

Geisinger

2015 Annual Report

Enhancing the patient experience



Caring

Our vision

To be the health system of choice, advancing care through education and research. Our vision is focused on these strategic priorities:

Quality and innovation

Driving all patient-centered care decisions is a culture of value re-engineering, innovation and patient empowerment

Market leadership

Expanding Geisinger quality and innovation through a network of local, regional and national collaborations and partnerships

The Geisinger family

Empowering personal and professional well-being

On the cover: Portia Siwawa, MD, Geisinger Community Medical Center

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In healthcare, each day represents a new beginning.

In healthcare, each day represents a new beginning. A chance to start fresh; to deliver better, more compassionate care; to truly make a difference in the lives of our patients and their families.

For Geisinger, 2015 was a pivotal year that saw the launch of several exciting new initiatives — all aimed at helping us elevate the patient experience and realize our full potential as a national healthcare leader. This report serves to highlight many of these efforts while providing you with updates on our facilities, finances and cornerstone programs.

Looking ahead, Geisinger will continue to apply novel thought and innovation to push industry boundaries and disrupt long-held notions that have hindered the progress of healthcare. We do this with one thing in mind — the health and well-being of our patients and community.

On behalf of our employees and leadership, we thank you for joining us on this journey.

Sincerely,

William H. Alexander
Chairman of the Board

David T. Feinberg, MD
President and CEO



Celebrating a century of care

September 25, 1915, was to be a day of celebration for Abigail Geisinger's newly minted hospital in the Danville community. Instead, the organization found itself in the throes of a crisis — a typhoid outbreak resulting from two contaminated springs. The medical staff of the George F. Geisinger Memorial Hospital jumped into action, throwing the doors open to the community and providing care for 35 patients.

A century later, the opening of Abigail's hospital was finally celebrated. In the months leading up to the Centennial anniversary, members of the Danville community, Geisinger staff and faculty and the national medical community-at-large took part in an impressive array of events aimed at honoring Geisinger's rich past and looking ahead to future success.



Treasures of our past

The public has long been fascinated with the opening of time capsules, largely because no one knows what they'll find.

In the case of the time capsule placed in 1913 at the former George F. Geisinger Memorial Hospital and opened during the Centennial anniversary, the contents proved to be a delightful glimpse into the life of hospital founder Abigail Geisinger and the Danville community.

Contents included coins, photographs, documents and newspaper clips — all in pristine condition. A new time capsule will be buried at a future date in the Alec Ewing Healing Garden at Geisinger Medical Center and will include contemporary items pertaining to patients, employees and events from across the organization.

In honor of the anniversary, Geisinger Medical Center's collection specialist and unofficial historian Kathryn Heilman created displays of archival treasures that included photos and biographies of hospital and health system CEOs, decades-old surgical tools and nursing uniforms.

Another display featured items belonging to Abigail Geisinger, including a teapot, a shawl and the shovel used at the hospital's groundbreaking.

The first piece of "equipment" brought in to the facility, a Bible inscribed with the words "George F. Geisinger Memorial Hospital" was also on display.

Kathryn Heilman, collections specialist, Geisinger Medical Center's Health Sciences Library, and unofficial Geisinger historian, shares a few of the items from the century-old time capsule that was opened during the Centennial anniversary.



A portrait of Glenn D. Steele Jr., MD, was unveiled during an October 2015 ceremony honoring his service and contributions to the health system.

Honoring the end of an era

As Geisinger closed the book on its first 100 years, it also bid farewell to retiring president and CEO, Glenn D. Steele Jr., MD. Dr. Steele's 15-year tenure with Geisinger will be remembered as a period of innovation, strategic integration, collaboration and investment in cutting-edge healthcare technology, including the deployment of a fully integrated electronic health record across the organization. Under his leadership, Geisinger significantly grew its annual revenue, market share, customer base, cash and investments.

Dr. Steele is also credited with helping to put Geisinger on the national stage as a leader in healthcare reform.

During a ceremony in October 2015, Geisinger honored the outgoing CEO's service and contributions by revealing both his portrait and the new name of the facility in which it hangs, the Glenn D. Steele Jr. Hospital for Advanced Medicine.

A nation turns its eyes to Geisinger

How does an organization attract attention during a milestone anniversary? In the case of Geisinger, you bring together some of the nation's leading voices in healthcare innovation for a two-day symposium.

"A Century of Transformation and Innovation" Centennial Symposium was held on September 24 and 25 and offered guests the opportunity to hear keynote presentations from Atul Gawande, MD, surgeon, best-selling author and public health researcher; Donald M. Berwick, former administrator of the Centers for Medicare & Medicaid Services and founding chief executive officer of the Institute for Healthcare Improvement; and Mark B. McClellan, MD, director of Health Care Innovation and Value Initiative at the Brookings Institution, former administrator of the Centers for Medicare & Medicaid Services, and former U.S. Food and Drug Administration commissioner.

Panel discussions and presentations featuring prominent healthcare leaders, government officials, and university and chamber of commerce leaders rounded out the event.



Focusing on the future

It's hard to beat Geisinger's track record. For more than a century, the organization has been upheld as a global standard in clinical innovation and research. Trailblazing advances in health information technology and genomic sequencing have captured the attention and imagination of the media, industry giants and even presidents, and in the process have helped to chart the course of healthcare in America.

Now, under the leadership of its sixth president and CEO, David T. Feinberg, MD, Geisinger is entering a new era — one that blends the organization's long-standing commitment to pioneering ideas with an unwavering focus on the patients and communities that it serves.

While it remains to be seen what exciting achievements will come out of Geisinger in the years to come, one thing is for sure: the nation will be watching.

Dr. David Feinberg at a glance

Age: 54

Undergrad:

University of California, Berkeley

Medical school:

Chicago Medical School

Residency and fellowship:

Psychiatry and child psychiatry,
UCLA School of Medicine

Board certification:

Child and adolescent psychiatry,
adult psychiatry and addiction psychiatry

MBA: Pepperdine University

A conversation with David T. Feinberg, MD

President and CEO | Geisinger Health System

It's been nearly a year since David T. Feinberg, MD, left his native California to join Geisinger Health System as its sixth president and CEO. In that time, he has immersed himself in the Geisinger culture, paying personal visits to every branch of the health system.

In a wide-ranging discussion, Dr. Feinberg talks about his impressions of Geisinger, where he sees the health system going and some personal insights into his leadership philosophy and style.

You grew up in San Francisco and spent most of your career in Los Angeles. How are you finding Pennsylvania?

I love Pennsylvania — it's fantastic. In December, we had some nice warm California weather here on the East Coast [laughs]. I kept asking my team if this was really winter. I was ready with a cap and overcoat — I've never owned an overcoat!

But you do have ties to the East Coast.

My wife Andrea grew up in New York. And both of our children now live on the East Coast. Our daughter is in New York and our son is in Philadelphia where he attends college.

In your short time here you've been a very visible CEO, often making yourself accessible to patients and employees. Why?

A couple of reasons. When I first became CEO at UCLA, I was afraid because there was so much I didn't know. Talking to patients was something I knew how to do. I've continued the practice because it's the best part of my job and gives me insight into the care we provide. I also enjoy getting to know employees on a one-to-one basis...getting out to meet them in their environment. I think the best way to learn about an organization is to listen to the people who actually provide the care.

You were quoted in the Wall Street Journal as saying: "I get the sense that America is watching [Geisinger], if we get it right here that will translate to better care across the country." Can you expand on that?

Geisinger is an organization with a long history of really smart people who placed the right bets. If you go back to our beginning we were a hospital that employed physicians, which was unheard of at the time. We bet on electronic health records before anyone else. We made an early bet on genetics that has positioned us to be a world leader in precision medicine. All of these things led

people to watch Geisinger, including myself while I was in California.

You talk about placing bets. What bet is Geisinger placing today?

I'd say we're placing a couple of bets. We're betting that people put a very high value on how they are treated by the clinicians, nurses and support staff that care for them and they will travel to a healthcare provider who gets it right. That means providing patients with safe, compassionate, accessible, easy-to-understand care. Some people think this is a new way of thinking, but it's actually pretty old-fashioned.

We're also placing a bet on genetics.

Geisinger President and CEO David T. Feinberg, MD, visits with new parents and their baby while participating in Leadership Rounding.





Celebrating the launch of a new partnership (from left) William Alexander, Geisinger board president; David T. Feinberg, MD, Geisinger president and CEO; David Tilton, AtlantiCare president and CEO; and AtlantiCare board chairman Eugene Arnone.

To provide individualized care for people, we really have to know them. And I don't mean learning how they interface with us on the website, but rather understanding their DNA. We're accomplishing this through the MyCode® Community Health Initiative which to date has sequenced the DNA of 50,000 Geisinger patients. Having this level of information allows us to screen and treat our patients for illnesses or conditions that many didn't even know they had.

How do projects like MyCode tie in to your desire to create a caring organization?

We are literally changing people's lives as we get their results. To me, that's caring. That's understanding what's going on. It's good old-fashioned medicine. It's taking histories and looking at families and putting pieces of the puzzle together. It's just that now we have some very sophisticated tests that allow us to verify what good doctors probably knew a long time ago.

You talk about Geisinger being a "disrupter" in the healthcare industry. What do you mean?

When you get sick you have to deal with two problems — being sick and dealing with a health system that isn't patient-

centered. You drive 45 minutes, you wait 30 minutes in the waiting room, 20 minutes in the exam room and then you get 10 minutes with the doctor. I think we're in a place to disrupt ourselves. I think we can become the most caring organization. We are caring, but we want to be more caring. Not the most caring healthcare organization in America. I want to be the most caring, period. I think there are examples in other industries that we can bring to ours and engage with our patients and figure out how to get there.

ProvenExperience™ is a new Geisinger initiative that offers refunds to patients who aren't satisfied with their care. Some have called this crazy.

ProvenExperience is an extension of our Proven portfolio which was started with Proven Heart — which is basically bundled best-practice and payment for heart care. Many organizations were doing it, but no one was offering a warranty for care. So ProvenExperience is our promise that we're going to do everything right, and if we don't, there's a warranty. We're going to answer the phone, we're going to get you seen right away, we will be culturally sensitive — of course we'll be high-quality and safe — you'll get a bill that you understand, and ultimately you would refer us to a friend

or family. That's our purpose — to take such good care of you that you'll say, "Please see my brother." And if we don't, because we want to learn and not have that problem with the next patient, we're very comfortable saying you can have your money back.

What challenges have you found at Geisinger that you didn't have in Los Angeles?

It's not necessarily a challenge, but I've learned that everyone knows everyone in this part of the country. That means the way we treat people is even more important because they are our friends, neighbors and relatives — and many times all three! I've found this to be true not just in the rural areas but also in some of the bigger cities that surround us. People who live here tend to stay here. In LA, everyone is from somewhere else and there is less of a "network." So I guess our challenge at Geisinger is to do the right thing every time, because if we don't, everyone in town will hear about it.

What's been the biggest surprise about Geisinger?

This may sound funny, and I'm not trying to be flip, but I couldn't imagine that people could be this nice. Maybe I'm jaded after spending 25 years in LA, but I've been blown away by the multigenerational sense of ownership and commitment here. I get emails all the time and they often begin with statements like "I've been a nurse here for 35 years...my daughter works here...my son-in-law is a doctor there....my husband is in IT." I've never seen such a heart and mind connection to an organization. It's a privilege to be a part of something like that.

Has that kind of atmosphere made the health system more receptive to what you're trying to do with the patient experience?

I've found everyone to be remarkably receptive. And I think most of the comments I've gotten as I've tried to lay

out the direction are “Oh yeah, that’s who we’ve always been, but we’ve kind of drifted a bit from that.” There’s been some major growth in recent years and it’s been very successful. But I think the staff feels that this is who we are at the core, and they are happy to go back in that direction.

What challenges will Geisinger face over the next few years?

So, our challenge is to get it right with the patient. Our challenge is to be 100 percent present. To not worry about what’s happening with healthcare reform, to not worry about what’s happening with our competition. I view our competition as heart disease and cancer and diabetes, not the big health systems that may come in here. Our challenge is to stay so focused that we get it right with those patients who entrust their care to us, and I know that’s the way to a very, very bright future, if we get it right with that patient.

You referenced Geisinger’s rapid growth. How do you manage that and how do you translate your culture to new members of the health system?

First of all, you have to go in with a lot of humility. Places like Atlantic City or Lewistown or Holy Spirit have much to teach us. So my message to the team is, “Tell me what we’re going to learn and borrow from them.” And then I think it’s about creating a shared vision and getting people aligned around a purpose.

Do you see the growth in Geisinger’s footprint continuing or are you growing in other ways?

I think it’s both. I think there are some markets where we’re clearly a leader and others where we’re coming from behind. In both areas, based upon the great care we provide, patients and families are choosing us. In terms of other kinds of growth, I think there continues to be consolidation in this market and healthcare in general. If organizations are a cultural fit for us and they believe that providing high-quality care at low

cost is the right way to do business, then we’re thrilled to have them.

Data plays a big role at Geisinger. Is that how you get people on board with what you’re trying to accomplish?

Data is the great leveler. When you show doctors and healthcare providers the data around cost-per-provider, length of stay and other points, it’s powerful.

At first they want to find holes in the data, but if it’s good they will come to bond with it. When people are shown the grading system, they almost always strive to improve their performance.

What’s the best customer service story you’ve heard since you joined Geisinger?

There was a 6-year-old girl going in for surgery and her dad is in the military and deployed overseas. Her condition wasn’t so serious that he was granted leave, so he called a neighbor of his, who happens to be one of our nurses. She in turn called our pediatric team. When the little girl

woke up post-op, one of our nurses had dressed up as Elsa from *Frozen* and said to her, “Your dad sent me.” They take a picture and text it to Dad. For our team to be able to bring this dad into the room via Elsa...to me that was special.

What would you tell employees who have an improvement idea but have never brought it up the chain of command?

I don’t think in terms of “up the chain.” I see our culture as very different. I see myself at the very bottom. The very top of our organization is our patients and the front line people who provide the care. My job — and that of everyone on the leadership team — is to get obstacles out of the way so that those front-line people can make their dreams come true. So if an employee has an idea and it’s something they can implement right now, and it’s good for a patient, and you’d do it for your mom and my mom, don’t even ask permission — just do it. If it’s something systemwide and it would be good for all

Displaying the 2015 Guardian of Excellence Award they received at the 2015 Press Ganey National Client Conference in Orlando, Fla., are (from left) Greg Burke, MD, internal medicine physician and chief patient experience officer, Geisinger; Patrick T. Ryan, CEO of Press Ganey; Alexander P. Moya, MD, director, Geisinger’s Center for Aesthetics and Cosmetic Surgery; and Paul Sommer, senior director of patient experience, Geisinger.



of our patients, my team's job is to find those ideas and make them happen.

You have had much success throughout your career. Currently, what are the top items that you'd like to fix at Geisinger?

We have wait times in our Emergency Department that are longer than they should be. A single surgical infection is too many. Every patient who has a complication, every patient to whom we didn't explain a medication correctly, every patient we put on hold because they couldn't figure out their bill, every patient we couldn't get in on the day he or she requested care, I think are challenges that we must fix.

What led you to medicine?

I love working with kids, so growing up I thought I would be a pediatrician. In medical school, I did a rotation in child psychiatry and fell in love with it. I just got my Pennsylvania license and privileges, and I'm looking forward to helping children here with autism, ADHD, depression and substance abuse.

When did you make the jump from practicing full time to a leadership role?

I actually don't think I made the jump. I'm just one of the 30,000 people here trying to heal patients. I don't have any powers or tricks. When I started taking on more administrative roles my mom said, "That's really sad because you'll see less kids," and I said, "No, there are just more patients that I'm taking care of." I just see

myself as someone having an impact on more patients.

Many healthcare leaders talk about their obstacles, but you talk about opportunities. Why do you lead the way you do?

It's so hard for me to answer that question, because I can't even see another way. I am so wildly optimistic about this place... so what you're really asking is, "Why aren't you worried about these other things?" We've got the best doctors, we've got great facilities, and we've got unbelievable people, a community that believes in us, this history of innovation. We have an insurance company, we have pre-acute, we have post-acute, we have this genomic research...we have everything going our way!



Moving to a model of transparency

Consumers are increasingly turning to online ratings when making decisions about healthcare providers. The problem is that these ratings are based upon a limited number of reviews and can inaccurately portray the quality of care.

To counter this challenge, in October Geisinger began publishing its own patient experience star ratings and comments on the Find-a-Provider page of its website, Geisinger.org. This model of transparency is a trend among top-performing organizations across the country and allows Geisinger to ensure that its patients have access to valid reviews and ratings.

Ratings are based upon patient experience surveys administered by Press Ganey Associates. Star ratings and comments are made available for providers with 40 or more survey returns during the previous 12-month period.

Colleen Jenceleski, RN, Geisinger South Wilkes-Barre

New program offers patients a satisfaction guarantee

Geisinger unveiled its latest and perhaps most radical innovation in October, ProvenExperience™, a program that offers refunds to patients whose expectations weren't met based on kindness and compassion.

The brainchild of Geisinger president and CEO David T. Feinberg, MD, ProvenExperience takes a common corporate practice and applies it to the healthcare setting.

"If you go to Starbucks and you're not happy with your order, they don't sip your latte and argue that they made it correctly," says Feinberg. "They just take care of you on the spot. This doesn't happen in healthcare.

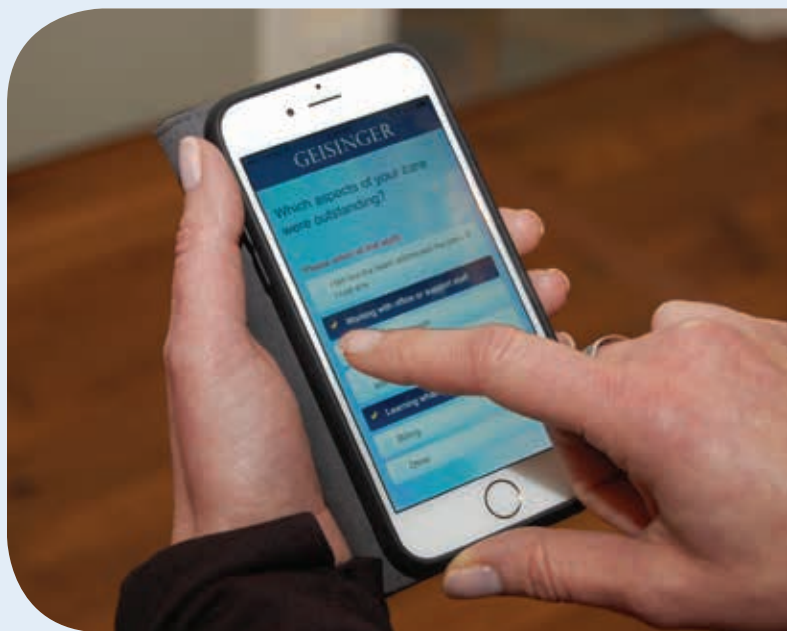
"If we're going to advance the patient experience, we need to be disruptive and give unsatisfied patients their money back."

A key component of ProvenExperience is a patient app — developed at Geisinger — that allows select surgery patients who are enrolled in the pilot program to determine if they want any of their co-pay refunded.

For example, if a spine surgery patient paid a \$1,000 co-pay and they weren't pleased with how office staff treated them, they can log into the app and select from a sliding scale how much of their co-pay they want refunded. Their request is processed within three to five business days.

Feinberg predicts that ProvenExperience will transform the healthcare industry.

"When I told other health system CEOs and industry leaders about ProvenExperience they told me not to do it," Feinberg explained. "But then I thought about Kodak and digital



The new ProvenExperience™ app allows patients to rate their experience with Geisinger and request a refund if dissatisfied.

photography, and Blockbuster and online video options and how those ideas were initially shunned. It was then that I made the decision to move ahead."

According to Feinberg, ProvenExperience is about getting back to the basics of healthcare.

"What people want is care that's accessible, understandable, dignified and culturally sensitive," he says. "We've got to provide our patients with the same high-quality, compassionate care that we would want for our family."

Recognizing a job well done

Delivering on its commitment to care for its employees, Geisinger increased its minimum hire rate to \$10 per hour this year. More than 1,000 employees across the system were positively impacted by the adjustment, with full-time personnel seeing an average annual pay increase of \$1,400. Non-union employees also saw increases in shift differential — for second and third shifts — and on-call rates.

"Our decision to increase these rates as part of our overall competitive compensation and benefits programs will help us to continue to retain and hire the best employees," says Amy Brayford, chief human resources officer for Geisinger.

Each year, Geisinger spends approximately \$1.9 billion in wages and benefits for its employees.

When medicine and miracles meet

Gardell Martin's unlikely recovery is a testament to the remarkable care he received at Geisinger.

Gardell Martin isn't old enough to remember what happened to him on the afternoon of March 11, 2015. But for his mom, Rose Martin, it's the day a miracle saved her son.

Gardell and his brothers were playing outside on their property in Mifflinburg, Pa. when the toddler suddenly went missing. A frantic search yielded the family's worst fear — Gardell had fallen into the frigid, fast-moving stream on the family's property.

"Gardell had floated a quarter of a mile downstream, and when our neighbor Randall found him a half-hour later he wasn't breathing and didn't have a heartbeat," remembers Rose. "I had called 911 before Gardell was found because I had a feeling that this is where he would be. The ambulance

"It's because of their hard work and dedication that Gardell is here today. I just thank God for them."

arrived just as Randall was pulling him from the water. I didn't get to see Gardell before they took him away."

Gardell was first taken to Evangelical Community Hospital in nearby Lewisburg and then transported by Life Flight to Geisinger Janet Weis Children's Hospital where a pediatric intensive care team, led by Frank Maffei, MD, medical director, pediatric critical care medicine, set feverishly to work on the child.

"When we arrived at Geisinger we learned that they were still performing CPR on him — he wasn't responding and it didn't look good," says Rose. "We were taken to the waiting room and stayed there for hours, getting updates from the chaplain and others."

Finally, Rose and her husband Doyle saw a welcome sight, their son's bed being wheeled down the hall to a patient room.

"It was after midnight when we were able to see him," she says. "He looked just like a sleeping child, but he was really cold.

"Doyle started talking to him and his eyes began to flutter," continues Rose.

"I said, 'It looks like he hears us,' and then a few minutes later he turned his head and opened his eyes. None of us, not even Dr. Maffei, could believe it. We were so excited. It was definitely a window of hope."

Despite being clinically dead for nearly two hours, Gardell made a full recovery.

"He's back to normal and you would never know that anything had happened," shares Rose. "He loves the outdoors but is definitely a bit shy of the stream.... that's okay."

She credits God and Geisinger's medical team with saving her son.

"When Dr. Maffei told us about what went into saving Gardell and how each person was there, sticking to it and doing their job, it really made us grateful," Rose says. "It's because of their hard work and dedication that Gardell is here today. I just thank God for them."

Photo by Dustin Cohen

Gardell Martin





Frank Maffei, MD



According to Frank Maffei, MD, medical director of pediatric critical care medicine at Geisinger Janet Weis Children's Hospital, Gardell Martin's case is one for the record books.

The awesome power of collaboration

Toddler in full cardiac arrest. CPR ongoing for more than an hour. Nonresponsive.

Despite this grim report, Frank Maffei, MD, and his colleagues sprang to work, pumping air into Gardell Martin's small lungs, sending warming fluids through his tiny veins to raise his temperature from an icy 77 degrees and taking turns performing chest compressions.

Even though his experience and knowledge told him that these efforts were pointless, Maffei had a feeling about this child.

"I just couldn't shake this idea that he was still with us," says Maffei.

Forty minutes later, Gardell was still unresponsive and the team was preparing to put him on a heart bypass machine to further warm his blood. Then the unbelievable happened — they discovered a pulse.

"Even though we had concerns about oxygen deprivation, Gardell came through this seemingly unscathed," Maffei says. "The stars aligned for this little guy in multiple ways."

He credits Gardell's hypothermic-like state with protecting his organs, and the nearly 50 medical professionals who had a hand in this case.

"In my 23 years I have never seen a recovery like this," says Maffei. "This doesn't happen by accident; it happens because people are trained. It just goes to show that when you assemble a team of skilled and dedicated medical professionals, remarkable things can happen."

Counting his blessings

James Culver's illness took him by surprise, but thanks to his outpatient case manager he's getting the support and care that he needs.

As a retired pastor and hospice chaplain, Scranton native James Culver is no stranger to caring for people during a time of sickness. However, he found himself on the other side of the equation in September 2014 when a friend, who is also a nurse, called to speak with him and noted that he was out of breath.

"She came over to check on me and I told her that I had officiated a wedding the day before and couldn't get my dress shoes on...my feet were really swollen," Culver says.

"I pulled my pant leg up and she looked at my feet and ankles and said, 'Jim, you're going to the hospital.'"

After a few days at Geisinger Community Medical Center, Culver learned what was

causing his swelling and shortness of breath: renal (kidney) failure.

The news came as a shock. "I never knew I had anything wrong," he says.

To determine the cause of Culver's renal failure, his doctors gave him a nuclear stress test. When he started having chest pains during the test, they knew they had found the underlying cause of his problem. Culver was having a heart attack.

"I've had this pain before and was not aware of what was occurring," says Culver. "I figured it was just stress."

A week later, Culver learned he had five blockages closing off between 80 and 95 percent of the blood vessels in and around his heart. He underwent

successful bypass surgery to open the vessels and was then on his way to recovery.

As part of his care plan, Culver receives dialysis three days a week to manage his renal failure. His doctors also referred him to an outpatient case manager — Kris Collins, RN — to help ensure he receives the care required to keep him healthy and out of the hospital.

"She calls to ask me how I'm doing, whether I have any concerns, that kind of thing," Culver says of Collins. "If I need to know something about how I'm feeling, I know I can call her and she'll give me some direction about what I need to do or help set up appointments for me. She's a real sweetheart."

He explains that Collins is his go-to resource when he needs help with his care or just a listening ear.

"For the first six months I had a tunneled catheter, and I was sicker than four dogs with that device. I couldn't stand the sight of food, I couldn't stand the sight of commercials with food and even the smell of food cooking made me feel ill, so I'd call Kris and talk to her about it," Culver says. "She told me that things would be better when they begin using a fistula and she was right. I really appreciate that I have someone like Kris. She's a real blessing to me."

"I really appreciate that I have someone like Kris. She's a real blessing to me."

James Culver





Kris Collins, RN, outpatient case manager, Geisinger Health Plan, is working to help patients take charge of their care.

Ensuring the right care at the right time and place

In her time as an outpatient case manager for Geisinger Health Plan, Kris Collins, RN, has helped many patients with complex medical needs. James Culver is one of her most rewarding.

“He’s an A-plus patient,” Collins says. “James really embraced the concept of case management and didn’t hesitate to reach out to me.”

Collins began working with Culver in October 2014 after he had bypass surgery and began dialysis for renal failure. As his case manager, she calls him regularly to check in. Initially that meant several phone calls a week, but it’s decreased over time as Culver has become more familiar with his medical needs, his doctors and Geisinger.

“As long as James has Geisinger and he sees the same doctor, I’ll be with him,” Collins says. “These days, that means intermittent check-ins to see how he’s doing, whether he’s scheduled appointments, that sort of thing. And that’s what we really want, to help our patients manage their cases themselves and really take the reins.”

Collins is one of more than 100 outpatient case managers available to Geisinger Health Plan patients. Outpatient case managers receive referrals from the health plan and physicians and work with these patients to assess their needs and coordinate care.

“We want to provide the right care, at the right place, at the right time,” Collins says. “Whether it’s a hospital visit or a doctor’s appointment, our goal is to guide patients and give them the tools to start doing that for themselves down the road.”



When timing is everything

Donald Sponsler is alive today thanks to the man he calls his “guardian angel” and the exceptional care he received at Holy Spirit—A Geisinger Affiliate.

“It was like a movie, when everything jerks — that’s what it felt like before it went dark,” Sponsler says. “The next thing I know, I’m waking up on the floor of a restaurant and someone is telling me, ‘It’s going to be okay, just wait for the ambulance.’”

That voice belonged to a man Sponsler would later call his guardian angel: Clyde Tinner, BSN, nurse manager for the Ortenzio Heart Center at Holy Spirit—A Geisinger Affiliate.

“Clyde and his wife were at the same restaurant that evening when he heard a waitress ask someone to call 911,” Sponsler says. “It was his day off, but he started working on me immediately and did CPR for six minutes until I was resuscitated.”

Sponsler was rushed by ambulance to Holy Spirit Hospital, where he had a pacemaker implanted and spent a week recovering. Unfortunately, an ultrasound revealed a more pressing problem.

“There were no blockages in my heart, and the pacemaker was doing its job wonderfully,” he says. “But they did find that my aorta was enlarged and the valve needed to be replaced.”

Sponsler returned to Holy Spirit a month later for surgery to replace both the weakened aorta and valve. Now, he visits for regular checks of his pacemaker but is in otherwise good health.

“I’m alive and walking because my heart decided it wasn’t going to work that day, and my doctors found an even bigger problem,” he says. “And I’m alive today because of Clyde. Not just the man, but what he knew, his training. He was there in the right place at the right time.”

Sponsler emphasizes that his time at Holy Spirit was made easier by his care team, which included Tinner.

“He checked in on me a few times while I was here, which I was grateful for,” he says. “I couldn’t have asked for better care — it was like being at a five-star hotel. Everyone just made me feel so comfortable and so secure that the surgery was going to be no problem and that I would be out of there before I knew it. The nurses, the doctors, even the cleaning staff — everybody was just unbelievable.”

“I’m alive today because of Clyde...He was there in the right place at the right time.”

Donald Sponsler





Helping others in need is instinct for Clyde Tinner, RN, nurse manager, Ortenzio Heart Center, Holy Spirit—A Geisinger Affiliate.

All in a day's work

When he heard a waitress mention that 911 had been called for a man who'd collapsed in the adjoining dining room, Clyde Tinner, BSN, didn't hesitate to step in and help.

"It was just an instinctive reaction," says Tinner, nurse manager for the Ortenzio Heart Center at Holy Spirit—A Geisinger Affiliate. "Before I was a nurse, I was a paramedic for 15 years. It's just what we do in the medical field."

Tinner performed CPR on Donald Sponsler for about six minutes before the ambulance arrived. Ironically, Sponsler was taken to Holy Spirit Hospital, which gave Tinner the opportunity to check in on the man he'd saved.

"We try to keep patients close to us until they go home," says Tinner.

"We have several staff members who have been here since we opened the Heart Center, and they've really taken ownership of the unit and how things run. We're a tight-knit group, which works out well for our patients, for the unit, and for our staff."





Christina Brady, PharmD, consults with a patient at the Geisinger Mt. Pleasant MTDM clinic.

Caring for our community

The ways in which Geisinger Health System reaches its patients are as broad and diverse as the expansive community it serves. From robust, 20-doctor community practices to mobile clinics, Geisinger is committed to leveraging its resources and creativity to ensure that patients receive the highest quality of healthcare where and when they need it.

Novel approach to tackling chronic pain achieves striking results

Chronic pain is an often overlooked and socially stigmatized disorder. It affects more people in America than diabetes, coronary artery disease and cancer combined, and requires skillful and appropriate management. This may include the judicious use of opioid medicines in conjunction with other methods of treatment.

Three years ago, there was a national outcry to ensure better care for those with chronic pain. Geisinger answered by founding the East Coast's first Medication Therapy Disease Management Program (MTDM).

"Geisinger's MTDM pharmacy team launched this program to better treat ambulatory patients with pain," explains Michael Evans, RPh, associate vice president, Strategy and Innovation, Geisinger. "It was a simple idea: have Geisinger clinical pharmacists and physicians partner to help patients achieve better pain control while decreasing the harmful side effects of opioids and prevent abuse and diversion. We just had no idea how successful it would become."

Evans explains that the program debuted at Geisinger's Interventional Pain Center in Danville and a second clinic was added a month later at the

South Wilkes-Barre campus. The goal of the program was multifaceted.

"We first had to ensure the safe and effective treatment of chronic pain in ambulatory patients," explains Evans. "Our second goal was to try and decrease the amount of opioid medications patients were taking and substitute more non-opioid or adjunctive medications. Third was to provide physicians with more time to conduct pain procedures, such as epidural injections."

The program quickly gained support from physicians, mid-level practitioners and nurses.

Fast-forward to 2015, and the program has served more than 18,000 patients across 11 locations in central and northeast Pennsylvania. Among participants to date, the MTDM Program has achieved an 86 percent increase in physical functioning and a 22 percent reduction in opioid usage (leading to lower costs and risk of diversion, abuse or overdose).

Evans explains that the MTDM Program targets patients who are on high-dose opioids, opioid combinations and patients who are not well controlled for chronic pain.

“We work with these individuals to gradually decrease their opioid dosages and introduce non-opioid alternatives to their regimen,” he says. “We may also introduce other types of therapies to help them keep their pain in check, such as occupational or physical therapy or even non-traditional approaches such as art therapy.

“A distinguishing feature of our program is that we really work with patients to manage expectations,” Evans continues. “They aren’t going to be pain free, but we can help them learn how to deal with their pain in ways that won’t cause the harm or side effects associated with long-term opioid use.”

The program is staffed by five MTDM chronic pain pharmacists who work cooperatively with physicians, nurse practitioners, physician assistants, RNs, addiction counselors and addiction-trained social workers to coordinate individual patient medication and therapy plans and provide educational programs. On any given day, a staff member sees 12 to 15 patients.

Unfortunately, demand for the MTDM chronic pain program is high and the average wait time for patients is three months. Evans hopes, however, that with grant funding the program will be able to train and hire additional pharmacists.

Enhancing the member experience through revised explanation of benefits

Anyone with health insurance has certainly received an explanation of their benefits (EOB) in the mail. Typically, these documents — which are required by law — are rife with industry jargon and challenging to understand. It’s a problem that the Geisinger Health Plan is working to overcome with its own EOB.

“What we hear from members is that they’re getting these statements in the mail and they don’t understand what it says or why we’re even sending them,” explains Chris Fanning, chief marketing officer, Geisinger Health Plan.

This realization has spurred the Health Plan to revise its EOB so that it’s not only transparent, but meaningful to members.

“We’ve conducted a broad review of competitors’ EOBs — and those

considered best in the industry — and are in the process of developing some new samples based upon our findings,” shares Fanning. “We’ll be testing these with our members to see which ones do a better job of communicating, rather than just informing.”

According to Fanning, the Health Plan sees the revised EOB as a great opportunity to enhance its members’ experience.

“If we’re required to provide members with these documents, then shouldn’t we take advantage of the opportunity and make it meaningful to them?” he asks. “This should be a positive interaction, not one that creates confusion or frustration.”

Geisinger Health Plan by the numbers

3,500

Primary care
physicians

27,000

Specialists and
hospital-based providers

110

Hospitals

43

Counties in
Pennsylvania

Laboratory medicine enjoys expanded space and capabilities

Geisinger Medical Center christened its new \$64.3 million, state-of-the-art Laboratory Medicine building in September 2015, replacing the interim lab building used since 1984.

The 162,000-square-foot building contains four laboratory medicine levels and a lower level used by the Foodservice Department. It provides ample space for programmatic growth, expanding Geisinger Laboratory Medicine's clinical, research and teaching programs.

"I think we have actually achieved the ideal in terms of efficiency," says Conrad Schuerch, MD, chairman of laboratory medicine. "This is something that's been needed for a very long time."

The building also boasts a pneumatic tube system using "Smart Path" technology to reduce turnaround time for specimen delivery and Remstar storage units that extend up to 40 feet vertically through unused ceiling space to provide storage for specimens, reagents, supplies, surgical blocks and

slides. With enough space to grow, the facility will be able to expand laboratory medicine's teaching capacity to house a future pathology residency program, a larger cytopathology fellowship and a transfusion medicine fellowship program.

Larry Quinton, technical specialist, Automated Testing Lab, checks one of the automated analyzers on the new line.



Specialty services, close to home

Long distances, transportation problems and a lack of nearby specialists can make it difficult for patients in some regions to access adequate healthcare.

Geisinger is overcoming these obstacles through its Specialty Care Outreach Program. Under this initiative, Geisinger specialists travel across the region to clinics where patients can access the care they need without excessive travel or the burden of hospital care.

Among the facilities benefitting from this program is Geisinger Shamokin Area Community Hospital,* which now offers patients cardiology, gastroenterology, laboratory, nephrology, nutrition, ophthalmology, orthopaedics, pulmonary medicine, sleep medicine, surgery, urgent care, urogynecology and women's health services.

Geisinger's specialty and diagnostic testing services are at more than 30 sites across northeast and central Pennsylvania. Each clinic is staffed with doctors, nurses and other healthcare professionals and, depending on the location, lab and radiology services are also available.

*a campus of Geisinger Medical Center



Ophthalmologist Benjamin P. Hale, MD, examines a patient at Geisinger Shamokin Area Community Hospital. He is one of the many Geisinger specialists providing care in the region's rural communities.



Charles Stivala, DO, and Russ Stahl, MD

GCMC proves that good things are worth the wait

Two years after breaking ground, Geisinger Community Medical Center (GCMC) celebrated the completion of its \$97.1 million expansion project in the fall.

The first phase of this project — a striking, five-story, 143,000-square-foot tower — opened in May and includes new multispecialty clinics, an 18-room intensive care unit (ICU) and an expansive main lobby featuring a café, a chapel, a gift shop, an information desk and a vending/seating area.

A new, 35,000-square-foot operating suite signaled the completion of the second phase of construction in September. This 14-room facility features state-of-the-art surgical equipment with video integration.



Private rooms in the Geisinger South Wilkes-Barre Short Stay Unit are specially decorated to create a comforting, peaceful ambiance. (Pictured) Kerry Higgins, RN, talking with a patient on the new unit.

New short stay unit at South Wilkes-Barre changing surgical experience

The Surgical 5 South Short Stay Unit and Surgical Suite, opened in late August at the Geisinger South Wilkes-Barre campus, makes minor surgeries more convenient and recovery a more relaxing experience for patients.

The \$7.1 million state-of-the-art facility boasts a 635-square-foot operating room

outfitted with the latest technology for minor surgeries, including orthopaedic, gynecologic, urologic, dental, plastic and ear, nose and throat surgeries. Following their procedure, patients at Surgical 5 South are admitted to private rooms, specially decorated to create a comforting, peaceful ambiance.

Amenities in the 14-bed facility go far beyond the scope of a typical surgical center: room service, wireless Internet access and even iPads are available to patients in recovery. Reserved parking under the building offers easy access for patients and visitors alike.



Mountain Top clinic opened in October 2015

Geisinger's newest medical facility opened to patients in the Mountain Top community in October. The 21,000-square-foot, \$7.3 million facility replaces and combines four smaller, older sites including a community practice clinic, Partners in Pediatrics clinic, a Careworks and a Patient Services center.

The new clinic features family medicine, internal medicine, pediatrics, pediatric endocrinology, pediatric gastroenterology, a Careworks Walk-In Clinic and lab and radiology services.



Geisinger opens new clinic in Pittston

In September 2015, Geisinger's community practice clinic opened to patients in the heart of downtown Pittston. The 17,000-square-foot, \$9.4 million facility replaces two smaller, older clinics and features family medicine, lab and radiology services along with underground parking and safe, off-street parking for patient convenience.



Through a grant from the Children's Miracle Network, Geisinger was able to acquire three new Giraffe OmniBeds for its NICU, bringing the total number of these beds to seven.

Special care for special deliveries

"When a baby is born at less than 26 weeks (micro-preemie), their skin is paper thin and incredibly sensitive," explains Maureen Lloyd, MSN, operations manager, NICU, Geisinger Janet Weis Children's Hospital. "They lose water and weight easily and need to be cared for in a special, humidified environment. This makes the Giraffe OmniBed perfect for them."

In 2015, Lloyd successfully secured grant funding from the Children's Miracle Network to purchase three new Giraffe

OmniBeds for the Geisinger NICU. This brought the hospital's total number of these isolettes to seven.

"The OmniBeds are optimal for micro-preemies because they provide both moisture and warmth, which helps them grow and better tolerate feedings and treatments," says Lloyd. "These beds can also be used for babies who are premature (between 27 and 36 weeks gestation)."

She indicates that the beds aren't inexpensive — even when purchased

at discount, each OmniBed costs Geisinger \$32,000.

However, they are considered a best practice for micro-preemie care.

"The investment makes sense when you consider that in 2015 we cared for more than 100 micro-preemies alone," says Lloyd.

"Given that there have been times when we've had five or more of these infants in our NICU, we could use several more of these beds."

Bringing mothers and newborns together through technology

A new videoconferencing service called iBonding is being used to help mothers connect with their newborns when they've been transferred to the Geisinger NICU.

The iBonding service uses Skype or FaceTime, an iPhone app, to connect mothers with their babies while also

giving them the chance to meet those who are caring for them.

Since the adoption of iBonding in late 2015, several mothers have taken advantage of the service.

"It provides some comfort to the mother to be able to see her baby while she is still in another hospital," says Phoebe

Beckley, a March of Dimes representative employed by Geisinger. "We have been working to provide this service to all of our families, but it's currently being used primarily for babies transferred from Susquehanna Health or Geisinger Wyoming Valley Medical Center."

Consolidated midwife program at Bloomsburg

Increasing demand for Geisinger Medical Center's (GMC) maternal-fetal medicine program led the health system to transition its midwife program to Geisinger Bloomsburg Hospital, which has the capacity to accommodate the growing need.

The six midwives who transferred to Bloomsburg in March 2015 joined two other midwives already at the facility. The shift has not required soon-to-be mothers to change facilities, as obstetricians continue to perform deliveries at GMC. Obstetricians will continue delivering babies at Bloomsburg and are available to the midwives, should they need backup.

Midwife services offered at Geisinger clinics have continued unchanged.



Shari Wachob, a certified midwife at Geisinger Bloomsburg Hospital, with baby Emily Fisher — whom she helped deliver — and her mom Stacy Fisher.

Lee Ann Campbell, RN (left) and Jessica Burkholder, RN prepare a patient bed in the Janet Weis Children's Hospital at Holy Spirit. In addition to the pediatric inpatient unit, Holy Spirit has expanded or grown a number of pediatric specialty services such as gastroenterology, orthopaedic surgery, general surgery, endocrinology and hematology/oncology.



Reaching new heights

Patients at Marworth Alcohol & Chemical Dependency Treatment Center now have a new opportunity to reach incredible heights on their road to recovery.

A combination of a matching grant from the Margaret Briggs Foundation of Scranton, donations from Marworth

alumni and friends and Marworth's own funds allowed the treatment center to introduce a 30-foot rock climbing wall to the recreation therapy program.

"This is the first high element we've incorporated into our existing challenge course," says Lori Pilosi, MS, lead

recreation therapist. "We got the wall primarily as a tool for our young adult population, but patients of all ages — men and women — have shown a strong interest and desire to climb."

Climbers are harnessed and connected to a system of safety lines which are controlled by a group of people on the ground, called a belay team. Led by one of the recreation therapists, the belay team includes three or four of the climber's peers who provide support and confidence to their teammate on the wall.

Marworth's recreation therapy team members, Ryan Collins, BS, Caitland Hawk, BS, and Pilosi, each completed specialized training to become certified challenge course practitioners. They use the climbing wall to connect a variety of 12-step themes to an exciting physical activity. While focusing on a personal challenge, or emotional wall, climbers learn about healthy risk-taking, stepping out of their comfort zone and relying on others for support. Each person goes at their own pace and climbs only as far up as they choose. Afterward, the group processes the experience together.

Once the wall is seen in their first recreation therapy group, many patients look forward to the day they will get to climb it. "It becomes a goal they can set and achieve before leaving treatment," says Pilosi. "The walls that addiction can build in a person's life can feel high and insurmountable. I'm glad we can give them an opportunity to experience the power of support to conquer their walls metaphorically and realistically."

The rock climbing wall at Marworth Treatment Center can accommodate two climbers at a time.





The Mobile Health Paramedic Program provides a range of services to patients in the community, including blood draws and checking vitals.

Filling an important need

Patients who have been hospitalized may need important medical interventions or follow-up care once they are discharged. Unfortunately, a home health nurse or skilled nursing facility isn't always an option.

Enter Geisinger's innovative Mobile Health Paramedic Program, which dispatches a specially trained paramedic to the homes of patients who are having trouble managing chronic or complex conditions such as heart failure and diabetes.

In this role, paramedics augment existing programs like care management and visiting nurses by providing care that

ranges from checking vital signs and drawing blood to administering intravenous (IV) diuretics, or helping patients understand their medical regimens.

The paramedic documents the patient's care in the electronic health record, which is immediately available to primary care and specialty doctors at Geisinger. If additional support is needed, the paramedics have real-time teleconnectivity with Geisinger emergency physicians.

"We wanted to create a nimble, clinical resource that we could deploy rapidly and provide a focused medical service to

the patient," says David Schoenwetter, DO, who directs the Mobile Health Paramedic Pilot Program at Geisinger Wyoming Valley Medical Center.

Since its launch in 2014, the program has prevented 418 hospitalizations, 116 emergency visits and 1,518 inpatient days among the patients served.

Hospital admissions and ER visits among heart failure patients fell by 55 percent and the rate of readmission after 30 days fell by 24 percent. Additionally, the program earned perfect patient satisfaction scores.

New look and services for Lewistown

Geisinger Lewistown Hospital broke ground in June 2015 on a \$10.1 million renovation project aimed at alleviating overcrowding, improving patient flow-through and expanding the array of available services and equipment.

Upgrades will include a new check-in and checkout area, triage rooms, waiting rooms, patient treatment rooms, staff break and locker rooms, work stations and charting areas in the Emergency Department, which currently handles 33,000 patient visits a year.

Renovations to the Imaging Department will include new registration and waiting areas, the installation of a GE Healthcare CT scanner and upgrades to imaging rooms to include ultrasound rooms, a fluoroscopy room and an additional X-ray room.

The nearly 13,000-square-foot renovation will encompass the entire ground floor of the hospital and is expected to be completed by August 2016.



Morgan Snyder, patient access representative, speaks with a patient from behind a newly renovated check-in desk.

Making good on a mission

There's an educational renaissance taking place at Geisinger. Long considered a hub for healthcare technology and innovation, Geisinger is now exploring ways to harness this knowledge to empower current and aspiring clinicians and achieve broader benefit for patients in the community and beyond. This pursuit has led the organization to refine its educational mission, launch new training programs and expand learning opportunities for healthcare professionals at all levels and stages of their career.

Education that emphasizes collaboration

"As an organization, we've built these incredible bridges to our communities," says Linda M. Famiglio, MD, chief academic officer and associate chief medical officer, Geisinger Health System. "Now we need to focus on crossing those bridges."

This realization led Geisinger to refine its Academic Affairs mission statement in 2015 to emphasize the importance of interprofessional education, an approach that prepares health professionals to provide patient care in a collaborative team environment.

"No longer is it enough to just teach a specific clinical skill set," says Famiglio. "We need to empower all of our healthcare professionals — both students and veterans — to partner with not only one another but the patients and families for whom they are caring."

According to the Institute of Medicine, interprofessional education "enhances the quality of patient care, lowers costs, decreases patients' length of stay, and reduces medical error."¹

"Healthcare needs to be a true collaboration and not a one-sided

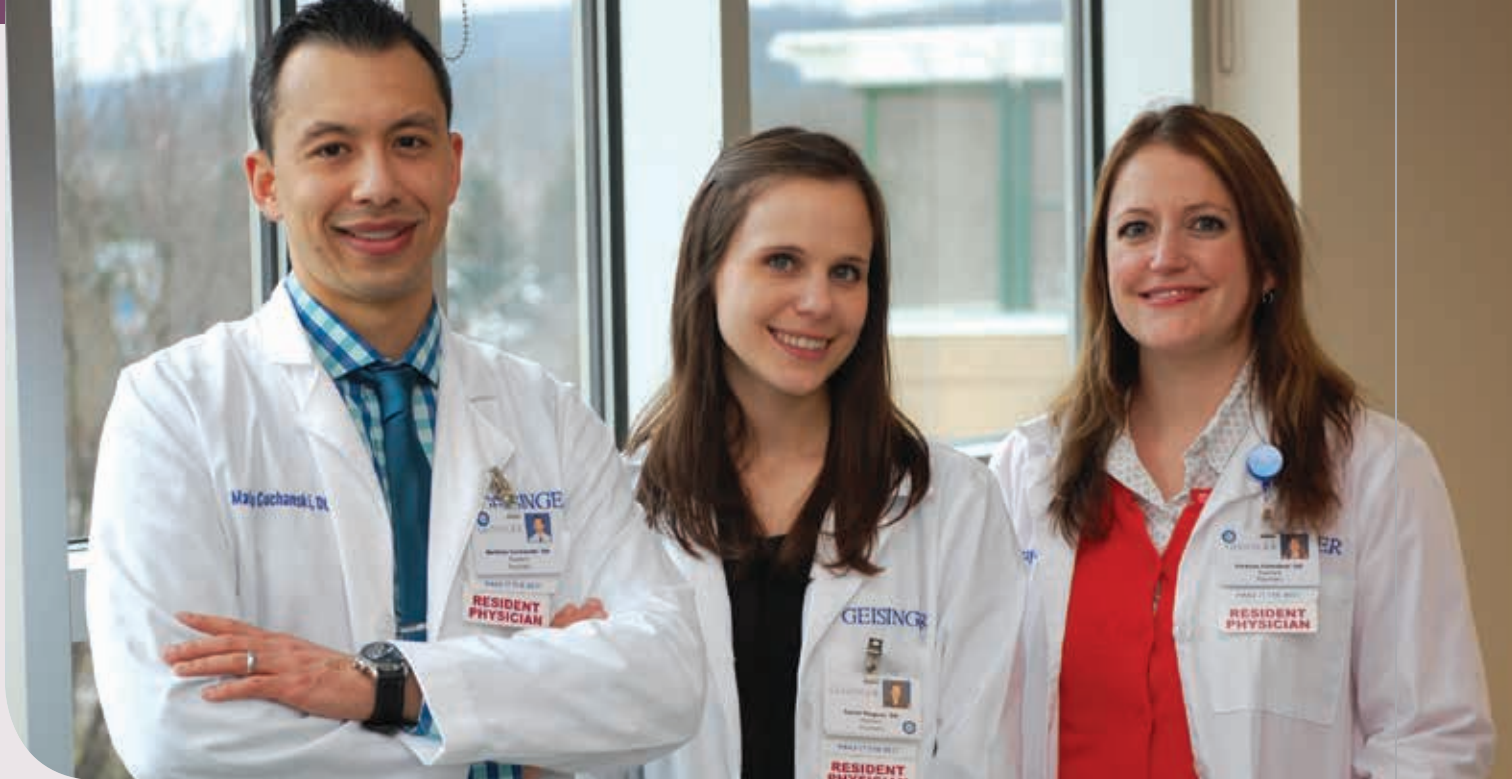
exchange," explains Famiglio. "This is the only way that we'll achieve our goal of changing the patient experience."

"Specifically," she continues, "Geisinger is now teaching relationship-centered communication that focuses on the human concept of what we do."

¹Institute of Medicine Committee on the Health Professions Education Summit. Health Professions Education: A Bridge to Quality. In: Greiner AC, Knebel E, editors. Washington, DC: National Academy Press; 2003

Interprofessional education at Geisinger is emphasizing the need for clinicians to partner not only with one another but also with patients and their families to enhance the care experience. Pictured (from left) orthopaedic surgery residents Shannon Alejandro, MD; L. Christopher Grandizio, DO; and Matthew Geswell, MD.





Geisinger's Psychiatry Residency Training Program inaugural class includes (from left) Mathieu Cuchanski, DO; Sarah Wagner, DO; and Lindsay Campbell, DO. (Not pictured: Ashley Dotson, DO)

Psychiatry residency welcomes its inaugural class

Among the many exciting educational advances to take place in 2015 was the launch of Geisinger's Psychiatry Residency Training Program.

"The addition of a Psychiatry Residency Training Program completes a pentad for Geisinger," says Marie Rueve, MD, residency program director for psychiatry, and director of Psychiatry Services and Inpatient and Consultation Services, Division of Psychiatry, Geisinger Health System. "This rounds out our offerings which already include established training programs in neurology, neurosurgery and neuropsychiatry as well as adult and pediatric psychology."

The four-year program received approval in 2014 and welcomed its inaugural class in July. Rueve explains that four residents will be added each year for a total of 16 once the program is full.

"Three residents in our first class come from Geisinger's Clinical Campus Program," explains Rueve. "The fourth is from West Virginia. We've received so many excellent applicants from across the nation that it's been a challenge to select just four."

Residents in the program will spend their first two years completing rotations in medicine, neurology, inpatient psychiatry and addiction medicine. Third-year residents will complete outpatient rotations in psychotherapy, county mental health clinics and integrated care sites.

"In these cases, the resident is placed at the primary care or medical specialty clinic to meet the patient where they are," says Rueve. "This is a very exciting aspect of the program for many of our candidates."

Fourth-year residents will provide care in Geisinger's clinics and units

where they'll receive geriatric and forensic experience.

"In addition to their rotations, residents will participate in quarterly case conferences with Geisinger Health System's president and CEO, David T. Feinberg, MD," Rueve explains. "The residents participate with a variety of faculty in intensive weekly didactic sessions, case conferences and Grand Rounds."

According to Rueve, the Psychiatry Residency Training Program has the potential to offer a long-term benefit to Geisinger's communities.

"We're training future psychiatrists, many of whom have a personal connection to the local area and the particular challenges born by a rural community," she says. "There's a tendency for residents to stay on and practice where they train — we certainly hope that this will happen here."

Preparing the next generation of chief medical information officers

The digitization of healthcare through technology has generated an enormous volume of valuable data. The problem is that few people know how to properly weave this information into clinical practice.

It's a quandary that has led a handful of insightful organizations to launch clinical informatics fellowships — specialized programs that teach physicians how to disseminate, use and repurpose information to improve patient care.

Geisinger proudly joined the ranks of the few this past year when it received approval to launch the nation's ninth Fellowship in Clinical Informatics.

"What we are doing is training the next generation of physician leaders such as chief medical information officers," explains Shravan Kethireddy, MD, associate program director, Clinical Informatics Fellowship. "These individuals will be facile in using technology and informatics to organize and apply information — while acting as real-time physician-informaticist consultants for providers — to deliver better, safer care."

The two-year fellowship, which will accept its first two fellows in 2016, will provide experience in all aspects of healthcare information technology.

"Information architecture and governance, mobile and web technologies for facile patient/provider engagement, clinical decision support and improved usability of electronic health records in both the in- and outpatient settings are a few of the areas we'll emphasize," shares Kethireddy. "Data management — an area which Geisinger pioneered — is also a focus."


A highlight of the fellowship is the capstone project, which requires fellows to identify an issue that is important to the health system and then leverage Geisinger's informatics resources to design and lead an effort to address that concern.

The aspect of the program that interests Kethireddy most, however, is something he calls the fellowship's "touchstone" — patient safety and quality. "We want to send Geisinger's message of patient safety and quality out across the country," he explains. "Everything we do with this fellowship is designed to help providers leverage technology, data and informatics to achieve better patient care."

"Our fellows will learn how to use the digital footprint of their patients to make sure that mistakes — when made — don't happen again," he says. "They'll be able to ensure that everything that is done correctly is done better, and when things become new and are considered standard of care, they'll embed them into practice."

Kethireddy adds that the fellowship will emphasize the overarching need for data transparency in healthcare.

"Information technology is no longer just operational; it's a necessary requirement to take care of patients in the digital age," he says. "This data means very little if we don't understand how to access it easily to optimize patient care. We need to be transparent about mistakes and show that information systems can help providers deliver innovative, safer care. I want our program to be the first in the country to show how this is done."



Shravan Kethireddy, MD, center, with (left) Chase Parsons, DO, resident, and (right) Jonathan Perez, MD, accelerates Geisinger's use of technology and informatics to organize and apply data to deliver better, safer care.



“Information technology is no longer just operational; it’s a necessary requirement to take care of patients in the digital age.”

Preparing the next generation of chief medical information officers

Communication hasn't always been a focus of healthcare, but Geisinger is working to change that fact through its standardized patient training.

Currently in its pilot year, this training provides clinical professionals at all stages of their career with the opportunity to hone their interpersonal communication skills through one-on-one interactions with patient actors.

"This program is important because it offers clinicians a means to practice real-life situations in a safe environment," explains Nicole Woll, PhD, vice president of Faculty and Curriculum Development, Geisinger Health System. "In these sessions, participants can feel comfortable making mistakes or

taking a time-out to collect their thoughts. Following the interaction, they receive feedback from an observing faculty member."

According to Woll, who co-directs the training with Mary Harris, MD, director of the Internal Medicine Residency Program at Geisinger Medical Center, this type of program has been taking place across the organization for over a decade but this is the first effort to formalize it into a resource that can support all of the organization's learners across the continuum of education.

"Over the past year, the patient experience has risen to the forefront of Geisinger's mission," says Woll. "This has led us to focus more deeply on the

interpersonal and communication skills of our clinicians. Standardized patient training helps us enhance how we interact with patients so that their needs are heard and met."

Standardized patient training can be easily adapted to accommodate different clinical departments, explains Woll. "We've covered things like end-of-life discussions as well as some things that people don't necessarily think about with this training," she says. "For example, we recently did a program for OB/GYN residents focusing on motivational interviewing as a means to change behaviors in women with gestational diabetes."

To ensure optimal training, the program hires outside talent to play the role of the patient. "We've hired actual actors, retired physicians and even stay-at-home moms for these roles," says Woll. "They've all sat in the patient's chair at one time or another, so they're able to bring that real-life experience to the training."

She shares that in its inaugural year, six different programs were offered for between 20 and 30 learners.

"Looking ahead, we have four short-term goals," Woll says. "We want to create more sophisticated training facilities, identify a pool of talent to serve as patients, develop a series of realistic clinical cases that we can add to our training and enhance our feedback process."

Mary Harris, MD, director of the Internal Medicine Residency Program, Geisinger, observes Syed Sherazi, MD, as he engages in a standardized patient encounter.





Participating in CPR training (from left) Haley Pollick, RN; Courtney Wesley, RN; and Tyler Calkins, RN.

Advancing healthcare through nursing education

Since the Institute of Medicine released its 2010 report calling on states to grow the number of BSN nurses, Geisinger has been actively partnering with area nursing programs to help its own RNs achieve this advanced degree.

In 2015, Geisinger expanded its educational partnerships — which already included Wilkes, Bloomsburg and American Sentinel universities — with the addition of The University of Scranton and Misericordia University.

Under the partnership with The University of Scranton, Geisinger nurses can enroll in an expedited BSN program at a special tuition rate. Lectures and clinical classes — taught by faculty from The University of Scranton — are offered at Geisinger Community Medical Center. Nurses at other Geisinger campuses can participate in classes remotely through live video conferencing.

Misericordia University is offering a 20 to 30 percent tuition discount for Geisinger nurses who wish to enroll in its RN-to-BSN program, its part-time accelerated evening BSN program or one of its advance practice degree programs. These include its Master of Science in Nursing (MSN) — Family Nurse Practitioner, MSN-to-Doctor of Nurse Practice (DNP) and BSN-to-DNP programs.

About 40 percent of Geisinger nurses have BSNs, with the goal of reaching 80 percent by 2020.

Whitney Nevins, RN, practices with a new type of catheter.





Dan Davis, PhD, director, Bioethics, Geisinger, pictured (right) with colleague Nicole Woll, MD, vice president of Faculty and Curriculum Development, Geisinger, is working to increase patient engagement in research.

Elevating care through innovation and research

Innovation and research at Geisinger are driven by a single, overarching goal — to improve the health and medical care of people both locally and globally. By leveraging its unique resources and partnering with other like-minded organizations, Geisinger has made tremendous progress in its pursuit. Novel, evidence-based strategies are improving outcomes and controlling costs, while pioneering efforts in genetic sequencing are making it possible for people to receive the right care at the right time, and in the right way.

“Investigators all have a shared mission to both improve care and improve health and well-being.”

Expanding research and increasing patient engagement

“Are you satisfied with the outcomes you get with your patients, or do you wish we could do better?”

It’s a question David Ledbetter, PhD, Geisinger’s chief scientific officer, often asks physicians when speaking to them about turning the organization into a “learning health system.”

According to the Institute of Medicine, a learning health system “generates and transfers knowledge from every patient interaction...to define, disseminate and support a vision of continuous improvement.” Creating this learning health system is one of the two key guiding principles in Geisinger’s updated strategic research plan — the other being partnerships with patients.

“Investigators all have a shared mission to both improve care and improve health and well-being,” says Ledbetter. “Geisinger has a duty to collect as much information as possible during each patient encounter, and then leverage that knowledge to improve the care of future patients as quickly as possible.”

Ledbetter explains that the greatest obstacle to this vision is the “wall” that has historically stood between research and clinical care.

“I tell physicians that if they’re in clinic and are able to diagnose and cure all of their patients in one visit, then they’re done and don’t need research,” he says. “However, if they’re not doing this, then they shouldn’t be satisfied with the care that patients are receiving. So why not join me and support the notion that Geisinger is going to develop the next generation of practice standards, improve outcomes and enhance the patient experience?”

But what does it take to become a learning health system?

Ledbetter indicates that one element is the creation of a continuous cycle of integrated innovation, implementation, assessment and reengineering in all aspects of Geisinger’s clinical and research enterprise. The other is to engage and partner with Geisinger’s patients and community — the strategic research plan’s other key guiding principle.

“The emphasis has changed from protecting patients participating in research to engaging them as research partners,” Ledbetter says.

This was the impetus for the creation of Geisinger’s Ethics Advisory Council for MyCode® Community Health Initiative, which is overseen by Dan Davis, PhD, director, Bioethics, Geisinger.

“The idea that research should have independent oversight has existed for many decades,” shares Davis. “But the idea that research oversight should also represent the perspectives of patients is more recent.”

Even though the council — which is composed of four patients and four community experts — has only been in existence for a little over a year, it has already made its mark, says Davis.

“The council was developed at a time when we were wading through some challenging ethical questions related to MyCode®,” he says. “Its members brought a perspective to this research that is illuminating and enormously helpful. We’re now looking at engaging patients in this way with other research endeavors.”

In addition to providing a crucial perspective, the council reviews consent forms and communications to ensure that they are clear, concise and convey the researcher’s message accurately.

“I sometimes compare our shift to engage patients to a Copernican revolution,” says Davis, referencing the philosophical shift that placed the sun at the center of the solar system. “Previously we neglected the perspective of patients, but we have now learned that by bringing them into the conversation and focusing our efforts around what it is they really think and need, we are much more likely to achieve meaningful, lasting improvements in care.”

“The emphasis has changed from protecting patients participating in research to engaging them as research partners.”

The charge to transition Geisinger into a learning health system is being led by Chief Scientific Officer David Ledbetter, PhD.



Familial hypercholesterolemia findings saving lives

They're known as the "Geisinger 76."

Seventy-six genes that are helping Geisinger identify individuals at very high risk for 27 different conditions, just by looking at their DNA.

It's a tremendous advancement in precision medicine made possible by Geisinger's MyCode® Community Health Initiative, which collects and sequences participants' DNA to enhance population health and medical research.

"When people provide us with their DNA through blood and saliva samples, we study it to determine if there are any changes in any of these 76 genes that would indicate that they're at high risk for one of these conditions," explains W. Andrew Faucett, MS, senior investigator, Geisinger Genomic Medicine Institute. "If the results of this screening show that they are predisposed to develop colon cancer, for example, we'll work with them and their primary care physician to

ensure that they get timely screening and any needed treatment."

Faucett adds that through this initiative, Geisinger has been able to put life threatening conditions on people's radar long before they may experience their first symptom.

One example is FH, which stands for familial hypercholesterolemia, an underdiagnosed, life-threatening and treatable genetic disorder that can cause heart attack and stroke at an early age.

"People with FH often require intensive use of cholesterol-lowering medicines to manage their risk for early heart attack and stroke," explains Michael F. Murray, MD, director of Clinical Genomics,

Geisinger Genomic Medicine Institute. "The good news is that Geisinger has the expertise to guide FH management, and over time, we expect decreased heart attacks and strokes in the patients identified through this program."

"Original estimates indicated that one in 500 people have FH," adds David Ledbetter, PhD, chief scientific officer, Geisinger. "When we began looking at the DNA that has been sequenced to date through our collaboration with the Regeneron Genetics Center, however, we discovered that FH was actually identified in 1 in 200 participants. That's significantly higher than most people previously thought."

"Through this initiative, Geisinger has been able to put life-threatening conditions on people's radar long before they may experience their first symptom."

Carroll Flansburg provides a patient with information about Geisinger's MyCode® Community Health Initiative.



Ledbetter explains that FH is a condition that can affect an entire family.

“We know that if someone has the genetic mutation for FH, there’s a 50/50 chance that they’ll pass it on to each of their children,” he says. “Because we have so many multi-generational families participating in the MyCode® project, we’ve actually been able to look at parents, grandparents, children and grandchildren and identify those people within the family who have or are at risk for this condition.”

FH can manifest in childhood, and current recommendations state that children in such families should be evaluated by age 8 for treatment consideration.

“This ushers in a new era of ‘anticipatory medicine’ in which we may be able to avoid the onset of disease by anticipating high risk and taking appropriate preventative measures and treatments,” Ledbetter adds.

Recently, Geisinger’s Marc S. Williams, MD, director of the Genomic Medicine Institute, and Marylyn D. Ritchie, PhD, director of Biomedical and Translational Informatics, were awarded a \$3.5 million National Institutes of Health grant to study FH and chronic rhinosinusitis. As part of their work, the team will test approaches to discussing FH genomic sequencing results with patients and families, and also how family members communicate with one another. This grant is part of the Electronic Medical Records and Genomics (eMERGE) network administered by the National Human Genome Research Institute (NHGRI).



An audience with the President

When President Barack Obama announced in January 2015 his initiative for the genomic sequencing of 1 million people, he was joined at the White House by some of the nation’s leading genetic experts including David H. Ledbetter, PhD, Geisinger’s executive vice president and chief scientific officer.

“We’ve invited some of America’s brightest minds in medicine and technology,” President Obama announced. “The Precision Medicine Initiative we’re launching today will lay the foundation for a new generation of lifesaving discoveries.”

“The administration is launching an effort quite similar to a major project we started in January 2014 and we are well on our way,” explains Ledbetter. “Projects such as the Geisinger-Regeneron collaboration and the Precision Medicine Initiative have the potential to improve health and in some cases, save lives through earlier diagnosis and treatment...and by determining who can be most helped by new drugs that improve or cure a subset of any given disease category. Those are lives that are being saved.”

MyCode® Community Health Initiative Update

>95,000

Current enrollment

>50,000

Current sequenced

37,999

Consented in 2015

250,000

Enrollment goal



The 14,000-square-foot, \$562,000 Precision Health Center is home to highly specialized teams from Geisinger's Clinical Genomics and Autism & Developmental Medicine Institute.

Precision Health Center brings unprecedented care to community

Additional clinical research space and a patient care center are just a few of the highlights of the new Geisinger Precision Health Center in Forty Fort.

The 14,000-square-foot, \$562,000 facility, which opened in April 2015, is home to highly specialized teams from Geisinger's Clinical Genomics and Autism & Developmental Institute (ADMI), and serves as the primary location for Geisinger research in northeast Pennsylvania.

The center also boasts a first-of-its-scale telemedicine genomics program that allows Geisinger specialists and visiting national experts to consult with patients and their physicians. Geneticists in Forty Fort will have the capacity to share their expertise via specialized videoconferencing software with patients and providers anywhere in the world.

"The genomic data that will become available to our team at Forty Fort will allow us to give patients access to genomically informed healthcare in a manner and at a scale that has not been seen before," says Michael Murray, MD, director of Clinical Genomics, Geisinger Genomic Medical Institute. "In the facility's initial phase, we will be consulting with people engaged in Geisinger's MyCode® Community Health Initiative; however, we expect to expand the use of this cutting-edge telegenomics technology rapidly in order to extend this type of care to providers and their patients."

Patients seen for clinical care at the Geisinger Precision Health Center will be able to have their genome sequenced, interpreted and applied to their medical care by a comprehensive team of physician geneticists, genetic counselors and other medical specialists. The

facility will ultimately act as a resource to other institutions, providers and patients locally, nationally and internationally seeking a second opinion.

As the second location for Geisinger's ADMI, the Forty Fort facility helps to fulfill a long-range vision to establish a network of regional centers of excellence that will make care for children with special developmental needs as accessible, efficient and effective as possible.

"We share a common goal with our families and community — to improve outcomes for children with special developmental needs," says Christa Martin, PhD, director, Geisinger ADMI. "ADMI's focused commitment to community is part of what makes us unique. This new facility should benefit a large number of local patients and their families."



Assessing mental health risks in troops

A new Geisinger study, led by Joseph Boscarino, PhD, and his team, hopes to identify specific risk factors, including genetic variants, in recently deployed National Guard and reservists that may increase their risk of developing post-deployment mental health problems.

Standing left to right: Joseph Boscarino, PhD; H. Lester Kirchner, PhD, director, Biostatistics Core; seated, left to right: Stuart Hoffman, DO;

James Pitcavage, MSPH; Johanna Hyacinthe, MS and Jared Pajovich, BS. Missing from photo is Thomas Urosevich, OD.

Inaugural GenomeFIRST Symposia addresses pressing health issues

In May, the Precision Health Center launched its semi-annual GenomeFIRST genomics symposia series.

“Each of the symposia focus on the early diagnosis of life-threatening conditions and highlight prevention and management of risk,” says Michael F. Murray, MD, director of Clinical Genomics, Geisinger Genomic Medicine Institute. “These symposia will function as meetings where people gather to learn and exchange ideas about important topics in clinical genomics.”

The inaugural conference focused on familial hypercholesterolemia, an underdiagnosed, life-threatening and treatable genetic disorder that can cause heart attack and stroke at an early age.

The next symposium took place in September and focused on the BRCA gene, which can predispose many people to life-threatening cancers including breast, ovarian and prostate. Speakers at both conferences included nationally recognized experts.

According to Murray, the genomic medicine symposia have three target audience groups: patients and patient advocates, clinicians who

care for patients and researchers and scientists interested in the genomic basis of the condition.

Only a small, invited live audience attended the symposia at Geisinger’s Precision Health Center in Forty Fort, Pa. However, all were invited to join via a live, free web link.

Participants in the inaugural conference included (from left) David Carey, PhD, associate chief research officer, Geisinger; Caroline Graham, CRNP, Pearsall Heart Hospital, Geisinger Wyoming Valley; Michael Murray, MD, director of Clinical Genomics, Geisinger Genomic Medicine Institute; Katherine Wilemon, founder and president, Familial Hypercholesterolemia Foundation; Christopher J. O’Donnell, MD, associate director, Framingham Heart Study, associate clinical professor, Harvard Medical School; David Ledbetter, PhD, chief scientific officer, Geisinger; Daniel J. Rader, MD, Seymour Gray professor of molecular medicine, Penn Medicine.



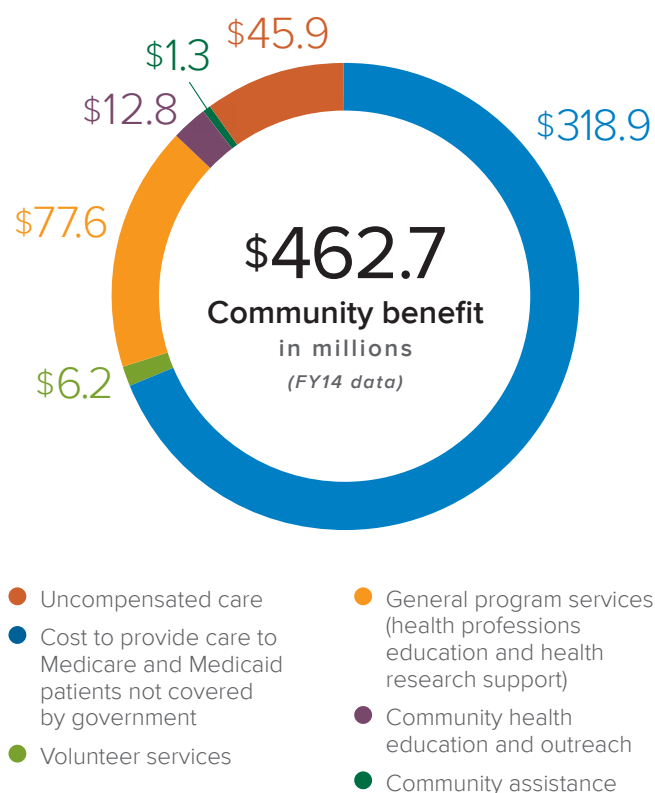


Geisinger president and CEO David T. Feinberg, MD, takes time to visit with a patient.

Supporting our community

Geisinger's reach extends far beyond the walls of its hospitals and clinics. Within the many towns and cities that it serves, Geisinger is making measurable contributions that include providing charitable care, educational programs and outreach services that enhance the overall health and wellbeing of the local community.

In fiscal year (FY) 2015, Geisinger employed about 23,500 people and had an \$8.9 billion annual positive impact on the state's economy (according to the Hospital and HealthSystem Association of Pennsylvania). Geisinger's commitment to promoting healthy work environments and encouraging its family members to adopt healthier lifestyles earned the organization the 2015 Platinum Award from the National Business Group on Health.



Geisinger provides charity care and community benefit at three times the amount required by the state to fulfill its not-for-profit mission.

A stronghold in the community

More than 3 million people from across Pennsylvania and southern New Jersey entrust Geisinger with their care each year. It's an awesome responsibility that has motivated the organization to push the boundaries of healthcare innovation in ways that have long only been imagined.

Through novel technologies, such as ProvenHealth Navigator®, ProvenCare® and now ProvenExperience™, Geisinger is engaging and empowering patients and their families in their care. Cutting-edge research in the areas of genetics and precision medicine is helping Geisinger to advance clinical knowledge and bring promising treatments to the forefront. And a growing footprint is allowing the health system to provide people with the care they need, where and when they need it.

Geisinger Medical Center greeters Clayton Dendler (left) and Ryan Beers provide patients with a warm welcome.



Geisinger by the numbers

Geisinger ended FY15 (July 2, 2014, through June 30, 2015) with an operating income, excluding interest expense, of \$127 million.* This reflects a 3.5 percent return on revenue of \$4.6 billion. The health system's economic benefit to Pennsylvania (from direct and indirect spending) totaled \$8.9 billion. Revenues grew by 14.7 percent over the prior year, and investments in facilities, technology and equipment totaled \$228 million.

In FY15, Geisinger provided \$462.7 million in community benefits — about a 12 percent increase over the prior year. This total includes uncompensated care and care provided under government programs at less than cost.

*Geisinger and AtlantiCare integrated financial information on Oct. 1, 2015. As a result, this FY2015 financial summary does not include information from AtlantiCare—A Member of Geisinger Health System.

Dori Crist, clinical resource coordinator,
Holy Spirit, consults with a patient.



Financial summary

(in millions)

FY2014 **FY2015**

Geisinger earned:

**Customer premiums, services
to patients and general services** \$9,750.2 \$11,550.0

Geisinger did not receive full payments from:

Medicare and medical assistance	\$3,506.7	.....	\$4274.5
Charity to patients	\$178.9	.....	\$227.1
Bad debt	\$53.7	.....	\$50.1
Other patients receiving services under contractual arrangements or due to administrative allowances	\$2,033.0	.....	\$2433.7
Total amount received	\$3,977.9	.....	\$4,564.6

Geisinger spent:

Salaries and benefits	\$1,598.1	.....	\$1,802.9
Contracted services	\$1,394.3	.....	\$1,559.4
Supplies, utilities and other expenses	\$726.1	.....	\$891.9
Depreciation	\$122.6	.....	\$150.7
Total costs for patient treatment and rendering care to beneficiaries	\$3,841.1	.....	\$4,404.8

Geisinger assets and liabilities:

Operating income	\$136.8	.....	\$159.8
Interest on debt, earnings on investments, and non-operating gains (losses)	\$291.7	.....	\$35.2
Excess of revenue and gains over expenses and losses	\$428.5	.....	\$194.8
Operating margin	3.4%	.....	3.5%
Total assets	\$4,634.6	.....	\$5,295.7
Total liabilities	\$2,113.8	.....	\$2,570.9
Accumulation of net worth from prior earnings	\$2,520.8	.....	\$2,724.8

Geisinger at a glance

FY2015 statistics

Employees 23,500

Staffed beds* 1,472

Admissions* 72,401

Average length of stay* 4.7 days

Average occupancy rate (based on staffed beds) 66.4%

Emergency room visits 213,358

Clinic outpatient visits 2,643,809

Population managed

(active patients plus members less overlap between
patients and members)

1,026,658

Finances

Revenue \$4.6 billion

Current capital investments \$228 million

Life Flight®

Air ambulances

(Locations: Danville, Scranton/Wilkes-Barre, State College,
Minersville, Williamsport)

5

Flights 2,156

Geisinger Health Plan membership** 540,172

Commercial 133,963

TPA 139,846

CHIP 9,429

Medicaid (including Healthy Pa.) 168,959

Geisinger Gold and Medicare Advantage 87,975

*Excludes nursery and skilled nursing and includes neonatal intensive care unit activity

**As of Dec. 31, 2015

Geisinger

Geisinger Health System

100 N. Academy Ave.
Danville, Pennsylvania 17822-2576
570-271-6461

geisinger.org