Leveraging Clinical Innovation to Improve Healthcare Quality and Access for all Americans

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Testimony of
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Thank you for the invitation to testify today at your hearing on reforming the nation's healthcare system.

I am Glenn Steele, the CEO and President of the Geisinger Healthcare System. To give you some background, I spent 20 years as an active cancer surgeon at both the Brigham and Women's Hospital and the Deaconess Hospital in Boston, the latter at which I served as Chairman of the Department of Surgery. After my service in Boston, I became Vice President for Medical Affairs and the Dean of the Division of Biological Sciences and the Pritzker School of Medicine at the University of Chicago with more than 700 physicians in our practice group at the University of Chicago Hospitals. This has given me firsthand experience with patients, their access to care, issues affecting physicians and other caregivers, medical education and research, and healthcare reimbursement.

In 2001, I accepted the role of President and CEO of Geisinger Health System. I was excited about this opportunity because Geisinger offered the potential as an integrated healthcare system of developing cutting-edge approaches to increasing efficiency and quality in healthcare. And I believed that, if we could achieve this at Geisinger, which serves a rural population that is older, sicker, and poorer than national averages, we might make some contribution to the nation's search for a more effective healthcare system.

BACKGROUND

Geisinger is an integrated healthcare system. That means we are a healthcare system that includes physicians, hospitals, various outpatient healthcare facilities and programs, as well as a healthcare plan. Our organizational structure is relatively flat with less bureaucracy than is inherent in most academic medical environments. We can make changes faster[1].

We serve a population of 2.6 million located in central and northeastern Pennsylvania. And we have an electronic health record (EHR) that was implemented more than 13 years ago with now more than 3 million individual health records. And we have been named as "Most Wired" by *Healthcare's Most Wired* magazine six times. We also lead our area's regional electronic health information sharing among both Geisinger and non-Geisinger healthcare providers, called the Keystone Health Information Exchange. We have a fully-integrated electronic health record with direct patient access. This secure, patient-approved sharing of information means that our doctors (and non-Geisinger doctors who share care of patients with us) can access patient information 24/7 from anywhere they are – a remote two-doctor primary care office, a multispecialty clinic, an operating room, or at 3 am from their home when their patient has been admitted to the Emergency Department.

Our patients can also access their electronic health record – which means they can see lab results, radiology results, request prescription refills, and email their doctors and nurses with questions and schedule appointments. Some of our elderly patients, who have family living outside of our area, give their children access to their own records. That way, family members can check on their

parents' care, view their medication list and health maintenance reminders, and encourage them to be sure to make that upcoming doctor's visit.

Geisinger employs more than 740 physicians who see patients in more than 50 clinical practice sites, 40 of which are primary care sites in local communities. As clinically appropriate, physicians in these clinical sites admit their patients to local community hospitals - ensuring that patients receive most of their care in their local communities and helping to keep rural community hospitals vital. We invest in quality and pay accordingly. Doctors who have better clinical outcomes are rewarded (financially and by recognition) and we constantly measure our outcomes against our peers both within Geisinger and nationally.

Our system provides all adult and pediatric primary and specialty care and includes three hospitals, multiple specialty hospitals (heart, cancer, and an alcohol and chemical dependency treatment center) and ambulatory surgery campuses. We also have dedicated personnel who are devoted to addressing post-traumatic stress disorder – a disorder that is more prevalent in rural areas where diagnosis and treatment for returning veterans, their spouses, and their children are especially problematic. We have taken on as a special responsibility working with the Veteran's Administration to care for our men and women returning from Iraq, Afghanistan, and other fields of combat who are suffering from these medical problems.

Geisinger has a 220,000 member health plan – Geisinger Health Plan (GHP) – that has been instrumental in designing and incenting new models of healthcare delivery. This is because we have both clinical and financial responsibility for these patients. When our innovation tests are

successful, we can then implement them across our system. Geisinger providers actively serve both Geisinger Health Plan enrollees and non-GHP patients who are covered under Medicare, Medicaid, and private insurers.

As I mentioned, Geisinger serves a population that is poorer, older, and sicker than national averages. Most of our patients have multiple chronic diseases, such as diabetes, high blood pressure, and lung disease. Geisinger has committed significant resources and has been working aggressively to use its unique strengths to bring value to healthcare using innovations that redesign how and when these patients navigate through a complex healthcare system. As we have learned from others, I firmly believe that the nation can take advantage of our experiences and make similar changes to improve health care value.

PROBLEMS IN THE HEALTHCARE SYSTEM

It is widely acknowledged that our healthcare system is struggling against what appears to be intractable problems: incomplete and unequal access to care; perverse payment incentives that fail to reward good outcomes; fragmented, uncoordinated and highly variable care that results in safety risks and waste; a disconnect between quality and price; rising costs; consumer dissatisfaction; and the absence of productivity and efficiency gains that are common in other industries. Healthcare value (that is, clinical outcomes relative to costs) simply must increase to achieve these goals.

GEISINGER'S ACUTE EPISODIC CARE PROGRAM (THE "WARRANTY") [2,3]

ProvenCare[SM]

A great paradox in healthcare is that we get paid for making more mistakes. It doesn't mean that we

intentionally make mistakes, but we are frequently rewarded financially when an outcome is not beneficial to the patient. For example, with few exceptions, if a patient develops a post-operative complication that might have been avoided by proper care, we may receive more reimbursement for that case than for a comparable case without a complication. This does not happen in other industries. Purchase of a car, a computer or even a home typically includes a warranty. Why should healthcare services be an exception?

In 2006, we started transforming care by testing and rewarding how we provide elective cardiac surgical care – what is known as coronary artery bypass grafts (or CABG). CABG is known as an episodic acute event – an event with a determined time frame from diagnosis through rehabilitation and recovery (unlike chronic disease, which stays with you for life). Led by Dr. Alfred Casale, our cardiology service line reviewed the American Heart Association and the American College of Cardiology guidelines for cardiac surgery and translated them into 40 verifiable process steps that we could implement with each patient undergoing this surgery. We embedded these behaviors into our electronic health record so that we would be prompted (or forced) to meet each identified step – or document the specific reason for an exception.

We then established a packaged price (based on historical data) that included costs of the first physician visit that determined surgery was necessary, all hospital costs for the surgery, and for related care for 90-days after surgery, including cardiac rehabilitation. We named this program "ProvenCare", since it is based on evidence of best practices or (at least) consensus of best practice by our cardiology experts. As long as the pre-operative, post-operative and rehabilitation are part of the expected care for that surgery and received at Geisinger, we have only one charge. And we do

not charge for mistakes. In other words, we take the financial responsibility for any associated complications and their treatment.

While our cardiac surgery outcome was already above the national average, upon initiation of this program only 59% of patients received all 40 best practice steps. Three months into the study, 86% were receiving best care. We raised that to 100% and, with few exceptions, have kept it at that high rate.

So, we knew we were onto something. We knew our patient care was better – using comparative, standardized data from the Society of Thoracic Surgery. We had a reduction in complications of 21%, sternal infections were down 25%, and re-admissions fell by 44%. Costs for treatment fell, too. Our average length of hospital stay decreased by half a day, and our net revenue increased by nearly 8%.

For many of our high volume, hospital-based treatments, we have considered every step in the patient's care flow. For instance, in orthopedic surgery, why should one doctor use one set of surgical instruments and another insist on a different design for the same procedure? That type of demand – if there is no medical justification for variation – results in unnecessary costs that are passed off to third party payors, such as Medicare.

We knew we needed to extrapolate our experience with heart surgery to other episodic and frequent healthcare events. That included hip replacement, cataract surgery, obesity surgery, care for babies from conception to birth, and heart catheterization. To-date, I am pleased to say are showing success

in each area. We have improved outcomes and, in most cases, we have reduced costs. This is because we have systematically researched how best to deliver care, embedded the evidence into our electronic health record to prompt us on what best practices are and removed unjustified variation in the way we deliver care.

ProvenCare – Chronic Disease

But it wasn't enough to simply address episodic care. A large part of healthcare is preventing and treating chronic diseases. So we identified the most common chronic diseases – diabetes, coronary artery disease, congestive heart failure, kidney disease – and defined the best steps needed to limit disease progression. We call this "bundled" care, since we put each of these steps into a bundle of care and strive to achieve as close to 100% adoption as medically appropriate and feasible. In the case of diabetes, we began to track how we performed in meeting 100% of the expected levels of care for diabetic patients. Our primary caregivers receive more compensation as more of our 25,000 diabetic patients reach higher levels in the practice "bundle".

Preventing disease also became an obvious priority and we developed an adult prevention bundle that includes cancer screening, heart care, prevention of infectious diseases (such as pneumonia), encouragement of proper nutritional care, and reduction of substance abuse. Each of these are measured as needed by sex, age, and recommended screening time frames. Doctors and their support staff have compensation tied to meeting these quality goals.

ProvenTransitions

To move patients through the healthcare system and make care consistent in each step of care, Geisinger has worked diligently to make "hand-offs" in care transparent. When a patient is scheduled for admission, we start the discharge process before they arrive. As much as possible, the patient is made aware of what they need to do to prepare for discharge, the length of time they should expect to be in the hospital, how they will be cared for after leaving, the medications they will be on, when they will need to see the doctor again (and how they can access transportation to that visit), and what financial and social assistance may be available. Geisinger's patient-centered medical home initiative (titled ProvenHealth Navigator) combines traditional medical home models with patient engagement and is designed to deliver value by improving patient care coordination and optimizing health status for every individual.

ProvenHealth Navigator

As I've said, if we are to achieve the diverse healthcare goals of the United States, healthcare value must increase. We understand that navigating through the complexities of any healthcare system is not easy, so we have invested in programs and staff to help support each patient's journey, placing dedicated nurses in each targeted outpatient clinic. There, they get to know the patients and their families, follow their care, help them get access to specialists and social services, follow them when they are admitted to a hospital, contact them to confirm that they are taking the appropriate medication dosages, and are available for advice 24 hours a day.

Importantly, we didn't just ask our clinicians to "try harder" we actually resourced them so that they could get the job done via extra payments from our health plan. In our initial pilot program, using

this method of care, we have significantly reduced admissions of our sickest chronic disease patients. We lowered readmissions by 18.5%. The payback on the resource investments for the health plan occurred within the first year. The benefit to patients avoiding multiple hospital admissions and emergency department visits was priceless!

Let me give you an example – which, I assure you, is not unusual. Patient "A" is a 75-year old widowed female whose two children are now married and living in other states. She owns her house and lives independently. She has diabetes, high blood pressure, congestive heart failure, and depression and must remember to take 15 pills each day. One day she falls, breaks her hip and must be hospitalized. When she leaves the hospital, who picks her up to take her home? Who makes sure she is not disoriented? Who understands that she may need help at home? Who makes sure she is able to see a doctor when she should and anytime she should? Who coordinates her prescriptions, gets her pills, and sees to it that she takes those pills at the right times?

That is what our ProvenHealth Navigator nurse does. And it works – for the patient and for healthcare costs.

Summary

In summary, our ProvenCare programs focus on delivering value through a system of care that can be easily and reliably updated as clinical evidence changes. We are not rigidly wedded to any current piece of evidence, but rather to the ability to apply new evidence and learning to care. With our electronic health record, we are able to "hardwire" reminders and prompts into the system in real-time. Information technology is necessary, but not sufficient. It enables the re-engineering of

care. That is the key. We have established metrics to measure how well we perform and hold ourselves accountable for providing the best clinical care. We are fortunate to have a health insurance company that we can partner with to test new models of reimbursement and care delivery. We include and encourage the patient to be part of the decision-making for their care and to let us know how they prefer their care to be given (will they take two pills a day or do they prefer only one? Different dosages of varying medications may be ordered). And we try to "close the loop" with our ProvenTransitions and ProvenHealth Navigator nurses.

As noted earlier, Geisinger has unique attributes that lend itself the ability to test and apply new methods of healthcare. But what we are doing is not unique. Application of best practices can be shared and used by others.

What we need to do is reward good clinical practice and not reward bad practice. Paying for readmitting a patient for an infection that should have been prevented is unacceptable. National policies that address these reimbursement issues (particularly for Medicare patients) should be changed. Programs like Medical Home need to be recognized for their value and reimbursed appropriately. Those changes will result in creating a practice environment for physicians that is rewarding, will increase interest in our young caregivers entering the field of primary care – where prevention of disease is centered – and move toward making the cost of healthcare more affordable for our nation.

As we all struggle together with adopting the right healthcare reform plan to make our nation's healthcare system the best, we would welcome the opportunity to support your efforts in any way

that we can. We also extend an open invitation to each of you to visit Geisinger and see some of what I have talked about firsthand.

Thank you again for the opportunity to testify today and I look forward to your questions.

References

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