Case Studies of Accountable Care Systems

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Marshfield Clinic: Demonstrating the Potential of Accountable Care

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Abstract Marshfield Clinic, a nonprofit multispecialty group practice in central Wisconsin, joined Medicare's Shared Savings Program in 2013, following its success in Medicare's Physician Group Practice demonstration—the program's forerunner. The clinic's Medicare ACO benefits from the organization's past investment in advanced primary care infrastructure and disease-specific care management capabilities, which have yielded reductions in hospitalization and readmission rates. The clinic has an advanced, internally developed electronic health record system and enterprise data warehouse, which allow internal performance reporting and identification of best practices that have galvanized physician support for quality improvement efforts. Marshfield Clinic's track record of achieving cost savings and quality targets set by Medicare suggests the importance of combining mission-driven performance improvement initiatives with a commitment to mutual accountability among providers in group practice.

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A Note on This Series

This case study series, which follows up on previous Commonwealth Fund research examining the attributes of high-performing organized delivery systems,[1] describes how three diverse organizations are creating accountable care systems. It focuses on how each organization is building on experience to develop a system for population health management.

IMPETUS FOR ACO FORMATION AND DEVELOPMENT

The Marshfield Clinic's efforts to establish an accountable care organization (ACO) began with its 2005 to 2010 participation in Medicare's Physician Group Practice (PGP) demonstration and continued through the subsequent PGP Transition Demonstration from 2011 to 2012. The PGP demonstration was the first Medicare pay-for-performance initiative for physicians and a forerunner to the Medicare Shared Savings Program.[2] Marshfield joined Medicare's Shared Savings Program in 2013 with the expectation that participation would provide it with a source of incremental revenue to support and enhance its ongoing quality improvement and care management initiatives for all its patients, not only those attributed to its Medicare ACO. These initiatives have included increasing access, improving delivery and coordination of care, and enhancing chronic disease management through the use of information technology and practice redesign.

BUILDING A SYSTEM FOR POPULATION HEALTH MANAGEMENT

Care redesign. Prior to launching the Medicare ACO, Marshfield Clinic instituted a patient-centered medical home model of care in all of its primary care ambulatory clinic sites, which use advanced access scheduling and physician extenders (i.e., nurse practitioners and physician assistants) to shorten wait times for appointments.[3] It has a 24-hour nurse line, staffed by registered nurses with access to patients' electronic health records (EHRs) and care protocols, which help route patients to the most appropriate care setting. The clinic also uses telehealth programs and a mobile health screening van to increase access to care for patients in rural and underserved areas.

Marshfield's internally developed EHR system facilitates these efforts by calling providers' attention to patients who are not meeting treatment goals and sending physicians alerts about the health status of patients scheduled for office visits. A medical assistant typically reviews the list and follows evidence-based protocols to perform outreach and delegated tasks such as examining the feet of diabetic patients for problems that would require further evaluation by a physician.

Care management for patients with complex, costly needs. The clinic encourages patients who are taking anticoagulation medication or are being treated for congestive heart failure to participate in specialized care management programs that develop individual care plans to promote patient education and self-care skills, help patients make lifestyle changes and increase treatment adherence, and offer consistent monitoring and management of symptoms. The heart failure clinic, for example, is staffed by specially trained nurse practitioners and registered nurse care managers who interact with patients over the phone and in person, under the oversight of a cardiologist. Patients receive a daily call from an interactive voice response system that records changes in weight or symptoms and alerts

Exhibit 1. At-A-Glance: Marshfield Clinic's Medicare Shared Savings ACO

Entity type	Nonprofit multispecialty group practice and affiliated health plan
Service area	41 ambulatory care sites in 33 rural communities of central Wisconsin
ACO program	Medicare Shared Savings Program (2013 start)
ACO partners	The clinic is the sole sponsor of its ACO
Patients served	Approximately 30,000 traditional (i.e., fee-for-service) Medicare patients, out of a total of 383,380 clinic patients, are attributed to the Medicare ACO
Physicians	More than 700 employed physicians, roughly one-third of whom provide primary care
Hospitals	The clinic operates a 40-bed community hospital and co-owns (with Ministry Health Care) a 25-bed critical access hospital. It maintains close referral relationships with 13 independent community hospitals in its service area, notably St. Joseph's Hospital in Marshfield, a 500-bed regional referral center and member of Ministry Health Care.
EHR systems	Internally developed electronic health record system
Financial arrangement	The clinic opted to participate in the one-sided risk model under the Shared Savings Program, which permits the ACO to keep up to 50 percent of the savings it achieves by reducing Medicare spending for assigned beneficiaries below a benchmark, but imposes no financial penalty for failing to meet its savings target. The benchmark is what Medicare would have paid assuming historical spending increased at the national rate of growth in Medicare spending. (Savings also must meet or exceed a minimum savings rate to assure they reflect more than random fluctuations in spending.) The proportion of savings the ACO may keep depends on meeting quality reporting requirements in the first year, and on achieving quality performance targets in subsequent years. Shared savings payments are capped at 10 percent of total benchmark expenditures each year.
Governance	Board of directors made up of clinic physicians

the nurse when these responses indicate the need to evaluate the patient or adjust treatment to avoid an emergency room visit or hospitalization. Patients with diabetes may be referred to a self-management education program taught by diabetes educators, pharmacists, dieticians, behavioral specialists, and therapists.

Based partly on expectations of financial support from participation in the Medicare Shared Savings Program, the clinic also hired and trained 45 registered nurses who were embedded in medical practices. These nurses coordinated care and provided education and care management services to patients at risk of hospitalization, as identified through risk prediction models. Although this program showed promising results in reducing hospital use, the clinic recently discontinued it because it was partially duplicating care management services offered to members of its affiliated Security Health Plan. In addition, the program's cost—nearly $5 million annually—was not sustainable without support from other payers.[4] Marshfield is restructuring its primary care teams to clarify role responsibility for care coordination.

> *"We went through this progression over a period of say 10 years where we took cost out of our system; we improved our value substantially per patient. And that bore out… with shared savings and improved quality. And that was great, but you reach a point where you've become lean enough, so to speak, that your average spend per Medicare beneficiary gets low enough that to take that next dollar out of your system becomes progressively more expensive. You strive to reach that break-even where you know taking a dollar out is no longer economically feasible because you lose more than a dollar by investing in that type of activity. No one has yet learned where that target lies."*
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> Kori Krueger, M.D., medical director, Institute of Quality, Innovation, and Patient Safety at Marshfield Clinic

Patient and family engagement and activation. Patients can use the clinic's Web portal to access their health information and immunization records and request prescription refills. Additionally, the ACO has a six-member patient advisory panel that meets quarterly to provide feedback on the ACO's performance and offer advice for improving processes such as after-visit summaries.

Integrated data and analytics. Marshfield Clinic began developing its EHR system more than 40 years ago, and performs ongoing testing and feedback with physicians. The customized system aggregates data from all care settings, as well as some external hospitals, using a unique patient identifier. The clinic recently created a separate subsidiary to sell its information technology services to other providers.

The clinic's enterprise data warehouse, in continual development for nearly 20 years, aggregates clinical data to allow the study of outcomes, costs, quality, and patient experience. This information is used to provide physicians with feedback on their quality performance compared with peers and to show variation in practice patterns, such as rates of cataract surgery. Reports and dashboards are available by clinic, region, specialty, physician, and patient.

When data suggest opportunities for improvement, the clinic's Institute for Quality, Innovation, and Patient Safety works with IT and clinical staff to identify high-performing physicians who can serve as exemplars of best practices. To identify high-risk patients who would benefit from care coordination, the system combines risk stratification data from Medicare with in-house data on billed charges, numbers of specialists seen, medications prescribed, gender, and age. The system has the capability to modify its predictive algorithms over time.

Supportive payment models and financial incentives. The Medicare Shared Savings Program functions much like a value-based pay-for-performance initiative in which the clinic receives bonus payments for achieving quality and cost targets, with no downside financial risk. Individual Marshfield Clinic physicians are paid an annual salary based primarily on their clinical productivity in the prior year; about 10 percent of compensation is based on performance on access and quality, plus consideration for teaching, research, and administrative duties. Collectively the clinic's physicians have an indirect incentive to help patients avoid hospital admissions for chronic conditions that can be well managed through good ambulatory care—one of the goals of Marshfield's care management programs.

As with the PGP demonstration, the clinic relied on its existing governance structure and close relationships with community hospitals to engage in the Medicare Shared Savings Program, thus avoiding the need to build new partnerships and devise methods for sharing savings with external parties. Participation in the Shared Savings Program may help the clinic prepare for and enter into similar value-based contracting arrangements with local commercial payers, should they express an interest in doing so.

RESULTS

Although results for the first year of Marshfield's participation in the Medicare Shared Savings Program are not yet available, its success in the PGP demonstration offers one example of savings that may be achieved through the Medicare ACO model. During the five-year PGP demonstration, the clinic saved Medicare $118 million, of which it earned $56 million in shared savings for meeting quality and financial targets. This amount represented more than half of the $107.6 million in total performance payments earned by all PGP demonstration sites.[5] The Marshfield Clinic achieved 81.8 percent of quality targets in the first year of the demonstration and 98.1 percent in the fifth year (see Appendix). An external evaluation found that the PGP demonstration sites achieved savings primarily by controlling spending on inpatient care among elderly patients with costly chronic conditions, though financially successful sites also controlled outpatient costs.[6]

An academic study found that the Marshfield Clinic reduced emergency department visits among Medicare beneficiaries by about 2 percent per year and 30-day hospital readmissions by about 1 percent per year during the PGP demonstration.[7] Further, Marshfield achieved savings both for low-income beneficiaries who were dually eligible for Medicare and Medicaid as well as for other Medicare beneficiaries, despite having relatively modest spending per beneficiary at the start of the demonstration. The clinic reports ongoing reductions in hospitalization and readmission rates among patients engaged in its heart failure management program.

LESSONS LEARNED

Enabling factors. Marshfield Clinic's ACO can be seen as the culmination of many years of effort, beginning with its participation in the PGP demonstration. The clinic's leaders say that effort has enhanced the organization's capacity for population health management and fostered an appreciation for how transparency accelerates quality improvement. Increasing provider acceptance of performance reporting was critical. "We saw how powerful it was for that information to be displayed to the care team and how that changed the care delivery process to enable us to have better patient outcomes," says Kori Krueger, M.D., a primary care physician leader and medical director for the Marshfield

Clinic's ACO. Having a sophisticated IT team that could build or adapt systems to meet the clinic's unique needs was another key factor in the success of these efforts, leaders say.

As the sole sponsor of its ACO, Marshfield Clinic does not share savings with independent community hospitals, nor is it at risk for lost revenue from reductions in inpatient stays. The clinic did not need to build new governance structures or negotiate new financial arrangements with other stakeholders to create the ACO. Nevertheless, Marshfield must cooperate with other community providers to achieve its goals. The clinic reports that federal financial penalties for excess rates of readmissions are prompting hospitals and skilled nursing facilities to collaborate more closely—with one another and with Marshfield Clinic—to reduce hospital readmissions.

Challenges. Under the Medicare Shared Savings Program, benchmark savings calculations are based on the reduced spending levels the clinic achieved in the PGP demonstration. This makes it more challenging for the clinic to realize additional savings. The clinic's inability to rely on Medicare shared savings to extend nurse care coordination across its primary care sites suggests that multipayer efforts are needed to support systemwide care transformation. However, the clinic has not yet been able to interest commercial payers in establishing value-based contracts that could help fund population-wide health management programs.

Marshfield Clinic's experience also offers a cautionary lesson about the possible challenges Medicare ACOs may face in continuing to invest in programs that produce savings as Medicare ratchets down the total spending target over time to ensure spending for ACO patients continues to decrease relative to fee-for-service spending. (Medicare will recalculate the ACO shared savings benchmarks at the end of ACOs' initial participation in the Shared Savings Program.) "The expectation is your current performance is the new norm, and there's no recognition of the fact that all of the infrastructure and the processes you've put in place to get to the level you're at continue to cost you money as an organization," says Krueger. From a policy perspective, this limitation of the Shared Savings Program model suggests it may be only a halfway point on the road to more durable and comprehensive risk-sharing arrangements.

While Medicare claims data have enabled the clinic to get a clearer picture of where patients seek care, leaders say the data have not been as useful as they had hoped. Some reports contain records for deceased patients who should have been excluded. In addition, the data are not detailed enough to identify the specific services patients receive when they are treated in unaffiliated hospitals. From a financial perspective, because Medicare restricts eligibility for some services the clinic believes are necessary to improve transitional care (such as home visits), the clinic is unable to internally fund such services and must rely instead on community-based organizations to help meet such needs.

Advice and insights. When asked to account for the clinic's success in achieving shared savings under the Medicare PGP demonstration—the forerunner to the Shared Savings Program—leaders say the involvement and collaboration of the clinical care team, regional leadership, quality improvement specialists, and expertise in health IT and analytics were essential. It was also important to pursue multiple initiatives simultaneously to build an impact and transform care. They also advise making sure clinical data are retrievable because physicians need to see patient-level data to understand the need for process improvement and care redesign.

Appendix. Physician Group Practice Demonstration Summary Results for Performance Year 1 Through Preliminary Performance Year 5

	Quality percentage					Shared-savings payments				
	PY1	PY2	PY3	PY4	PY5	PY1	PY2	PY3	PY4	PY5
Billings	90.91%	97.78%	98.11%	92.45%	100.00%	–	–	–	–	–
Dartmouth	95.45%	97.78%	92.45%	94.34%	96.23%	–	$6,689,879	$3,570,173	$328,798	–
Everett	86.36%	95.56%	94.34%	94.34%	100.00%	–	$129,268	–	–	–
Forsyth	100.00%	100.00%	96.23%	96.23%	100.00%	–	–	–	–	–
Geisinger	72.73%	100.00%	100.00%	100.00%	100.00%	–	–	$1,950,649	$1,788,196	–
Marshfield	81.82%	100.00%	98.11%	100.00%	98.11%	$4,565,327	$5,781,573	$13,816,922	$16,154,242	$15,832,603
Middlesex	86.36%	95.56%	92.45%	94.34%	100.00%	–	–	–	–	–
Park Nicollet	95.45%	97.78%	100.00%	100.00%	100.00%	–	–	–	–	$5,673,177
St. John's	100.00%	100.00%	96.23%	98.11%	100.00%	–	–	$3,143,044	$8,185,757	$2,598,859
Michigan	95.45%	100.00%	94.34%	96.23%	98.11%	$2,758,370	$1,239,294	$2,798,005	$5,222,852	$5,329,967

Source: RTI International for the U.S. Centers for Medicare and Medicaid Services, http://www.cms.gov/Medicare/Demonstration-Projects/DemoProjectsEvalRpts/Downloads/PGP_Summary_Results.pdf.

Notes

[1] D. McCarthy and K. Mueller, *Organizing for Higher Performance: Case Studies of Organized Delivery Systems* (New York: The Commonwealth Fund, July 2009); D. McCarthy and S. Klein, *The Triple Aim Journey: Improving Population Health and Patients' Experience of Care, While Reducing Costs* (New York: The Commonwealth Fund, July 2010).

[2] Center for Medicare and Medicaid Services, Physician Group Practice Transition Demonstration, http://innovation.cms.gov/initiatives/Physician-Group-Practice-Transition/.

[3] D. McCarthy, K. Mueller, and S. Klein, *Marshfield Clinic: Health Information Technology Paves the Way for Population Health Management* (New York: The Commonwealth Fund, Aug. 2009).

[4] M. Cuellar, "Marshfield Clinic to End Nurse Care Coordination Program," *Marshfield News-Herald,* May 7, 2014, http://www.marshfieldnewsherald.com/article/20140507/MNH01/305070635/Marshfield-Clinic-end-nurse-care-coordination-program.

[5] Seven of the 10 sites participating in the PGP Demonstration earned performance payments in at least one of the five years; see: RTI International, *Physician Group Practice Demonstration: Performance Year 1–Preliminary Performance Year 5 Summary Results* (Baltimore, Md.: U.S. Centers for Medicare and Medicaid Services), http://www.cms.gov/Medicare/Demonstration-Projects/DemoProjectsEvalRpts/Downloads/PGP_Summary_Results.pdf.

[6] RTI International, *Evaluation of the Medicare Physician Group Practice Demonstration: Final Report* (Baltimore, Md.: U.S. Centers for Medicare and Medicaid Services, Sept. 2012), http://www.cms.gov/Medicare/Demonstration-Projects/DemoProjectsEvalRpts/Downloads/PhysicianGroupPracticeFinalReport.pdf.

[7] C. H. Colla, D. E. Wennberg, E. Meara et al., "Spending Differences Associated with the Medicare Physician Group Practice Demonstration," *Journal of the American Medical Association,* Sept. 12, 2012 308(10):1015–23, Table 1 and eTable 4.

About the Authors

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The aim of Commonwealth Fund–sponsored case studies of this type is to identify institutions that have achieved results indicating high performance in a particular area of interest, have undertaken innovations designed to reach higher performance, or exemplify attributes that can foster high performance. The studies are intended to enable other institutions to draw lessons from the studied institutions' experience that will be helpful in their own efforts to become high performers. It is important to note, however, that even the best-performing organizations may fall short in some areas; doing well in one dimension of quality does not necessarily mean that the same level of quality will be achieved in other dimensions. Similarly, performance may vary from one year to the next. Thus, it is critical to adopt systematic approaches for improving quality and preventing harm to patients and staff.

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