990s did not penetrate Kentucky. Furthermore, Norton tends to be risk-averse, which may in part be because of its lack of experience taking on capitation or global risk payments.

Relationship with Humana

Norton's relationship with Humana, its ACO payer-partner, dates back to the late 1970s and 1980s, when they were competitors in the health care delivery sector. In the early 1970s, Extendicare (renamed Humana in 1974) became the largest nursing home company in the United States. Humana divested the nursing home chain and moved into purchasing hospitals by the end of the 1970s. By the 1980s, it was one of the country's largest hospital companies. Norton was also expanding its hospital network in the 1980s, competing against Humana for market share in the Louisville area. In that same decade, Humana began marketing health insurance products and divested its hospital business line. Norton acquired two of Humana's hospitals. Humana is currently one of three leading health insurance carriers in Kentucky, with its headquarters in Louisville.

Norton and Humana's longstanding relationship played a vital role in their decision to establish an ACO for their self-insured populations. In the past, Norton and Humana have at times had an adversarial relationship. Still, Humana believed Norton was the most fitting partner for the ACO because Norton showed immediate interest in designing an ACO and was willing to take the steps necessary to do so. Both organizations believe the ACO will strengthen their relationship and focus them on shared goals of providing high-quality services and lowering health care expenditures. The ACO will manage the overall quality and costs of care for roughly 7,000 Norton and Humana employees combined. The ACO will be tagged onto Norton's existing infrastructure, which will eliminate the need to seek federal or state antitrust waivers.

ORIGINS OF ACCOUNTABLE CARE AT NORTON HEALTHCARE

Well before Norton embarked on a journey to implement an ACO, the organization devoted time and investment to improving its delivery of care. It has achieved notable progress in designing a responsive and patient-centered institution by: 1) engaging in strategic planning; 2) employing a pay-for-performance program; 3) implementing a robust and integrated health information technology (HIT) infrastructure; 4) developing internal capabilities to manage population health, quality, and costs; and 5) focusing on quality performance and improvement. Implementing the ACO is not viewed as the starting point, but rather a step in a journey Norton has taken to increase accountability to its patients.

Strategic Planning

In 2009, a consulting group performed an assessment to pinpoint areas for growth and methods for improving Norton's efficiency and quality of care. Norton embarked on this process in anticipation of national health reform and to prepare itself for value-based payment models. Through this effort, the Performance Excellence Program was created to focus on Norton's labor productivity, revenue cycle, supply chain, care management, and clinical effectiveness. Norton concluded that these first two areas would be managed internally, while it would partner with a consulting firm to address the other three.

The firm designed a strategic plan focused on transparency, standardization of care, efficiency, total costs of care, and outcomes. For example, the plan charged the clinical effectiveness team to focus on readmission rates, length of stay, patient satisfaction, and variable costs. The strategic plan also aims to align the ACO with the work that is occurring to advance clinical effectiveness and care management.

Pay-for-Performance

Norton aligns financial incentives with performance. Hospitals and physician practices are evaluated relative to performance targets that Norton sets at the beginning of each calendar year. Employed primary care physicians' compensation is linked to performance (monitored at the group practice level) on established quality metrics. Currently, about 10 percent of their salary is linked to performance; this will steadily increase to 20

Exhibit 3. Norton 2011 Quality Measures for Physician Practices

Adult
Percent of women with screening mammogram in current or previous year
Percent of patients with colorectal cancer screening
Percent of women with cervical cancer screening
Percent of diabetic patients with documented eye examination
Percent of PQRS-eligible visits for diabetes meeting desired status (mean of five percentages below)
Percent with HbA1c poor control in Type 1 or 2 Diabetes Mellitus (DM)
Percent with low density lipoprotein control in Type 1 or 2 Diabetes Mellitus (DM)
Percent with high blood pressure control in Type 1 or 2 Diabetes Mellitus (DM)
Percent with urine screening for microalbumin or medical attention for nephropathy (DM)
Percent with foot exam (DM)
Pediatric
Percent of patients age 2 years who received recommended vaccines
Percent of eligible pediatric patients with documented well-child visits
Percent of eligible pediatric patients with documented lead screening

PQRS = Physician Quality Reporting System.
Source: Norton Healthcare, 2011.

Exhibit 4. Norton 2011 Quality Measures for Hospitals

Measure	Norton Audubon Hospital	Norton Brownsboro Hospital	Norton Hospital	Norton Suburban Hospital	Kosair Children's Hospital
1. Safety composite progress (infection rates and practices, patient falls injury, pressure ulcers)	X	X	X	X	
2. Readmission rate for acute myocardial infarction / heart failure / postnatal / chronic obstructive pulmonary disease (30-day adjusted)	X	X	X	X	
3. Achieve reliable and effective use of the World Health Organization surgical safety checklist	X	X	X	X	X
4. Number of surgical and invasive procedures with the wrong site, procedure, or person	X	X	X	X	X
5. High priority: coronary artery bypass graft surgery-only procedures with intubation more than 24 hours; risk-adjusted	X				
6. High-priority projects (Performance Excellence Program, etc.)	X	X	X	X	
7. Elective delivery before 39 weeks (National Quality Forum / The Joint Commission hybrid)			X	X	
8. Percent of Vermont Oxford Network neonatal intensive care unit (NICU) opportunities met; 4-item average				X	X
9. Safety composite progress; includes Suburban NICU				X	X
10. Percent of admissions with transfer to a higher level of care within 4 hours					X
11. Percent of emergency department visits meeting targeted door-to-door time for nonadmitted patients					X

Source: Norton Healthcare, 2011.

percent. Quality metrics are usually derived from the Physician Quality Reporting System indicators, which relate to prevention/screening, safety, productivity, and readmission rates (Exhibit 3). The data and analytics team conducts a monthly evaluation of physicians' performance on these measures and addresses outliers if necessary. The team also analyzes hospitals' performance on a different set of quality measures (Exhibit 4).

Implementing a Robust Health Information Technology Infrastructure

Norton has dedicated substantial resources to implement robust, integrated health information technology (HIT). The backbone of this will be the Epic electronic health record (EHR) system, which will connect outpatient and inpatient facilities under a single platform. Before launching Epic, Norton utilized the Meditech EHR system in its hospitals while most of its physician offices used paper records—making it difficult to foster effective hand-offs between ambulatory and inpatient care settings. Norton opted to introduce Epic to enable seamless data sharing between the five hospitals and the ambulatory settings, and to comply with the Centers for Medicare and Medicaid Services' meaningful use measures. The goal is to have Epic fully operational across the ambulatory care setting by mid-2012 and across the five hospitals in 2012 and 2013.

Norton is also establishing a data warehouse using a platform called Microsoft Amalga, which will standardize information from Epic and other information systems. Physicians will monitor their patients' progress based on patient-level data retrieved from Amalga. Amalga will interface with the patient portals that are currently under development. One such portal is Epic's MyChart, through which patients can access their medical history and clinical information and schedule visits. Norton also partnered with Microsoft HealthVault to create a Web-based personal health record platform for patients.

Developing Capability to Manage Population Health, Quality, and Costs

Norton is steadily introducing new initiatives to better manage population health, quality, and costs. It is advancing these areas by: 1) improving care coordination and leveraging its disease registries, 2) capitalizing on its hospitalist program, and 3) launching an employee wellness strategy.

Care Coordination

Norton employs a traditional approach to care coordination in its hospitals—using fax and telephone communication. This is expected to change once the Epic EHR is fully implemented across the system. Currently, a discharge summary is created once a patient is released from the hospital. All hospitals contact patients one to five days after they have been discharged to inquire whether patients have scheduled follow-up appointments with their primary care providers and filled their prescriptions. Inpatient care managers conduct follow-ups if necessary. Before high-risk patients are discharged, care managers provide education and training on diabetes, congestive heart failure (CHF), and chronic obstructive pulmonary disease (COPD). The care managers also participate in multidisciplinary rounds and bed huddles to improve continuity of care and monitor patients' length of stay and expected date of discharge.

To improve the care coordination structure, Norton launched pilots in five of its largest physician practices starting in the third quarter of 2011. Participants will use predictive and risk modeling analysis to enhance care coordination for patients with diabetes, congestive heart failure, chronic obstructive pulmonary disease, and coronary artery disease. Each practice will have a dedicated care management team, including social workers, to oversee patients' transitions through Norton's system. Eventually, the pilot program will cover other chronic diseases and medical conditions.

Some service lines and facilities have developed their own care coordination strategies. For example, the cancer service line created a program that links cancer patients with a patient navigator, whose role is to help them transition smoothly throughout Norton's delivery system. Cancer-focused multidisciplinary teams also meet regularly with patient navigators to review care and treatment plans. Norton also employs care managers to provide ongoing support to inpatient and outpatient providers and to serve as advocates for cancer patients.

Executive leaders believe that there is room to improve the feedback loop and patient hand-offs between inpatient and outpatient care, perhaps through more effective use of care managers. Executives also believe that development of a systemwide care coordination strategy will help them create a business case for sophisticated care coordination programs (e.g., those that holistically address the needs of high-risk, high-cost patients).

Disease Management

Norton created a heart failure disease registry to improve care management for such patients, identify those at risk for developing heart failure disease, and target those who could benefit from early clinical intervention. The Clinical Information Analysis department is charged with populating the registry. High-risk patients are assigned a care manager, who works with their primary care providers to develop personalized care coordination plans. The organization currently uses the state's cancer and tumor registries, and it is developing other disease registries to capture clinical data on the most prevalent, high-cost diagnoses (e.g., diabetes).

Use of Hospitalists

Norton established a hospitalist program in the mid-1990s to enable better communication and information exchange between its ambulatory and inpatient facilities. Norton employs hospitalists who care for patients admitted to any of the five hospitals. In addition to administering clinical services, the hospitalists are charged with monitoring and relaying updates on hospitalized patients' progress to their primary care physicians. Hospitalists work closely with outpatient physicians by accompanying them during rounds. They also use the Care Link software that is embedded in the Meditech EHR to communicate with Norton-employed physicians. This software is available to these physicians via a server-based portal.

Employee Wellness Program

In preparation for implementing an ACO among Norton and Humana employees, Norton began a wellness and health promotion program for its employees intended to promote healthy behavior and reduce unnecessary utilization. Norton currently covers more than 85 percent of employees' insurance premium, and it has observed a growing trend in their health care expenditures. The wellness program will offer: 1) free wellness visits to any Norton-affiliated physician, 2) smoking-cessation programs, 3) weight-loss programs, and 4) health risk assessments. Norton hopes the wellness visits will enable physicians to identify employees exhibiting early signs of chronic illnesses such as diabetes. Norton will pair those with chronic conditions with care managers, who will design personalized disease management interventions. Norton has instituted premium discounts for employees who utilize the health promotion offerings. It also is purchasing an IT system, Pure Wellness, to enable employees to track their health data.

Quality and Performance Improvement Infrastructure

Norton strives to improve the quality and efficiency of care through several efforts, including: alignment and integration across facilities, clinical leadership of improvement initiatives, use of data to identify improvement opportunities and monitor progress, and a focus on appropriate utilization of services.

Alignment and Integration Across the System

Norton has invested substantial effort in creating an agenda that promotes alignment of goals and activities among the health care system's hospitals, physician practices, IT staff, human resources, and other nonclinical areas. The agenda also promotes evidence-based practices and standardized care protocols across the system. It includes patient outcome targets in numerous areas, including acute myocardial infarction, congestive heart failure, chronic obstructive pulmonary disease, and pneumonia. In 2003, Norton adopted a single medical staff, as per the Joint Commission's requirements, across its five hospitals. This has reduced redundancy by creating structures and committees that cross facilities (i.e., common order sets and a single Pharmacy and Therapeutics Committee).

Clinical Leadership of Improvement Initiatives

Norton's performance improvement efforts are driven by clinical staff, with guidance from support staff. Increasingly, Norton involves physicians in the initial phases of improvement efforts and relies on physician champions to lead initiatives. For example, a recent Norton Orthopedics initiative to standardize order sets and reduce readmission rates was led by the director of system performance and a surgeon. The initiative included seven surgeon-led subteams that focused on preadmission testing, order sets, care coordination, postoperative nursing care, readmission rates, and development of educational materials. Frontline nursing staff are also increasingly involved in leadership and improvement efforts, as Norton pursues Magnet recognition. Norton employs clinical and nonclinical process improvement staff to support its improvement efforts, drawing on the principles of Deming and total quality management.

Use of Data to Identify Improvement Opportunities and Monitor Progress

Norton routinely uses data to identify opportunities for improvement. In the past, data collection occurred through manual chart abstraction, but this will change

once the systemwide Epic EHR is implemented. Norton has established quality targets for core measures and specific diagnosis-related groups. It uses data to identify areas of high variation in performance, monitor improvement efforts, provide feedback, and hold staff accountable for performance. It is available to physicians in an online format and in quality and performance scorecards.

The focus on delivering accountable care has changed how Norton staff view and interpret data. "We are looking at things right now with our physicians and with the leaders that are involved in the ACO that we've never looked at," explained Ben Yandell, M.D., system association vice president for clinical information analysis. "It's generating fascinating conversations," he said, around issues related to per-member per-month costs and readmission rates.

Focus on Appropriate Utilization of Services

Norton's efforts to improve the quality of care are integrated with its efforts to reduce costs, involving close collaboration between its quality and finance staff. Norton outlined a utilization management program to promote quality improvement while reducing costs. The program will: 1) create standards that support the cost-effective delivery of high-quality, medically necessary services; 2) ensure that clinical practice standards are equitably and consistently monitored and evaluated across the system; and 3) make recommendations when opportunities for improvement are identified.

The plan calls for the creation of a utilization management committee, including the hospital president, chief medical officer, system director of patient care operations, directors of care management, and hospital medical directors. The committee will include two or more practitioners charged with completing the utilization reviews. Through this mechanism, inpatient medical services (e.g., hospitalizations, length of stay, discharge readiness, and services ordered and provided) will be reviewed for their necessity, appropriateness, and efficiency at preadmission, concurrently, and retrospectively.

The Care Management Department also will develop mechanisms to track and trend utilization review metrics. These will include appropriate level of care determinations, readmission rates, Medicare one-day stays and observation stays greater than 48 hours, length of stay by payer classification, compliance with delivery of the Medicare beneficiaries' inpatient bill of rights, completion of an initial care management assessment after admission, variance days, and denials.

CONTRACTING WITH A PAYER TO CREATE A GLOBAL QUALITY AND COST PAYMENT MODEL

Norton and Humana's partnership to establish an ACO began in 2009, prior to the enactment of the Affordable Care Act. They were selected as one of the pilot sites in the Brookings–Dartmouth ACO Pilot Program, in an effort to demonstrate that provider groups were willing and able to create ACOs. The pilot sites' early success informed the establishment of the Medicare Shared Savings Program provision in the Affordable Care Act. Both Norton and Humana worked collaboratively with Brookings and Dartmouth to test the model and demonstrate that early implementation is feasible.

The ACO is designed to coordinate the care of Norton and Humana's populations of self-insured employees. Norton believes there is a strong value proposition for implementing an ACO for employees. After close review of their own employees' health care expenditures, Norton found that at least 40 percent of health claims were generated outside of its network—meaning that Norton pays its competitors approximately $60 million to $70 million annually to provide care for its employees. It hopes the ACO will encourage its employees to seek care within its system, thereby resulting in cost savings. Norton believes value-based payments structured around the ACO model are the future of payment reform, as well as an effective way to facilitate organizational integration and a strategy for supporting growth and expansion.

ACO Prepares Norton for the Future

Integration of the ACO model into Norton's delivery structure will require Norton to hold itself financially accountable for the delivery of high-quality health services. Norton operates in a marketplace largely driven by fee-for-service reimbursements but its leaders agree that this payment system, and escalating health care expenditures, are unsustainable.

Integration of the ACO model into Norton's system may require fundamental changes in its approach to care delivery. Acute care is Norton's primary revenue generator and area of strategic focus. Norton has roughly 1.5 million patient encounters each year; while only about 5 percent of those are inpatient hospitalizations, these produce close to 75 percent of revenues. Leaders are considering how to most effectively structure the ACO around its hospital-based system. Although Yandell suggested that the ACO may "cut off [Norton's] oxygen," the organization wanted to stay ahead of the health reform curve and "shift before the finances tell [it] to shift." Leaders believe that developing an ACO provides an opportunity for the organization to increase its focus on ambulatory care, but they also acknowledge that the transition will take time.

ACO Facilitates Integration

Norton leaders hope the ACO will stimulate integration across its service lines and facilities by aligning its quality and care coordination strategies with its clinical information systems. Clinicians will use the detailed patient information available through Epic to drive the delivery of seamless, patient-centered care. For example, hospitalized patients exhibiting high-risk factors will be linked with care managers, who will help guide them through Norton's health services continuum. One director noted that Norton is trying to overcome cultural differences between Norton's corporate structure and its hospital facilities and physician practices. The ACO leadership team hopes that the ACO will promote a shared sense of mission among all these groups, while still enabling hospitals and physician practices to retain their distinct identities.

ACO Fosters Growth and Expansion

Norton will use the ACO as a vehicle to expand and grow across and beyond the Louisville service area. It hopes to demonstrate the benefits of the ACO model among the self-insured population. If the venture is successful, Norton will reach out to other large-scale employers in the area to offer them business propositions for establishing joint ACOs.

MOVING FORWARD WITH ACCOUNTABLE CARE

Before commencing ACO implementation, Norton engaged in preliminary activities that shaped its readiness for designing a shared savings contract, including: 1) participation in the Brookings–Dartmouth ACO Pilot Program, 2) establishing a joint ACO implementation committee with Humana, and 3) building the ACO's core capabilities.

Participation in the Brookings–Dartmouth ACO Pilot Program

Norton and Humana's participation in the Brookings–Dartmouth ACO Pilot Program provided an opportunity for them to solidify their approach to delivering accountable care, while leveraging the technical support and guidance provided. Once Humana decided to develop an ACO, it consulted with a variety of medical organizations in the Louisville area to identify a partner, and Norton expressed immediate interest. Negotiations between Norton and Humana intensified around July 2009, when both officially joined the pilot program. Both organizations agree that the pilot program was helpful, and have used the Brookings–Dartmouth quality measurement set and patient attribution methodology to inform the creation of the ACO contract.

Joint ACO Implementation Committee

Norton and Humana established a pre-implementation committee to craft a roadmap to guide the ACO implementation process. The committee was charged with defining the human resource needs required to move forward, the ACO population, and the selection of

Exhibit 5. Core Characteristics of the ACO

Payer-partner: Humana
Legal entity: Entity within existing parent organization [501(c)(3)]
Oversight of ACO formation: ACO Executive Steering Committee
Payment model: Shared savings, no risk in Year 1; transition to risk-bearing
Patient attribution model: Brookings–Dartmouth Method
ACO patient population: 7,000 Norton and Humana employees in Louisville
ACO physician population: 170 PCPs, 71 specialists

primary care doctors and specialists to participate. The committee also designed the ACO framework as it related to: governance, physician engagement, practice redesign, performance reporting, contractual agreements, and reconciliation of shared savings. Leaders representing Norton's clinical practice, hospital, and data and analytics departments participated in the committee. Discussions around data and analytics consumed most of the committee's deliberations. The committee meets weekly to share status reports.

Building Core Capabilities

Norton and Humana are jointly building a core set of capabilities that will enable the ACO to assume financial risk for the total costs and quality of care for the defined patient population. These capabilities include: defining and updating the patient population, measuring performance and efficiency, extracting and assessing cost information, building clinical and care coordination strategies, and constructing incentive-based compensation programs to reward clinicians who demonstrate accountability for costs and outcomes. Norton plans on building these capabilities without adding additional staff and remains committed to integrating the ACO into its current delivery structure.

CREATING THE INFRASTRUCTURE TO BECOME ACCOUNTABLE FOR CARE

Norton and Humana are working collaboratively to establish the ACO's structure, governance and leadership, contract terms, payment model, and patient and physician engagement strategy (Exhibit 5).

Type and Structure of the ACO

The ACO is designed to manage the full spectrum of health services delivered to Norton and Humana's self-insured population. Norton will be held accountable for lowering the costs and improving the overall quality of care. The ACO will include Norton's integrated delivery system (hospitals, ambulatory physician practices, and specialty centers). As such, it will be hospital-led, with some physician representation. The ACO will be absorbed under Norton's existing legal structure as a nonprofit organization.

Governance and Leadership

Norton has established an executive steering committee to oversee ACO implementation. Steve Hester, M.D., chief medical officer, chairs the committee and oversees the contracting process. The steering committee is closely involved in designing the ACO and managing the implementation process. In contrast, the governance board, still being assembled, will oversee the strategic direction, activities, and progress of the ACO.

Terms of Contract

The terms and agreements pertaining to the ACO have been incorporated into three existing contractual arrangements between Norton and Humana. As such, a stand-alone ACO contract will not be developed. The existing agreements were created when Humana began reimbursing Norton for providing services to its self-insured population, and when Norton began paying premiums to Humana for providing insurance coverage to its self-insured population. Norton and Humana signed a letter of agreement in August 2010 to authorize the establishment of the ACO and legalize the modifications made to the existing contracts (Exhibit 6). Amendments to the three base contracts began in November 2010. Further amendments will be made after the end of each performance year. Once Norton and Humana finalize the amendments for performance year one, the three base contracts will then reflect the various roles each organization will assume in the ACO, with Norton as the provider and employer/payer and Humana as the employer/payer and third-party administrator.

Exhibit 6. Norton and Humana ACO Contract Framework

Humana: Employer ASO-TPA Payer. This contract represents the *first* of three original agreements between Humana and Norton. The contract identifies Humana as both an employer and payer of health services.
Norton: Employer ASO-Payer. This contract represents the *second* orginal agreemment between Humana and Norton. This contract identifies Norton as both an employer and payer of health services.
Norton Provider-Humana Payer. The *third* original contract identifies Norton as the provider of health services to Humana's ASO population and it identifies Humana as the payer.

ASO = administrative services only, or self-insured population; TPA = third-party administrator.
Source: Humana Inc., 2011.

Norton and Humana have agreed to pursue a simple shared savings contract, where neither of the organizations will be held accountable for losses above the spending target for the first year of the ACO program. They plan to increase the level of financial risk in future years.

Payment Model

The ACO contracts stipulate that expenditures will have to be 2 percent lower than the proposed target before the ACO is eligible to receive shared savings. The proposed date of shared savings distribution will occur 30 to 60 days following a 120-day claims run-out period that begins at the end of the plan year.

The magnitude of shared savings will be tied to Norton's performance on the Brookings–Dartmouth Starter Set of Measures (Exhibit 7). Norton and Humana will begin linking performance to shared savings in the second year of the ACO program. Norton will not distribute shared savings in the first year of the ACO but instead will reinvest shared savings at the organizational level. The degree of risk sharing is set for a 60/40 split in 2010–11, with the employers (both Norton and Humana) receiving 60 percent (applies to Norton and Humana) and the provider (Norton) receiving 40 percent of shared savings.

Generally, Norton is supportive of contract terms that do not stipulate a high degree of financial risk. Hester notes that there needs to be some level of symmetry between the risks and benefits before Norton would be comfortable pursuing risk in future years. "My fear is with health reform what you're going to see is everybody pushing risk to the health system, but not really offering benefit or high upside," he said. "Is the upside worth the risk?"

Patient Attribution

Norton employs the Brookings–Dartmouth patient attribution model to assign its employees to the ACO. Individuals are assigned based on their historical care patterns, specifically the plurality of outpatient evaluation and management visits.[1] This includes office visits, home visits, nursing home visits, and specialist encounters. Services rendered in an inpatient setting are not counted. The ACO population can be assigned only to primary care physicians, medical specialists, and surgical specialists. However, primary care doctors are given the highest priority, so even a single visit to a primary care doctor trumps any number of visits to medical or surgical specialists. Employees are required to have at least 12 months of coverage with Humana before they are eligible to be attributed to a participating ACO provider. Patients will be reassigned to the ACO on an annual basis. There are approximately 7,000 patients attributed to the ACO.

Patient Engagement

Norton has a systemwide Patient and Family Advisory Council. The ACO Executive Steering Committee regularly updates the council on the ACO implementation

[1] J. P. W. Bynum, E. Bernal-Delgado, D. Gottlieb et al., "Assigning Ambulatory Patients and Their Physicians to Hospitals: A Method for Obtaining Population-Based Provider Performance Measurements," *Health Services Research*, Feb. 2007 42(1 Pt. 1):45–62.

Exhibit 7. Brookings–Dartmouth ACO Pilot Site Starter Set Measures

Priority area	Starter set measures	NQF number
Overuse	Low back pain: use of imaging studies	52
	Appropriate testing for children with pharyngitis	2
	Avoidance of antibiotic treatment in adults with acute bronchitis	52
	Appropriate treatment for children with upper respiratory infection (URI)	69
Population health	Breast cancer screening	31
	Cervical cancer screening	32
	Diabetes: HbA1c management (testing)	57
	Diabetes: cholesterol management (testing)	63
	Cholesterol management for patients with cardiovascular conditions (testing)	n/a
	Use of appropriate medications for people with asthma	36
	Persistence of beta-blocker treatment after a heart attack	71
Safety	Annual monitoring for patients on persistent medications	21

* NQF = National Quality Forum, which endorses national quality performance measures.
Source: Measures are drawn from the National Quality Forum list of endorsed performance measures (Available at: http://www.qualityforum.org/Measures_List.aspx).

progress and seeks guidance from its members on issues pertaining to patient engagement. Norton is considering ways to incorporate patients into the ACO governance. It is also working with Humana to determine how employees should be notified that they have been attributed to the ACO.

Physician Engagement

Having the support of providers is crucial to the success of the ACO. Norton believes that primary care providers, in particular, are in a position to reduce medical costs through better care coordination. One of Norton's quality improvement specialists estimated that such providers are equipped to coordinate as much as 80 percent of outpatient care delivered to the ACO population. Of the 241 physicians attributed to the ACO, there are 170 primary care providers (including nurse practitioners), 35 medical specialists, and 36 surgical specialists. Through a series of open forums, Norton sought to engage providers in the ACO and address their concerns. Physicians were told that the ACO would serve as a means for the organization to increase its value for major health care purchasers (e.g., large employers and the government), ensure accountability to patients, and improve clinical practice by focusing on standardization, utilization management, readmissions, and health promotion and prevention. Early physician interest in the ACO model was driven in part by the potential for bonus payments through shared savings.

MONITORING PROGRESS TOWARD ACCOUNTABLE CARE

Norton believes that a successful ACO will improve the health and well-being of its patients and generate business opportunities with other self-insured employers in the Louisville area. The ACO also will be deemed successful if it supports the delivery of high-quality health care. To measure this, Norton will evaluate a range of outcome and quality measures.

Performance Measurement

Norton's participation in the Brookings–Dartmouth ACO Performance Measurement Technical Workgroup sharpened its ability to measure the ACO's performance. This workgroup was formed with representatives from each of the Brookings–Dartmouth ACO pilot program sites and payer-partners. Both Norton and Humana provided input on the feasibility of collecting proposed measures and vetted them on their usefulness and relevance to the quality of care.

Exhibit 8. Brookings–Dartmouth ACO Pilot Site Clinically Enriched Performance Measures

Priority area	Clinically enriched measures	NQF number
Coronary artery disease	Cholesterol management for patients with cardiovascular conditions	n/a
	ACE inhibitor or ARB therapy**	66
Diabetes	Low density lipoprotein (LDL-C) control in diabetes mellitus	64
	HbA1c poor control in diabetes mellitus	59
	HbA1c control (<8.0%)	575
	High blood pressure control in diabetes mellitus	61
	Kidney disease screen	62
Hypertension	Blood pressure control	18
Pediatrics	Childhood immunization status	38
	Immunization for adolescents	n/a
Preventive care	Colorectal cancer screening	34

** This measure was drawn from the Physician Consortium for Performance Improvement metrics. All other measures in this table are from the Healthcare Effectiveness Data and Information Set (HEDIS).
Source: Measures are drawn from the National Quality Forum list of endorsed performance measures (Available at: http://www.qualityforum.org/Measures_List.aspx).

Workgroup members identified measures and specifications in three categories: a claims-based starter set, including all-cause readmission and utilization measures; clinically enriched measures, which rely on data extracted from clinical data systems, as well as administrative claims data; and patient-reported measures, including their care experiences and patient-reported outcomes (Exhibits 7 and 8). Norton and Humana are the first participants in the pilot to report outcomes using the starter set measures, which are derived from the National Quality Forum's endorsed measures. This represented an important milestone in the implementation process. While other pilot sites have incorporated additional performance measures through agreement with their payer-partners, Norton and Humana have not yet pursued measures beyond those identified in the Brookings–Dartmouth set.

Performance Reporting

Norton prides itself on transparency and publishes monthly performance reports on its public Web site. The reports include hospital- and physician-level performance data on over 600 nationally recognized quality indicators and practices relating to childbirth, cancer survival, heart attack, infection control, medical imaging, screening and immunization, and patient experiences. The reports generally compare Norton's performance to the national average. Exhibit 9 shows part of a report related to heart failure treatment.

Norton has received many awards for its dedication to improving the quality of its health services. It received the 2011 National Quality Forum National Quality Healthcare Award, which recognizes organizations that have made significant advancements in providing patient care and publicly reporting performance data under voluntary or mandated reporting programs. Norton also was awarded the Kentucky Hospital Association 2011 Quality Award.

Norton and Humana's ACO data exchange agreement stipulates that both organizations will share performance information, outcomes data, and financial data on a quarterly basis. Humana will also provide quarterly reports on patient utilization (e.g., number of emergency department visits and length of stay) and participation in the ACO. This will enable participating providers to accurately identify which patients are assigned to them and help them build personalized interventions for high utilizers of health care services. It is likely that the ACO's performance on quality and population health management will be shared publicly.

Exhibit 9. 2011 Norton Healthcare Quality Report on Heart Failure Treatment

KEY

Better than U.S. average	
Near U.S. average	
Worse than U.S. average	

#	=	too few eligible cases to calculate a reliable statistic
italics	=	no comparative data
blank	=	does not apply
0 or *100*	=	best score possible

		Desired performance	Norton Audubon Hospital	Norton Brownsboro Hospital	Norton Hospital	Norton Suburban Hospital	Kosair Children's Hospital	Norton Healthcare	Kentucky	U.S.
% of HF measure opportunities met (composite)	high	94	98	94	94		95	87	95	
Heart failure treatment - percent of heart failure patients										
with LVF assessment	high	100	*100*	99	*100*		**100**	96	98	
who smoke given smoking counseling	high	*100*	#	*100*	*100*		*100*	98	98	
given complete discharge instructions	high	84	96	85	82		85	82	88	
prescribed ACEI/ARB at discharge (accountability measure)	high	*100*	#	98	*100*		**99**	91	94	
Heart failure mortality - percent of heart failure patients										
who die (AHRQ risk-adjusted)	low	**1.8**	1.3	**1.5**	**1.5**		**1.6**		4.1	
who die of any cause w/in 30 days	low	10.5		10.5	10.5		10.5	10.7	11.2	
Heart failure readmission - percent of heart failure patients										
who are readmitted for any cause w/in 30 days (adj)	low	25.6		25.6	25.6		25.6	25.3	24.7	

Source: Norton Healthcare, http://www.nortonhealthcare.com/QualityReport.

LESSONS LEARNED

Although Norton has made significant progress in implementing the ACO, the organization has faced many challenges. Its experience in overcoming these challenges and building on its early successes offers lessons for other health care organizations considering development of an ACO.

Challenges

Integrating Value-Based Payments

Integrating the ACO will require Norton to adapt to a new payment model. Until now, Norton existed in a marketplace that eschewed managed care and capitated payments. Consequently, the organization is set up to function and survive in a mostly fee-for-service payment environment. Further, inpatient care is Norton's main source of revenue. Adjusting to risk-based payment models that promote a reduction in hospital use may require Norton to fundamentally change its approach to care delivery. The ACO will require Norton to assume accountability for the costs and quality of care, necessitating a greater focus on prevention and promotion, care coordination, care management, and reducing readmissions.

Garnering Physician Support and Participation

Norton is committed to educating physicians about the value of the ACO model and garnering their support. Early on, leaders noticed that some physicians were skeptical of the effort and reluctant to participate. Physicians practicing in Norton's system are unaccustomed to managing risk, and some are worried that risk-based payments might impinge on their revenue stream.

Physicians are also anxious that the ACO will be established without their input. One physician—arguing that it is not possible "to develop fully integrated, well-functioning models in a short time"—advocated for a protracted implementation timeline. Others are concerned about their lack of experience bearing risk, hospital domination over physician practices, and nominal shared savings. In spite of such concerns, most physicians are receptive to the ACO concept. Physicians, in particular, support greater care coordination for their patients and efforts to reduce inefficiencies and waste in the system.

Hester and other members of the ACO Executive Committee conduct town hall meetings to brief providers on the status of the ACO implementation and respond to their concerns. The goal of these meetings is to foster an environment in which Norton actively engages providers and solicits their input on the ACO.

Developing a Comprehensive Care Management Strategy

Norton does not have a systemwide care management and care coordination strategy. Developing one is a priority, but leaders admit that it will be a lengthy process. The strategy should: promote prevention and early diagnosis; support the use of immediate care centers and physician practices for minor illnesses, rather than emergency departments; improve management of complex patients; and include partnerships with home health care agencies, long-term care centers, and the local Community Health Department. It should enable Norton providers to better understand population health needs and provide coordinated, patient-centered care.

Success Factors in Early Stages of ACO Development

The factors that appear to be key to the successful initial development of an ACO at Norton Healthcare include:

- a strong relationship with its payer-partner,
- investment in its health IT Infrastructure, and
- leveraging the benefits of an integrated health care system.

Strong Payer–Provider Relationship

Establishing a strong payer–provider relationship was critical to the development of the ACO infrastructure. Humana approached Norton to design the ACO, while the other Brookings–Dartmouth ACO provider sites initiated contact with their payer-partners. The strength of Norton and Humana's existing relationship, combined with Humana's interest in establishing an ACO, encouraged Norton to embark on the ACO implementation journey. There is mutual understanding between the parties about how the ACO should be operationalized. Additionally, both organizations are committed to using their internal resources to facilitate implementation. For example, both Norton and Humana have delegated staff from their human resource, legal, data analytics, and other departments to work on the implementation process. Norton and Humana's joint commitment will shape the success and longevity of the ACO.

Expanding Health IT Infrastructure

Implementing an interoperable health IT infrastructure will facilitate data exchange among Norton's affiliated entities and support enhanced care coordination for the ACO population. Norton hopes that its EHR and data warehousing system will help it understand the needs of its self-insured population, thereby enabling it to target effective and efficient health services on high-cost and high-risk patients. The ACO patient population's information will be accessible to all clinical stakeholders, which will enable cooperation and communication among providers.

With the implementation of the EHR system, Norton will also be able to pinpoint service areas that need refinement (e.g., care management). Epic will enable the organization to collect reliable and timely patient data, which can be used to support practice redesign efforts to improve care and lower costs. Norton will also use Epic to collect performance measures relevant to the ACO and share information with Humana to identify whether the ACO is meeting its targets.

> *We are ready to be accountable to the community for outcomes, so we've really looked at [the ACO model] as a driver to really improve [patient's] health. [We are] looking for those partners that will do that along with us and work in a multi-disciplinary approach to care for the patient population."*
>
> Mary Jo Bean, system vice president, planning and business analytics, Norton Healthcare

Leveraging Benefits of an Integrated Health Care System

The ACO can leverage and build off of Norton's integrated delivery structure, which will help providers monitor their patients' care patterns and coordinate care. Norton also has a substantial employed primary care provider base. Such providers will play a critical role in coordinating ACO patients' care and are likely to encourage ACO patients to seek care from within the Norton integrated delivery system.

CONCLUSION

Despite challenges, Norton Healthcare is making a strong institutional commitment to begin the journey toward accountable care. The ACO will enable Norton to take on financial risk, expand its business portfolio, and move forward with critical infrastructure investments. As the ACO evolves, Norton will need to address existing and potential challenges, including: limited experience bearing global financial risk, the fact that its primary revenue is derived from hospital services, providers' skepticism and reluctance to participate in the ACO, and the lack of a comprehensive care management strategy. Norton has built readiness to implement an ACO through a strong payer–provider relationship, an expanding health IT infrastructure, and a stable leadership base that is committed to quality measurement and reporting, quality improvement, and transparency. Leveraging its strengths will enable Norton to advance toward achieving the triple aim of providing better care for individuals, improving the health of populations, and reducing per-capita costs.

For a complete list of case studies in this series, along with an introduction and description of methods, see http://www.commonwealthfund.org/Publications/Case-Studies/2012/Jan/Four-Health-Care-Organizations.aspx.

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