ProvenCare: Geisinger's Model for Care Transformation through Innovative Clinical Initiatives and Value Creation

Interview with Ronald A. Paulus, MD, MBA

Geisinger's system of care can be seen as a microcosm of the national delivery of healthcare, with implications for decision makers in other health plans. In this interview, Dr Ronald A. Paulus focuses on Geisinger's unique approach to patient care. In its core, this approach represents a system of quality and value initiatives based on 3 major programs—Proven Health Navigation (medical home); the ProvenCare model; and transitions of care. The goal of such an approach is to optimize disease management by using a rational reimbursement paradigm for appropriate interventions, providing innovative incentives, and engaging patients in their own care as part of any intervention. Dr Paulus explains the reasons why, unlike Geisinger, other stakeholders, including payers, providers, patients, and employers, have no intrinsic reasons to be concerned with quality and value initiatives. In addition, he says, an electronic infrastructure that could be modified as management paradigms evolve is a necessary tool to ensure the healthcare delivery system's ability to adapt to new clinical realities quickly to ensure the continuation of delivering best value for all stakeholders. [*AHDB*. 2009;2(3):122-127.]

Robert Henry: *Two recent articles on ProvenCare discussed Geisinger's innovative approach to patient care.*[1,2] *Could you provide a quick synopsis of ProvenCare, and consider whether this system could help transform US healthcare from a sickness-based to a wellness-based system?*

Ronald A. Paulus: Geisinger's approach to patient care can be seen as a microcosm of the broader national landscape of healthcare delivery. ProvenCare represents 1 of the 3 core strategies that comprise Geisinger's healthcare system of quality and value initiatives that are transforming care. These 3 strategies are: (1) *Proven Health Navigation*, which is our name for our advanced medical home; this means wrapping a bundle of services around a patient, or a consumer, and his/her family. The goal of Proven Health Navigation is to address healthy behaviors, disease prevention, and disease management once a patient has past the point where prevention is no longer working; (2) *ProvenCare*, whose model recognizes that no matter how well we incorporate prevention strategies, even with the technology and the knowledge base we have today, a certain percentage of patients (ideally a declining percentage) will ultimately require an acute intervention. And ProvenCare is all about optimizing that intervention and rationalizing the reimbursement paradigm for that intervention, as well as engaging the consumer more actively in his/her own self-care during the time of intervention; and (3) *transitions of care*, recognizing the many handoffs between outpatient and inpatient, between inpatient and outpatient, between inpatient and nursing home, between home and nursing home—particularly vulnerable points for ensuring care safety, quality, and efficiency.

So to answer your question about transforming the US healthcare system, the ProvenCare model cannot transform our healthcare into a wellness-based system by itself, but the combination of those 3 strategies—with ProvenCare as its central component—can move us quite far toward that goal.

Henry: *What gave Geisinger the sense that it could get tracking for this idea?*

Dr Paulus: It was the leadership of our board of directors, headed by our Chief Executive Officer (CEO), Glenn Steele, Jr, MD, PhD, who observed that the

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reimbursement status quo no longer made sense.[1] The current reimbursement system includes, although not intentionally so, perverse incentives. Clinicians are paid more if their patients' outcomes are poor rather than good, because they are paid more for addressing complications of care. All providers recognize that if they have more office visits, their reimbursement increases; if they do more interventions, they are reimbursed more dollars. At the same time, there is a lack of focus on preventive services and on patient education. There is no emphasis today on disease prevention.

That led our board of directors to challenge the medical leadership to do something innovative about pay-for-performance (P4P),[1] to rationalize reimbursement by involving the consumer, the care-delivery system, and the payer in the process, and by aligning the incentives for improved outcomes across the board. The result is an innovative model of payment whose goal is not just to measure performance steps as process metrics but rather to actively do something to affect better outcomes.

Our CEO suggested a program that would incorporate all the current best practice evidence into a series of steps of care, document the steps of care being delivered, and bundle together the entire care process.[2] He challenged our medical leaders to take on the initiative, and the Director of Cardiothoracic Surgery, Alfred Casale, MD, stepped up to the plate.

Henry: *One of the goals of this journal is the alignment of stakeholder incentives. How do you get all the stakeholders—patients, providers, payers, and others—to win in this environment?*

Dr Paulus: When we discussed the new approach with our payers, they suggested that we should look at different ways of implementing this process. Ultimately we also discussed this with buyers (ie, self-funded employers) and with our own health plan. We introduced to them this model of all-inclusive professional services, hospital services, and the idea of a preoperative through 90 days postoperative "warranty." The 90-day care warranty balanced all these considerations and made this process acceptable to everyone. Because Geisinger is an integrated healthcare delivery system, it was easier to establish the program.

It was important to align incentives so we could have a dialogue. Among other things, we created a steering committee that included payer representation, the clinical enterprise representation, as well as surgical and professional group practice representation. As chair of that committee, I functioned as a "neutral facilitator"—a facilitator across all those different parties.

Although we have an integrated delivery system, each operating unit has its own budget, its own financial and clinical quality goals, and its own metrics, against which it is being measured. And 2 of our 3 hospitals are open-staffed, that is, they have a mix of Geisinger-employed and non-Geisinger physicians.

We also had to confront real-world issues, such as—if you are getting a bundled payment, how do you pay fee-for-service physicians who are not part of this system? But we all realized that the current payment model did not make sense, and there had to be alternative ways. ProvenCare is a nice half-step between the traditional fee-for-service approach and capitation; it aligns incentives but around specific things that are far

KEY POINTS

- Geisinger's integrated healthcare delivery system comprises an advanced medical home, the ProvenCare model, and transitions of care.
- A key component of Geisinger's approach to healthcare is an innovative model of incentives for the consumer, the provider, and the payer.
- ProvenCare's unique approach to risk management revolves around a 90-day so-called care warranty (for participating payers), initially applied to elective coronary artery bypass surgery but has since been expanded to other procedures, including hip replacement surgery, knee replacement surgery, perinatal care, angioplasty, and cataract surgery.
- In the short-term, Congress is not overly concerned with cost control relative to stimulus of the economy. The policy over the next year is not likely to be very motivated by demographic or by social problems.
- "Quality" and "value" represent the bottom line for Geisinger, which strives to create an all-inclusive delivery system that offers best value for patients, payers, and providers.
- Applying electronic infrastructure in healthcare is necessary today. Within the Geisinger medical home, the routinization of processes with electronic infrastructure enable all providers to practice to their outmost capacity.
- The lesson drawn from the Geisinger experience is that such an approach could be successfully applied to other plans, and with other payers.

less comprehensive and far less prone to underutilization than a pure capitation model.

The big leap of faith that had to be taken to implement this approach involved a half-step forward by the clinical enterprises and a half-step forward by the payer. The payer agreed to a bundled rate that included all the evidence-based services that are required, which meant they were funding the care that people truly needed. And the clinicians said they could improve patient care by doing all these process steps correctly 100% of the time and hardwiring those into the electronic health records (EHRs) infrastructure of the organization.

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Henry: *Could you briefly explain your innovative approach to risk management?*

Dr Paulus: Geisinger addressed risk in 2 ways: First, we agreed to accept a bundled rate—including a 90-day care warranty—so if things go awry, we absorb the cost of care. Second, those responsible for the clinical services said they could likely reduce their readmission rate as one measure of complication. This meant we give back 50% of the cost of our historical readmission rate to the payer upfront, in exchange for locking the future 50% of the historical readmission rate. We figured that if we reduced our readmission rate by more than 50%, it would be an opportunity for incremental profit margin creation on the clinical enterprise side.

It also means immediate gain for the payer, because whether or not we reduced the readmission rate, the payer saves 50% of what the payer would have paid historically, in addition to getting a locked-in bundled rate; so any given buyer has less risk of an outlier case.

Henry: *Fascinating. And is this related to the coronary artery bypass graft (CABG) surgery used in ProvenCare?*

Dr Paulus: Although this was initially applied to CABG,[2] we have since applied that principle to several other procedures, including hip surgery and cataract surgery, as well as angioplasties. We are now actively delivering and working on bariatric surgery and on a perinatal program. The perinatal program covers the duration of pregnancy, delivery, and the postdelivery follow-up period.

We have also added chronic disease optimization initiatives for coronary artery vascular disease, diabetes, chronic kidney disease, and most recently a preventive care bundle, where we optimize care in the same way. But instead of applying the same sort of bundled payment rate, we apply performance metrics and bonuses more akin to traditional P4P. It is easy to figure out when CABG starts, and what the follow-up period is. Similarly, it is relatively easy in perinatal care, given the nature of pregnancy and delivery, what those periods are. But when it comes to chronic conditions, such as diabetes, which last a lifetime, defining the bundle's appropriate window period isn't as clear-cut.

For acute intervention, the 90-day warranty is only for events related to the procedure, such as surgical wound infection, required follow-up, or extended cardiac rehabilitation.

Henry: *And is reaching consensus among different clinical schools of thought more complicated in relation to chronic diseases?*

Dr Paulus: ProvenCare's clinical approach to CABG surgery applied the 2004 American College of Cardiology/American Heart Association guidelines for CABG surgery.[3] It was initially difficult to reach consensus among all the clinicians even in relation to those guidelines. For this reason, we gave each clinician the guidelines that he or she was most skeptical of and asked them to review the literature, agreeing to revise our model if they found the guidelines lacking. However, after reviewing the literature, the clinicians agreed, with no exceptions, that these guidelines were the right ones to follow.

In part it was an attempt to take advantage of existing guidelines and in part to engage the clinicians and acknowledge their skepticism, by asking them to come up with the evidence. Another subtle but absolutely critical aspect of this approach is that even with guidelines, we allow clinicians to opt out of the guideline for any reason related to the procedure; the only requirement is that they document the reason for it.

Our experience shows that very few opt out of the guidelines. We track 40 different components on every patient undergoing CABG.[2] We have had hundreds of patients who had undergone CABG, so 250-plus times 40 is a large number, but we have had less than a handful of opt-outs. Nevertheless, the ability to opt out and the fact that the procedure is not being dictated to

them, provide clinicians an appropriate degree of freedom and comfort.

Henry: *Does this represent the difficulty in achieving a value-based healthcare system?*

Dr Paulus: For Geisinger, quality and value are the bottom line. Quality and value are intrinsic to our integrated delivery system model, because we have the payer and the provider sides of our organization. Ultimately, as an integrated healthcare delivery system we wanted to optimize quality and value to create a competitive differentiation for our health plan. That way we could offer a product to the marketplace that is a win-win system for the payer and the provider. It may be a provocative statement, but in today's healthcare marketplace, very few stakeholders are truly concerned with quality and value. And those who could or should be do not actualize it. The reasons vary by stakeholders.

Payers are not concerned with value because they are regulated or pseudoregulated and essentially make a fixed profit margin; therefore, the higher the total spending, the more money they make. So at the end of the day, I am not sure what would be the incentive for an insurance company to lower cost or to enhance value. For example, if premiums actually fell, and fell year after year, as in the case of personal computers, insurance plans would not like that business model.

Providers have not necessarily had the desire to increase quality and value, because they either do not accrue any benefit other than psychological, mission-based, or professional-based benefit, or they are actually penalized for it. For example, if a hospital invested in remote monitoring devices for its patients and was able to reduce readmissions by 50%, and if it is not an integrated system with a payer, this would reduce its revenue from potential admissions, meaning that it could not cover its fixed operating costs.

Patients are also not concerned with cost, because they have not borne a high degree of out-of-pocket cost, traditionally, once they get past their deductible; thus they have not had any incentive to manage costs. And, as for quality, they assume that they get it every step of the way.

Employers have probably been in the most painful position; they either have not had the buying power to be able to effectuate the desire to have better value, or they have traded off convenience and geographic proximity to their employees over value.

So the US healthcare system lacks players who truly care about value for their own population, although everybody cares about value at the societal level. No one is instigating the desire for value creation in the current healthcare system, which is not like a traditional, consumer-driven market, where people are paying out of pocket and vote with their dollars (which is what drives value in that situation).

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Henry: *Does value creation also relate to reimbursement issues and stakeholder collaboration?*

Dr Paulus: Indeed. We recognize that we are never going to be a hermetically sealed organization (such as the Kaiser Foundation), in which we insure the population and provide the care for that population only. But the more efficient we can become, and the more quality and value we can provide, the more we help the payer. It helps us have a higher profit margin on other payers, while offering competitive rates.

When we look at the current and looming healthcare crisis in Medicare and Medicaid, it is clear that over time reimbursement will become an issue. We have to prepare our delivery system to be successful in that Medicare/Medicaid environment; if we can be successful there, we can be successful anywhere.

This relates directly to value creation—recognizing that this value needs to be shared across the consumer, the payer, and the delivery system. We are trying to create the value that enables that sharing to happen.

Because Geisinger has an integrated delivery system, we decided we could afford to care about quality and value, and in patients for whom we provide the majority of the care we could afford to take risk—we could innovate—and make investments in the value creation. And we accrue that back. We can also apply that value principle to other markets or other payers.

We provide the same clinical care with ProvenCare, regardless of who the payer is, but our own insurance company is the only firm that reimburses us (we have not been approached by other payers). We can selectively choose when to deploy that component of ProvenCare to other payers. So our 3-part strategy has improved resource utilization and has led to improved patient outcomes,[2] which is the true value.

Henry: *What is the role of electronic records or other electronic technology in Geisinger's model of care?*

Dr Paulus: Applying health information technology (HIT) and electronic infrastructure in healthcare is even more important to being able to scale the activity. We could have been successful in CABG surgery or in any given thing through paper checklists and individual heroism and hypervigilance around processes and people and all that. But that rugged individualist, heroic model breaks down when you want to scale it across tens or hundreds of diseases.

A major barrier of technology and its ability to affect care is the time it takes for known benefits to work their way into more than 80% of healthcare. We are quickly approaching a scenario where working without an electronic infrastructure will be impossible or dangerous.

To apply this model to a variety of diseases, scaling becomes important. By scaling it, and keeping it from going back to the way things were done before, we need to involve people and electronic resources to monitor the process and report data seamlessly. Using HIT allows you to make the process low cost enough to afford to maintain and scale it, as needed.

We know that this knowledge is going to change over time, when new drugs, devices, or the approach to care become available. We are therefore not wedded to any given component of the bundle of things that are part of the overall ProvenCare program, whether in CABG, hip replacement surgery, perinatal care, or in any future ProvenCare initiative. We focused on creating a reliable, reproducible, scalable infrastructure to take whatever the current state of knowledge is and translate that into a reliable care process that could be reproduced over time, thereby enabling the delivery system and care process to evolve with time.

A major barrier of technology and its ability to affect care is not whether the technology is good or bad but rather the time it takes—on average 17 years—for known benefits to work their way into more than 80% of healthcare. We have tried to take an existing apparatus across multiple disease areas that can translate new knowledge into practice in weeks or months rather than in years or decades.

We are quickly approaching a scenario where working without an electronic infrastructure will be impossible or dangerous. In the ProvenCare model, this is not just an EHR infrastructure but rather it is an EHR system that is in the hands of people who can maintain it, deploy it, and facilitate it. And it will be particularly beneficial for subtypes and subdisease states that complicate the care delivery process. HIT has a great capacity to provide decision support for such care processes.

Henry: *Could you briefly discuss the way in which your medical home is integrated within the Geisinger approach to care?*

Dr Paulus: The medical home is a primary care–based function, which is today one of the most undercompensated services at the pediatric and the adult levels. The ProvenCare pilot introduced payment of an incremental fee to the primary care physician and an additional fee to the primary care practice. This amount of reimbursement is not trivial; it could be as high as $20,000 per primary care physician annually.

The issue of underpayment of cognitive services is a big deal across many specialties, and in particular in primary care, where preventive services, interventions, and lifestyle interventions have the biggest opportunity.

Also, within the medical home environment, and within ProvenCare, the routinization of the processes and the augmentation with HIT infrastructure enable all providers—nurses, pharmacists, physicians, and midlevel clinicians (eg, nurse practitioners, physician assistants)—to practice to their utmost cognitive and licensure capacity.

In ProvenCare we have hardwired nurse and midlevel clinician participation in a robust way, because we are going to face a staff shortage no matter how you slice it. Even if the reimbursement model changes now, changing the staff shortage will take a long time, because it involves many years of training in medical school, residency programs, and fellowships.

We also need to push the capacity of clinicians to work to the high-end rather than the low-end of their license. These things are linked together directly—as odd as this may seem—to medical home and to ProvenCare; they are directly linked to transitions of care, because of the importance of how the team-based approach works for each of those environments; transitions, medical home, and ProvenCare are all team-based initiatives.

Henry: *Finally, as mentioned earlier,* AHDB *is dedicated to the idea of healthcare stakeholder collaboration. Can the ProvenCare model be applied in other plans or by other providers or employers?*

Dr Paulus: The lessons we have learned from this experience lead us to believe that this approach could be applied and implemented in other plans, and with other payers.

We have had interests from providers and payers who have asked us to work with them in other markets, potentially to help facilitate ProvenCare programs in other places. We have also been approached by providers like ourselves (ie, health systems) and by payers to collaborate with them. Increasingly we feel that this approach could be applicable in other markets. There is no reason why other providers and payers could not collaborate in a similar manner.

In addition, from Medicare's perspective, there is an interest in episode of care-based payment demonstrations, including the current one that has recently been announced. A group called Prometheus is looking at this from a payer perspective—how to model these episodes; how to create warranties around care. They have been partially informed by what we have done with ProvenCare, and we have likely been partially informed by what they have done. So there is a broad sense that the current piecemeal payment model does not make sense in the long-term.

We have looked at some of the things that the Centers for Medicare & Medicaid Services has been trying to do, and we are participating in the physician group practice demonstration projection.

The episode-based demo is another good idea. The work the Commonwealth Fund is doing around high-performance delivery systems is important, and our CEO, Dr Glen Steele, is involved in this. We have worked with the Institute of Medicine concerning the learning healthcare system—how do healthcare systems learn and reproduce that knowledge and redeploy it quickly.

The work of the Agency for Healthcare Research and Quality is very important, and so is the work done at some of our peer institutions around the country, such as the Mayo Clinic and the Cleveland Clinic. We are looking to collaborate with and learn from our peers as much as we can.

Finally, Geisinger's model of care can accommodate significant changes quickly, to ensure flexibility and adaptability to new clinical realities and guidelines, as well as administrative needs—all geared toward the goal of creating and sustaining best patient outcomes at optimized costs. The Geisinger experience exemplifies a successful approach to healthcare transformation that could be applied to other health plans, as well as help transform the US healthcare system by aligning the needs of all stakeholders, containing costs, and improving outcomes. ■

References

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