Background

Geisinger Health Plan (GHP) is a nonprofit health maintenance organization serving the health care needs of more than 310,000 members in 43 counties throughout central and northeastern Pennsylvania. Geisinger Health System employs more than 950 physicians who serve a predominantly poor and rural population of 2.6 million.

In 2003, Elizabeth McGlynn, et al. reported that across the United States, people were receiving only 55 percent of recommended evidence-based medical care.\(^1\) GHP leadership note that studies like McGlynn’s, along with persistent increases in fragmented care and the cost of care, helped direct its priorities as a health plan and set in motion initiatives to bolster primary care.\(^2\)

In 2005, the Geisinger Board of Directors challenged leaders to develop approaches to improving care coordination, chronic care, patient engagement, transitions of care and acute care.\(^3\) As a result, GHP’s patient-centered medical home (PCMH) initiative, entitled the ProvenHealth Navigator\(^\circ\) (PHN), was designed and implemented to deliver value by improving care coordination and improving the health status of each patient.

The pilot originally addressed the needs of Medicare Advantage patients with chronic disease and multiple comorbidities who represented the health plan’s highest cost segment. GHP focused on five core components tied to PCMH transformation:

- Patient-centered primary care.
- Integrated population management.
- The medical neighborhood.
- A quality outcomes program.
- A value reimbursement model.\(^4\)

The PHN model was later expanded to all Geisinger primary care sites as well as non-Geisinger sites, and currently includes Medicare and commercial members.
Implementation

During the pilot, GHP conducted baseline practice assessments to identify the strengths, opportunities and gaps of each practice; these were presented and discussed at the first medical home meeting. Subsequent monthly meetings were conducted at each pilot practice and included practice providers, front desk/nursing staff and health plan leadership. From the baseline assessment, practices and the health plan worked together to develop next steps, which were reviewed regularly with a focus on workflow redesign, progress and practice issues/barriers.

Patient-Centered Primary Care

The first three components of the GHP PHN model focus on improving patient care and coordination. First, patient-centered care improvement is achieved by focusing on increasing patient education, improving access, implementing team-based care and promoting active electronic medical record (EMR) use, including decision support and best practice alerts. Increasing access includes ensuring that acutely ill patients can be seen promptly and their needs are fully addressed during their visit.

Integrated Population Management

The second core component, population management, directs practices to care for all their patients, with a focused attention on the most ill as well as increased assistance to patients with complex prescription drug regimens. To implement population management, GHP provides embedded nurses, teamed with office staff, who help improve communication between the practice and the patient. Case management nurses are embedded into practices at a ratio of one case manager to every 1,000 Medicare Advantage patients or 5,000 covered lives.

These case managers have access to claims data, which allows them to communicate directly with patients and alert practice care teams about patients likely to require additional care. Case managers have further responsibilities, which include post-hospital discharge follow-up within 48 hours, medication reconciliation, assessment of patients’ social support at home and the creation of links with local resources, such as nursing homes or rehabilitation centers, on behalf of primary care practices. The health plan also risk-stratifies the patient population with predictive modeling software, and uses telephone interactive voice response (IVR) and in-home wireless devices to monitor high-risk or post-hospital discharged patients.

The Medical Neighborhood

The third focal area of the PHN is challenging practices to improve connectivity with the medical neighborhood. Practices can provide “360 degree care” by aligning primary care physicians with specialty physicians, hospitals and skilled nursing facilities to improve patient care regardless of where GHP members access the health care system. As an added benefit of creating those value care system connections, because primary care physicians are motivated to enhance quality of care, they are more likely to refer patients to high-quality and accountable specialty services, hospitals and select nursing homes.
**Quality Improvement and Reimbursement**

The fourth and fifth components involve quality improvement and value-based reimbursement. Providers and staff receive monthly membership reports and/or disease registries on diabetes, hypertension, coronary artery disease and preventive care. The health plan also provides practices with a comprehensive utilization and medical expense report, including data for hospital admissions, readmissions, emergency department use, pharmacy, ambulatory care, surgery and PMPM costs. These data allow for the implementation of interventions such as targeted reminder mailings for office hours and provider access, surveys to identify causes of ED visits and health plan outreach to high utilizers. In addition, each practice is required to define 10 quality targets and receives quarterly reports outlining progress on these measures.

During the pilot, the plan supported practice transformation with monthly payments to practices of $1,800 per physician, and additional stipends of $5 per Medicare patient per month. The payment model utilized was a fee-for-service (FFS) hybrid with performance- and results- shared payment. Outcomes were based on a set of 10 quality outcomes related to encounters per patient, disease-specific care scores, inpatient follow-up rates, percentages of high-risk patients with a care plan or risk assessment and patient satisfaction scores.

**Sustainability**

As Janet Tomcavage, R.N., chief administrative officer of health services, describes, “Data drives more data.” The fourth core component of the GHP pilot requires tracking of quality and cost-savings outcomes; data are used to identify areas for further investigation to drive quality improvement by helping the plan and practices understand what interventions are working well, in addition to further areas for improvement.

One example of data driving improvement began when GHP measured readmission rates for patients who were discharged from a hospital to a skilled nursing facility (SNF) and found that a full 30 percent of all such patients were readmitted to the hospital within 30 days. GHP assumed that most of these readmissions were as a result of poor handoffs from hospitals directly to SNFs. However, a deeper dive into the data found that 20 percent of the readmissions occurred during the transition from SNF to the patient’s home, largely due to lack of appropriate hand-offs to family and the community practice teams. Therefore, tackling this area for readmissions required a different strategy; instead of just focusing on the hospital handoff, GHP could work on improving the SNF handoff to patients’ homes and primary care.

The plan shared this readmission data with SNFs at their quarterly meetings to begin the improvement process. Examining preparedness of patients to transition from SNFs to their homes is now a crucial element of the comprehensive care coordination program for transitions.

In the past, many primary care practices felt that ED use was highest on the weekends — when primary care offices were closed — thereby making it difficult for practices to reduce these rates. When GHP examined the data, staff saw that the highest ED time of the week was actually Monday morning. It deduced that patients waited with their care needs over the weekend and then, if they could not get an appointment on Monday morning, went to the ED. For one practice, the highest rate of ED use among its patients was on Thursday afternoons, when the practice had the least physician coverage. Such data allow GHP to work with practices to improve access to primary care for patients.
GHP also developed its own patient satisfaction survey, through which the plan found that a quarter of patients surveyed did not know their care managers’ names. In response, GHP changed work flows to ensure that care managers always shared their business cards in their introductory packets and reinforced their names throughout conversations.

These improvements are based on the idea of rapid-cycle innovation, which includes “iterative tests of care re-engineering” that are “tested, scaled, and adapted with ... urgency.” Recognizing that new clinical knowledge can take 14 to 17 years to disseminate into standard practice, GHP developed the aforementioned system to continuously monitor data, quickly pilot changes and rapidly disseminate them throughout the entire medical home system. As Tomcavage described, the basis of innovation with this system is “how you take data, analyze it, look at it, use it for operational impact, then deploy rapid-cycle changes to see if you can impact it.”

Outcomes

For Medicare Advantage patients, PHN implementation was associated with an 18 percent reduction in hospital admissions, 36 percent reduction in hospital readmissions and a 7 percent reduction in cumulative spending that approached statistical significance. An August 2009 review of the PHN reported an estimated $3.7 million net savings, which represented a return on investment of greater than 2-to-1. For the practices performing in the highest quartile, patients with chronic diseases had hospital stays that were 23 percent shorter, were admitted 25 percent less frequently and were readmitted 53 percent less often.

A subsequent August 2012 analysis found that between 2005 and 2009, GHP members whose sites of care were reengineered as medical homes showed statistically significant reductions in amputations and end-stage renal disease and reductions in strokes.

Scale

Geisinger Health Plan gradually brought new sites into the PHN model in accordance with its strategy of continuous evolution. As part of its rapid-cycle innovation strategy, Geisinger continuously evaluated outcomes and incorporated lessons learned into new sites that were added as medical homes. For example, lessons learned during the 2008-2009 addition of nursing homes were incorporated into all future PHN clinics. The nursing homes themselves were incorporated gradually; two SNFs piloted the PHN model before it was deployed to the rest of the facilities. GHP developed and piloted other strategies, such as extended hours at practices, in one or two practices, then sent across the rest as standard work. Expansion of the GHP-affiliated micro-delivery system (medical neighborhood), such as the addition of nursing homes, is part of the evolution of the model.

During the pilot phase of the PHN model, GHP chose only to include high-risk Medicare patients in its initiative to improve transitions from hospital to home. However, the plan shortly realized that simply by being in the hospital, many Medicare patients were at higher risk and also needed a more comprehensive transition of care strategy. Because GHP was constantly and consistently looking at the impact of its approaches, the plan saw that it was missing opportunities for patients who were presumed to be at lower risk but

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were still having complications after discharge. Therefore, from 2009 to 2011, GHP scaled the PHN model from just Medicare Advantage beneficiaries to include its larger commercial membership. Outcome measures have continued to remain strong since the inception of the PHN in late 2006, and while costs continue to increase, they are growing at lower rates in comparison to GHP’s non-medical home.

GHP is currently looking at ways to develop an extended care team to decrease its reliance on registered nurse care managers. Over the past year, the plan has piloted behavioral health in a few of its sites to evaluate the impact of such services at the point of care and in the medical home. The plan has also expanded the role of pharmacies and pharmacists in the team and is looking at what non-clinical personnel can offer, particularly with regards to community services. As the plan continues to examine its data and spread the model, staff is placing a high importance on maintaining sustainability in the long term by evaluating roles of team members and examining what types of providers can most efficiently and affordably deliver key care functions.

Ultimately, GHP considers the most important aspect of its PHN model not the specific initiatives that have been implemented, but rather the development and refinement of an “innovation infrastructure that can adapt to new evidence, efficiently and rapidly translate that evidence into care delivery and focus on patient benefit.” GHP expects that its current care models will be changed through this process, based on technological advances, new evidence and ongoing learning; it is prepared to do so by focusing on rapid-cycle innovation.

2 Participant interview with Rebecca Malouin, Ph.D., 2011

A copy of the full ACHP report on strengthening primary care for patients, supplementary profiles on member plan initiatives, a one-page fact sheet and other resources are available online at www.achp.org or by emailing innovations@achp.org.