



[ACTUARIAL SPECIALTIES](#) | [HEALTH](#)

Value-based Risk Share

The ultimate case study of how we can slow growth in medical costs while improving quality

ROY GOLDMAN AUGUST 2021

Photo: iStock.com/NoSystem images

Due to the boldness of this case study, I refer to it as “the ultimate case study.” The issues addressed are fundamental ones, including how we can slow the growth in medical costs while improving quality. In my experience, physicians have been and will continue to be in charge of the health care system. They are the ones who write the prescriptions; refer patients to specialists; order radiological, lab, and other tests; and admit patients to the hospital and other facilities.

Over the last 35 years, insurers and health plans have tried many approaches to engage with physicians and other providers. These include:

- Hospital preauthorization requirements
- Discharge case management
- Provider discounts for indemnity payers
- Formation of health management organizations (HMOs), then preferred provider organizations (PPOs)
- Payment of primary care provider (PCP) capitation, then global capitation
- Wellness incentives for members

- High-deductible plans
 - Complex case management
 - Radiology preauthorization
 - Prescription benefit tiers
 - Bundled payments
 - Formation of medical homes and accountable care organizations (ACOs)¹
- Geisinger has managed physicians and hospitals for more than 100 years, and it has offered a health plan (Geisinger Health Plan, or GHP) to the public since 1985. At one time or another, it has implemented all of these approaches to engage with providers, ranging from discounted fee-for-service to full risk to providers. In its latest iteration, GHP has contracted with Geisinger to share in the upside and downside risk for all GHP members in a service area, regardless of whether all of the members use Geisinger providers and facilities. Geisinger's approach does not use the typical primary care attribution; instead, it selects a predetermined service area based on a plurality of primary care services. If member utilization of Geisinger primary care in a county within the service area exceeds the agreed-upon percentage, then all members in that county are included in the program.

GEISINGER CASE STUDY OVERVIEW

Geisinger, an integrated delivery system based in central Pennsylvania, has used its health plan to develop and test innovative payment models that:

- Encourage cooperation and collaboration among physicians, hospital executives, and the health plan
- Provide real-time information, reporting, and technology
- Use tools to combine administrative and clinical data necessary to generate actionable insights to transform health care
- Produce lower costs and better outcomes that have a triple benefit—for members, GHP and Geisinger

Over the years, Geisinger has learned that such arrangements must:

- Create mutual trust
- Rely on GHP for high-quality and timely data and analytics
- Have reasonable and mutually agreeable performance targets
- Be administratively simple²

In 2018, GHP and Geisinger introduced the value-based risk share (VBRS) program. This is an innovative risk arrangement with shared savings between its provider and payer arms. It is a significant risk arrangement in that Geisinger must meet overall medical expense ratio (MER) targets by line of business (LOB) for all GHP members in a predetermined service area. It is value-based in that all components of the health system must use the best evidence available to keep members as healthy as possible and to manage care in a way that minimizes cost and maximizes quality.

LEARNINGS FROM PREVIOUS INITIATIVES

Geisinger has reorganized its departments to meet the health plan's challenge. Many of the methods used are ones that were successfully applied to prior initiatives:

- Provider pay-for-performance programs (are still in place with many GHP providers today)
- Patient-centered medical home programs^{3,4} (were launched in 2006 with Geisinger and large non-Geisinger practices, which also are still in place)
 - These programs had shared savings per-member per-month (PMPM) arrangements with targets and settlements
 - Their features include GHP nurses in providers' offices to meet/advise members and develop contacts, physicians in nursing homes, redirecting members from ER to the office, daily tracking of inpatient members, and daily meetings of office medical team to discuss patients
 - The payment models have transitioned from PMPM to utilization targets with shared savings for reaching reasonable benchmarks
- Proven care programs⁵ (were developed beginning in 2006)
 - These programs featured bundled payment for all care related to a given procedure (e.g., coronary bypass, hip replacement, perinatal care, diabetes) with a guarantee that no further payments would be made if there were complications within 90 days
 - For each procedure, Geisinger developed literature-based actionable steps for optimal care prior to, during, and post-admission, with all steps and outcomes tracked by an electronic medical record (EMR) system
- A readmission program with a "carrot and stick" approach in which hospitals could earn more per admission but no further payments would be made for a readmission (launched in 2009)
 - Two years of study by hospital, floor, and wing were used to develop targets and create a bonus system that provides incentives down to the floor nurses and hospitalists who make the discharge decisions

VBRS PROGRAM DESCRIPTION

With its newest arrangement, VBRS, Geisinger is working to create alignment among providers and payer with a targeted focus on optimizing health outcomes. The overall aim is to provide high-value population health management to improve affordability in the communities served.

The overall aim of VBRS is to provide high-value population health management to improve affordability in the communities served.

The primary goal of VBRS is to reduce cost through avoidable utilization with procedures that are consistently applied, which is achieved through efficiently managing at-risk populations and providing continuity of care no matter where the member accesses the system. Key components of this model include:

- Align incentives for both payer and provider to optimize the care and minimize cost
- Manage the total health of members/patients together (by provider and health plan)
- Enhance the ability to manage the at-risk population
- Improve analysis and business management
- More accurate reflection of MER performance for use in monitoring—the MER is the key risk metric used in pricing and managing risk
- Administrative simplification
- Significant changes were made across Geisinger to make this model successful for patients and members
- Clinical transformation began with creating seven institutes focused on medicine, surgery, heart, cancer, musculoskeletal, neuroscience, and women and children
- Institutes employ a team-based approach for providers, scientists, educators, and other health care professionals at every location, providing consistency and continuity of care no matter where a patient enters the system
- To drive accountability across the organization, a Trend Committee was formed with the goals of understanding cost and utilization trends, comparing results to benchmarks using Milliman’s MedInsight tool, and establishing action plans (called “trend benders”)
- Follows a schedule of weekly, monthly, and quarterly meetings
- Attendees include GHP and Geisinger executives; clinical and business leads of the institutes, actuaries, and finance; and support team representatives from pharmacy, diagnostic medicine, telehealth, nurse triage, and innovation and technology
- Actuaries’ roles include setting targets/incentives, providing monthly updates of utilization and cost trends by LOB, applying risk adjustments and credibility for bonus awards and physician comparisons, and analyzing cost/benefit results

COST REDUCTION VIA VBRS

With incentives aligned for providers and payer, they work together to review opportunities for improvement, and there is an enhanced ability to identify and manage the at-risk population.

A key component is due to administrative simplification. Complicated and custom fee schedules that were developed over many years between Geisinger providers and payer were discontinued, and the conversion to a percentage of Medicare fee schedules removes perverse incentives, encourages complete and accurate encounter data submission across all LOBs, and allows for efficiencies in benchmarking performance. Further, this cooperation creates operational efficiencies among various departments:

- Payer/provider contract negotiations are streamlined
- Revenue cycle and claims operations are aligned

- Prior authorization and provider admissions procedures are simplified. Settlements occur every six months by comparing actual performance relative to the mutually agreed upon MER target by LOB, and targets are adjusted for seasonality. This arrangement includes both upside and downside risk for Geisinger. Therefore, the health plan will meet its pricing MER target by LOB, while providers can earn a bonus to augment their revenue by reducing cost when bettering MER and quality targets. Geisinger believes countywide targets improve the credibility of results and create a more reasonable-sized population to help drive down the cost of care.

Geisinger believes countywide targets improve the credibility of results and create a more reasonable-sized population to help drive down the cost of care. Additionally, by constantly measuring performance against national benchmarks, Geisinger believes health outcomes will improve. Due to the newness of the program, rigorous studies have not yet been completed.

HURDLES AND RISKS TO VBRS IMPLEMENTATION

What makes this case study unique is that GHP members use Geisinger *and* non-Geisinger providers and facilities, and Geisinger providers and facilities see non-GHP patients. In addition, there are two primary obstacles to broadly implementing VBRS:

1. The health system and payer must truly be in alignment and committed to finding and acting on opportunities.
2. The health system must truly shift the focus from fee-for-service to value-based care. The health system still may have concerns around the number of beds filled, departmental revenue and physician relative value scale (RVS) targets, and so on.

Both physician practices and the health plan will have increased personnel (e.g., GHP hired nurses to meet with patients after they saw their physician). Significant changes in management and operations also are required. While Geisinger was able to improve the quality of care and lower total medical costs, the return on investment fluctuated from year to year, and it began to exceed 1.0 after two years. Here are some other risks:

- As with many interventions, it may be difficult to prove short-term savings. Even when something seems like the right thing to do, it may not have an immediate cost savings.
- Actuaries, data scientists, and analysts must help these entities quantify both short- and long-term savings.
- There is a cost to setting up this type of practice—new staff, systems, reporting, and so on, and this needs to be funded by someone.
- VBRS arrangements' impact on enterprise risk management must be considered.

- Product diversification is necessary to minimize risk.

SCALING VBRS FOR WIDER ADOPTION

Even when something seems like the right thing to do, it may not have an immediate cost savings.

GHP is willing to enter similar arrangements with other health systems that are important within its service area. Other health plans can do the same with important health systems in their service areas. However, there needs to be a sufficiently large number of plan members accessing services with the target provider.

Reimbursement models between payer and provider with an emphasis on value-based care are gaining more traction in the marketplace and with the Centers for Medicare & Medicaid Services (CMS). Once CMS sets incentives for providers, they should be looking for health plan partners that can provide the data and care management expertise they need. Additional studies like Geisinger's would help grow this model in the marketplace.

CONCLUSION

Geisinger's vision is to make "better health easy." In the company's words: "In order to make that vision a reality, we began transformation of both our clinical assets and our payment models. We intend to improve the health of our members through delivering high-quality clinical programs to meet their needs, along with aligning the finances to make it more affordable. Managing the total health of our members is the primary focus of our organization and will require significant work across the entire Geisinger organization."

Roy Goldman, Ph.D., FSA, CERA, MAAA, is a retired health actuary and currently president of the Society of Actuaries.

This article was reviewed and approved by executives at Geisinger Health Plan.

Statements of fact and opinions expressed herein are those of the individual authors and are not necessarily those of the Society of Actuaries or the respective authors' employers.

REFERENCES:

1. For more information on physician reimbursement models, see [Provider Payment Arrangements, Provider Risk, and Their Relationship with the Cost of Health Care](#) and [search for "physician reimbursement models" on Google Scholar](#).
2. See [Driving Innovation in Provider-Payer Value-Based Care Relationships](#) for an example.
3. [Gilfillan, Richard J., Janet Tomcavage, Meredith B. Rosenthal, Duane E. Davis, Jove Graham, Jason A. Roy, Steven B. Pierdon, Frederick J. Bloom Jr, Thomas R. Graf, Roy Goldman, Karena M. Weikel, Bruce H. Hamory, Ronald A. Paulus, and Glenn D. Steele Jr. 2010. Value and the Medical Home: Effects of Transformed Primary Care. *The American Journal of Managed Care* 16, no. 8:607–](#)

4. [Maeng, Daniel D., Jove Graham, Thomas R. Graf, Joshua N. Liberman, Nicholas B. Dermes, Janet Tomcavage, Duane E. Davis, Frederick J. Bloom Jr, and Glenn D. Steele Jr. 2012. Reducing Long-Term Cost by Transforming Primary Care: Evidence from Geisinger's Medical Home Model. *The American Journal of Managed Care* 18, no. 3:149–155.](#)
5. Steele Jr, Glenn D., and David T. Feinberg. 2017. *ProvenCare: How to Deliver Value-Based*

Healthcare the Geisinger Way. McGraw-Hill.

Copyright © 2021 by the Society of Actuaries, Schaumburg, Illinois.