Remaining Financially Viable in a Time of Healthcare Transition

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SUMMARY

In an unstable healthcare environment, Western Maryland Health System has been demonstrating stability. We have responded to the many challenges that hospitals face and managed to thrive in the new, value-based world.

We made the transition to value-based payment and care delivery models through innovations in Maryland's payment system. In 2010, we recognized that becoming a demonstration project for value-based care would benefit our health system as we dealt with an aging and shrinking regional population. By moving care away from the acute setting to other settings across the care continuum, we now treat patients in the most appropriate setting (e.g., the home, physician office, clinic, and even senior centers, churches, and homeless shelters).

As we have transitioned care, we have also transitioned our workforce. With fewer acute care patients, we need fewer staff members at the bedside. Many of our staff have shifted to delivering care in pre- and post-acute care settings.

To improve our financial performance, we formed an alliance of three health systems. This new alliance has found increased savings by consolidating services, managing regionwide population health initiatives, and benchmarking clinical quality through best practices. Through the alliance, each individual health system is stronger and well augmented by the savings that it could not achieve separately.

The transition has not been easy, but we have shown that it is achievable. We have identified a number of solutions to reduce costs and generate savings while enhancing quality and patient safety. These solutions may present a pathway to success for other organizations seeking to move to value-based care delivery and new payment models.

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Setting the Background

> *This hardscrabble city at the base of the Appalachians makes for an unlikely hotbed of health care innovation. Yet Western Maryland Health System, the major hospital serving this poor and isolated region, is carrying out an experiment that could leave a more profound imprint on the delivery of health care than President Obama's reforms.*
> —Eduardo Porter, *New York Times*, August 28, 2013

Virtually overnight in December 2010, the Western Maryland Health System (WMHS) went from aiming for increased volume in admissions, procedures, tests, and visits to applying the Institute for Healthcare Improvement's Triple Aim: better care through improved quality and satisfaction, lower cost, and a healthier population. At that time, WMHS became one of ten community providers that participated in a demonstration project on payment reform that would be applied to all Maryland hospitals three years later. This new care delivery and payment model drew national attention. Seven years later, healthcare delivery in western Maryland has evolved into a model for best practices.

WMHS is a 275-bed health system in Cumberland, Maryland, that grew out of the consolidation of two competing organizations, a Catholic hospital and a secular hospital, in 1996. After a tumultuous start as the new organization reconfigured clinical services across the system, we were able to satisfy our many stakeholders by creating centers of excellence. One hospital focused on women's and children's health, trauma, and orthopedics, and the other on cardiac care, behavioral health, and cancer services. The system continued to operate two acute care hospitals until 2009, when the campuses were consolidated into a new hospital at a synergistic location adjacent to the local health department and a college with many allied health profession programs.

Establishing Value-Based Care Delivery

Shortly after building a new medical campus and combining two hospitals into a new system, WMHS was invited by the Health Services Cost Review Commission (HSCRC), the entity that regulates reimbursement rates for Maryland hospitals, to participate in a demonstration project called Fixed Total Gross Regulated Patient Revenue (TPR) with nine other Maryland hospitals. Recognizing that the growth of healthcare spending in the United States was unsustainable and the Affordable Care Act was promoting new strategies to reduce the total cost of care, we decided to become a part of the project. Being in rural Maryland, in one of the poorest counties in the state, WMHS cares for a population that is aging and declining in size. We expected changes in volume and reductions in payment.

The demonstration project was an opportunity to take advantage of the value-based learning curve and prepare for the future of healthcare delivery. The shift to value-based care would certainly bring challenges, but as a progressive organization, we felt that the opportunity was worthwhile. Because WMHS was part of a demonstration project, the HSCRC provided funds to assist in the transition.

Having worked with value-based care delivery under TPR for more than seven years, I am often asked whether it is better for our patients. My answer is a resounding yes. In fact, I do not think I could work in a fee-for-service environment again. The difference that we have been able to make in the lives of our patients is remarkable; at the same

time, we have saved millions of dollars through reduced utilization and a much more comprehensive approach to care delivery.

By shifting the emphasis from volume to value, WMHS was able to reduce admissions and readmissions; strengthen patient engagement; reduce variation in quality; reinvest our savings in technology and new-to-market, real-time data systems; work collaboratively with community partners; reduce utilization of the emergency department (ED), as well as observation and ancillary services; and improve the overall health of our region.

Patient education became a major area of emphasis, along with a more thorough discharge-planning process.

The *New York Times*'s 2013 prediction came true: Maryland's unique experiment did leave a more profound imprint on healthcare than Barack Obama's reforms. The Centers for Medicare & Medicaid Services is directly involved in the expanded demonstration projects currently underway in Maryland hospitals and intends to apply our successes in other parts of the country.

Turning Challenges into Successes

The work has not been easy. An important early component of the process was education at every level of the organization about the concept of value-based care. Although leadership immediately saw its potential, we realized by the end of the second year that our staff still did not completely understand our new care delivery and payment models. I would make rounds in the hospital and continue to hear about how busy WMHS was—in the minds of the staff, volume was still a good thing. As a result, we created a mandatory education program for employees so they would understand value versus volume. This education initiative was an overwhelming success, enabling staff to grasp the change and support our efforts.

After getting hospital governance, the administration, and our staff on board, we had to figure out a way to engage our physicians in value-based care delivery. In most instances, they were still reimbursed under a fee-for-service payment methodology. I asked six physician leaders to serve on a newly formed president's clinical quality council, and they agreed. The intent of the council was to begin educating physicians on our transition from volume to value. I asked the group, whom we considered early adopters, to nominate six colleagues to round out the council. These 12 physicians joined me and other members of the C-suite on the council.

Fortunately, we selected 12 true movers and shakers from across the healthcare spectrum: surgery, hospital medicine, primary care, radiology, pathology, cardiology, oncology, ED, and gerontology. Each signed a contract to show commitment to the new care delivery model and was paid an hourly stipend. The council was educated on value-based care and its importance to the organization's new care delivery and financial models. We met monthly, and the physicians were asked to help educate their colleagues on our transition. We established task forces led by physician council members to address documentation issues, handoffs, colleague communications, pay-for-performance models, and overutilization. The council became a significant force in facilitating the care delivery transition, as well as many quality and safety initiatives systemwide.

Identifying Cost Savings

Before our mandatory education for employees, WMHS experienced a loss from

operations in 2012, in part because of our staff's lack of understanding regarding the transition from volume to value. In a capped revenue model, organizations can keep any savings they generate, but they are also responsible for any losses. So we engaged consultants for an eight-month initiative to identify significant savings opportunities. Areas addressed included appropriate staffing levels for our changing care delivery model and potential savings in our supply chain, with a focus on physician preference items. Purchased services opportunities were also identified.

Engaging subject-matter experts in clinical, ancillary, and support areas pushed our productivity into the top 25 percent of the industry. We also were able to demonstrate how dramatically healthcare was changing and why we could no longer tolerate the individual preferences of the medical staff, particularly interventional cardiologists and surgeons. Each eventually grasped that standardization was necessary going forward. We were able to work with our cardiologists to standardize our pacemakers and implantable cardioverter defibrillators, as well as with our orthopedic surgeons on hip and knee prosthetics.

We realized savings that amounted to nearly $9 million in labor and supplies. Labor savings alone exceeded $5 million across 15 different departments; the joint replacement initiative saved $1.3 million, with similar savings in devices; and we achieved almost $1 million in pharmacy savings and other savings in food service, purchasing discounts, and warehouse operations. All of these initiatives allowed us to get back on track financially the following fiscal year.

Forming the TPR Collaborative

WMHS also was able to benefit from the experiences of the other hospitals in the ten-hospital demonstration project. Shortly after the TPR demonstration began, I reached out to the other CEOs and asked if they would be interested in forming a hospital collaborative—all were interested, and the collaborative was formed. The CEO and chief financial officer of each participating hospital served on the collaborative, which met monthly. We brought the chief medical officers, care coordinators, and data analytics staff from each hospital together to pursue best practices in their areas of responsibility. We also engaged consultants to help negotiate our TPR agreements with the HSCRC as a collaborative rather than as individual hospitals. The collaborative continued for five years, effectively negotiating two additional agreements with the HSCRC before it was disbanded, its work complete.

Setting Strategies, Getting Results

As WMHS evolved under TPR and value-based care delivery, staffing adjustments became necessary. The number of care coordination staff more than doubled, and the home care program grew by 35 percent in the first year. We also added observation beds and created a network of community health workers. Fortunately, as WMHS's inpatient admissions decreased, we were able to shift professional staff into these expanding areas, avoiding any loss of our experienced staff. We added primary care practices throughout the region, with a focus on where our most vulnerable patients lived. Throughout our practices, we implemented a patient-centered medical home with round-the-clock patient access; team-based care, including care coordinators, behavioral health staff, and dietitians; and a variety of population health initiatives. We transitioned the physician leadership of the president's clinical quality council into the leadership for WMHS's

new clinically integrated network. The intention was to keep independent physicians who no longer admitted to the hospital engaged with our health system while offering them a pay-for-performance incentive.

Under TPR and in our pursuit of value, WMHS recognized the importance of enhancing inpatient care delivery. Patient education became a major area of emphasis, along with a more thorough discharge-planning process. We decentralized the pharmacy, assigning pharmacists to each patient unit to serve as a resource for staff and to educate patients and their families. Scheduled team rounding was instituted by nursing, along with shift-change reporting at the patient's bedside. Care coordination was staffed 24 hours a day, 7 days a week, including in the ED. Now every readmission is subject to a root-cause analysis process by a transition steering committee. Focused care management is provided in physician offices, including by independent physicians throughout the region, to arrange referrals and patient transportation, provide emotional support, address basic social needs, and assist with procuring home medical equipment and supplies.

We also recognized the importance of facilitating the transition to home. In partnership with our hospital pharmacy and a local independent pharmacy, WMHS initiated Med-Start, a program that delivers 30 days of post-discharge medications to the patient's bedside. Since its inception several years ago, Med-Start has required a few adjustments, but it now significantly benefits our patients because they can leave the hospital with their required medications in hand. We make follow-up calls on all discharged patients and check in with all high-risk patients in the transitional care clinic if newly discharged patients cannot see their primary care physicians within five days of discharge. A team of nurses, community health workers, and respiratory therapists perform home visits to high-risk patients as well.

So, WMHS has moved away from the traditional care delivery approach, where virtually everything is centered on the ED and the acute care hospital and where all pre- and post-acute care is secondary (Exhibit 1). Under the new continuum-of-care model (Exhibit 2), the acute care services of the hospital and ED still exist, but pre- and post-acute care are of equal importance. In addition, many who were competitors are now partners. Most significant is the amount of care that is now being delivered in the home.

Skilled nursing facilities (SNFs) throughout the region have become key partners in our effort to keep patients out of the hospital when care can be delivered in a more appropriate location. WMHS created an initiative, Partnership to Perfection, in collaboration with the administrators and nursing directors of all of the local SNFs. In addition to educating them and their staff on our value-based care delivery model, the physicians and nurse practitioners in several SNFs serve as skilled nursing specialists—a role based on the hospital medicine model, but for nursing homes. They provide on-site care at the SNFs seven days a week and address acute issues as they arise. They are supplemented by registered nurse (RN) transitionists who accompany nursing home residents back to the SNF after discharge and provide a summary to the staff about each resident's care and discharge instructions. They also perform medication reconciliation and facilitate a better transition from the hospital.

Because WMHS had its own SNF, there was an initial sense of competition and mistrust between our health system and the other SNFs. We worked to convert that competition into a true partnership where we rely on the SNFs and they rely on us. Since 2015,

EXHIBIT 1
Traditional Care Delivery

EXHIBIT 2
Today's Continuum of Care

we have seen a 31 percent reduction in readmissions from SNFs at which the RN transitionist and skilled nursing specialists are in place. Even in the SNFs where this model is not in place, we realized a 24 percent reduction in readmissions, which is still a welcome outcome.

As noted earlier, we engaged consultants when we first formed the TPR collaborative of ten hospitals. One of the collaborative venture's early projects was gathering data to learn about the impact that high-risk patients were having on the individual member hospitals. We realized that we needed to address these patients, many of whom had multiple comorbidities, as quickly as possible.

At the time, WMHS had diabetes, congestive heart failure (CHF), and anticoagulation clinics operating in virtual silos. We realized that an integrated care model in one location would provide better outcomes for our most vulnerable patient population. We created the Center for Clinical Resources (CCR), consolidating all of the clinics into a 6,000-square-foot office, which also provided the ability to address hypertension and chronic obstructive pulmonary disease (COPD) and asthma. The clinic also provides medication therapy management. Among patients followed by the CCR, reductions in the number of admissions have been notable: 12 percent for individuals with diabetes, 27 percent for those with CHF, and 64 percent for anticoagulation patients. The availability of the CCR for high-risk patients resulted in a $9.6 million cost avoidance in the first 24 months of operation.

Through such initiatives, and a host of others, WMHS continues to address the health needs of specific populations. In February 2016, we began our heart failure transitionist program to manage patients with heart failure or a related diagnosis. The nurse transitionist who manages this program has more than 360 patients and works through the care management department and the CCR. The nurse provides these patients with education and helps them navigate the continuum of care, ensuring appropriate pre- and post-acute treatment and arranging telemonitoring in the home.

In the first year, 70 patients completed the nine-month program. The benefits are twofold: The longer a patient stays with the program, the greater the benefit to the patient and the more WMHS saves in overall utilization of services. One year into the program, WMHS saw a 43 percent reduction in total ED visits, observation stays, and inpatient admissions and realized more than $800,000 in cost avoidance for total charges. We modeled a similar program for diabetes in 2017 and achieved similar encouraging results. In just six months, we recorded a total cost avoidance of more than $1.2 million for 91 patients with diabetes.

As noted previously, care is shifting to the home. Our latest venture for keeping patients out of the hospital is a home-based telemonitoring program for patients with chronic conditions such as CHF, COPD, diabetes, and hypertension. Patients and their families are given a tablet computer to track weight, blood pressure, glucose levels, heart rate, and respirations. The patients are monitored daily by medical staff, with results provided to a designated nurse who follows up when an abnormal result is received. This early medical intervention often eliminates the need for a trip to the ED for symptom management. With the telemonitoring program, patient satisfaction and quality of life are high because patients prefer to cope with chronic disease in their own homes.

Through the success of all of its value-based care delivery initiatives, WMHS has intentionally gone from operating 275 beds in 2009 to an average daily census of 160 in

2017. Inpatient admissions have been reduced by 24 percent and inpatient readmissions by 19 percent. Behavioral health admissions have decreased by 13.5 percent and behavioral health readmissions by 54 percent. We have achieved an 8 percent reduction in ED visits.

WMHS has also effectively managed to shift our Level I and Level II patients from the ED to urgent care clinics. From 2016 to 2017, urgent care visits have increased by 17 percent. In 2011, consultants found that 1,972 patients accounted for $140 million of our costs. That number has since been reduced to 1,257 patients accounting for $81 million.

Addressing Affordability

How can WMHS afford to do all that we are doing? Through the fixed-revenue model of TPR, we benefit from the savings that are generated through cost-effective care delivery. With 100 percent of our total patient revenue fixed—regardless of inpatient and outpatient mix, reductions in volume, or changes in case mix—across-the-board reductions in utilization and associated savings are the keys to our success. Delivering care in the least costly, most appropriate setting is imperative. In its first seven years of TPR, WMHS experienced great success and improved patient experience.

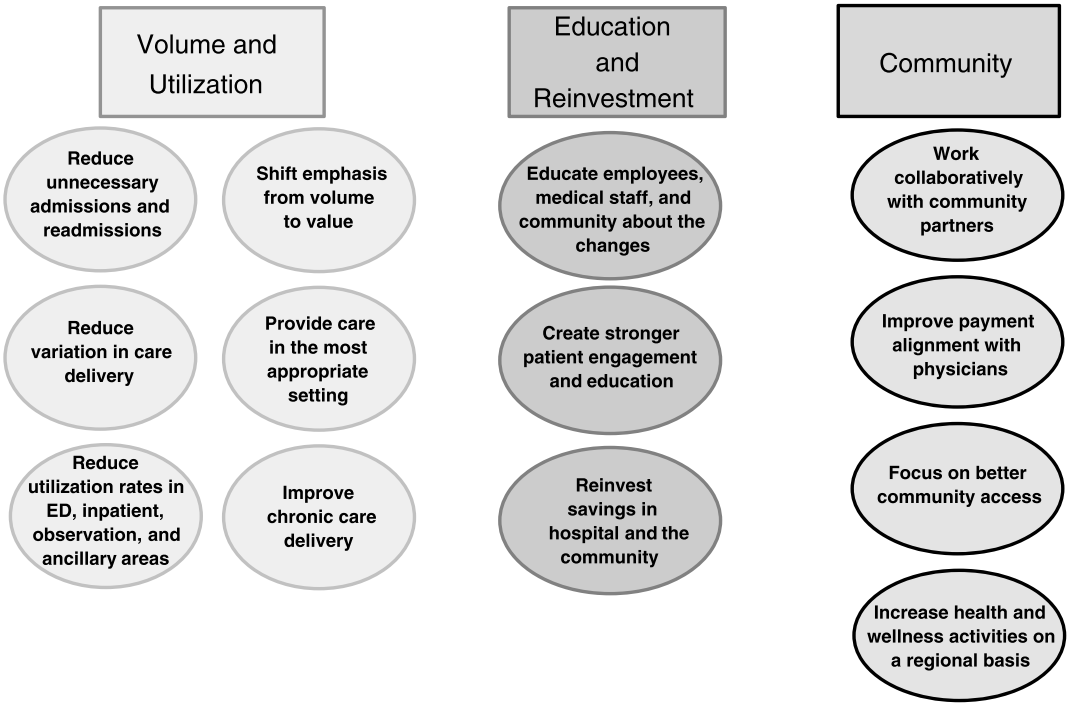
In 2014, the HSCRC introduced global budget revenue (GBR) to the remaining 40 hospitals in Maryland. GBR is based on the principles of TPR but is adjusted for market share and population growth. In 2017, the HSCRC merged TPR and GBR as the model of care delivery in Maryland. Exhibit 3 shows the key components of the policy and serves as a road map for achieving affordability. Between 2014 and 2017, WMHS hosted visits from more than 35 hospitals and health systems, mostly in Maryland. Also, members of the WMHS C-suite have had numerous speaking engagements across the country to describe our journey and share our initiatives as well as our lessons learned. When all Maryland hospitals fell under this new payment and care delivery model, the four years of early experience at WMHS became valuable knowledge to share.

In addition to the savings WMHS has realized, we also benefit from grant funding related to population health initiatives and from the many partnerships that we have cultivated (detailed later). Also, we have adopted the Baldrige Performance Excellence Framework to achieve results similar to our successes in 2012 with labor and supply chain. We are reexamining key processes, energizing systemwide initiatives, refining improvement tools such as Lean and Six Sigma, eliminating waste, and tracking continuous improvement results. The ED, intensive care unit, radiology, facilities, nutrition, and environmental services were the first areas to use this process. WMHS already is seeing successes in our pilot areas as we better align strategic, operating, and financial plans across the system.

Coming Together in the Trivergent Health Alliance

WMHS also made significant improvements in cost and quality through the formation of the Trivergent Health Alliance. In October 2012, WMHS, Meritus Health (in Hagerstown), and Frederick Regional Health System (in Frederick) began discussions about an alliance. These health systems represent three independent providers with combined annual revenues exceeding $1.2 billion and function as sole community providers in adjoining counties. The goal of the alliance was to provide greater stability in an increasingly unpredictable market.

EXHIBIT 3
Managing Under Value-Based Care



Each health system was interested in ensuring its long-term survivability and committed to providing a full continuum of care in its respective community. As healthcare reform encouraged providers to create larger or more integrated organizations, the three health systems saw the creation of this alliance as a way to improve clinical quality, share services, and enhance population health initiatives under Maryland's approach to global budgets. The alliance, eventually named the Trivergent Health Alliance, became a functioning entity in 2014.

Approximately 1,200 employees from the three health systems were transferred to the new alliance to form a management services organization (MSO) that consolidated six service areas for greater efficiency: supply chain, revenue cycle, pharmacy, information technology, human resources, and laboratory services. Through the creation of work teams for each area and consultative assistance, a three-year savings target of $40 million was identified; the MSO is on track to achieve this savings goal in its third year. Substantial savings and efficiencies have been achieved by using a standardized formulary to reduce drug costs, managing payment denials, addressing physician preference items, improving cash flow, insourcing norm reference testing, acquiring laboratory automation, and reducing supply costs.

Clinical quality improvement has been achieved across the alliance through understanding and benchmarking clinical capabilities, leveraging new technology, exploring approaches to reducing variation in patient care, and identifying strategies to eliminate

patient harm. We have established 19 specialty groups to determine and share best practices. The outcomes achieved through these groups have benefited each of the alliance hospitals, and those serving in the groups do not have to face the ever-changing healthcare environment alone.

Population health is another area of focus for the alliance. In 2016, Trivergent was awarded a $3.1 million grant by the HSCRC. This grant was only possible because the three health systems had joined forces to better serve western Maryland. Through a host of partnerships, each health system has set a goal of comprehensive community care coordination. For example, through real-time data analytics, WMHS has identified hot spots throughout our service area where high-risk patients have repeated ED visits, admissions, and readmissions. A team of nurse practitioners, social workers, dietitians, RNs, and crisis counselors visits homeless shelters, low-income housing units, senior living centers, churches affiliated with the local parish nursing program, and municipal buildings to see patients in their own communities. The team is addressing immediate health needs, establishing ongoing primary care relationships, and signing up patients for insurance on the healthcare exchange. Socioeconomic factors are also assessed and addressed through established community partnerships to arrange transportation and meet basic needs such as food, clothing, and housing. Each alliance health system is approaching population health initiatives specific to its community, but all are experiencing direct benefit in reducing overall hospital utilization as reflected in fewer admissions, readmissions, and ED visits.

Making a Difference in Population Health

Before the financial crisis of 2008, Maryland was a state with rich health and social benefits for those in need. Our local health department was the region's safety net. During the financial crisis, many programs were abolished as a result of state funding cuts, but the needs in the community did not change. Now many of those needs are met by WMHS. Through the savings generated under the new payment model, we can reinvest in our community to better meet some of the basic needs of our poor and disenfranchised. We can address many of these needs by partnering with other agencies and organizations.

As one such example, WMHS opened its first community garden in 2015. The intention was to provide those who have limited access to fresh food with the space and support to grow their own fruits and vegetables. The community garden was made possible through grants and in-kind donations from many agencies and local businesses. We partnered with the city for water; the local prison for plants; hardware stores for fencing; landscaping companies for soil, mulch, and timbers; and the University of Maryland for seeds and seedlings. Eventually, one garden grew to five in 2016. Today, volunteers help tend some of the garden plots and donate hundreds of pounds of fruits and vegetables to the local food bank throughout the summer.

Oversight of the many initiatives, programs, and services to address value-based care delivery rests with the WMHS Triple Aim coordinating council. Members include the CEO, vice presidents, physicians, and nurses, along with the leadership from eight departments. The council oversees the initiatives to ensure that they continue to contribute to our care delivery model.

Leaders also check regularly that WMHS is making a difference in the lives of our patients. A community health needs assessment is conducted every two years by a group independent from the health system, the

Community Wellness Coalition. Recent results reflected a healthier population with improvements in obesity, smoking, heart disease, insurance coverage, dental health, teen births, and physical activity.

Conclusion

When I attend meetings with colleagues, I hear about many familiar challenges. The uncertainty of healthcare plagues all of us. Nevertheless, WMHS has been able to eliminate many of the challenges that my colleagues still face. We have enjoyed successes such as a new state-of-the-art medical center—transitioned to a value-based care delivery model—and a nursing home that allows WMHS to more rapidly transfer patients out of the acute care setting. In addition, the creation of a three-hospital alliance to share costs, enhance clinical quality, and address population health needs throughout the region has been especially beneficial.

Through the savings generated under the new payment model, we can reinvest in our community.

The willingness of the state's HSCRC to allow us to reinvest most of the savings we generate through our value-based initiatives back into the health system and the community supports our mission. We are able to work effectively under a rigorous, quality-based reimbursement system after improving our performance from worst in the state to first in the state in one year. Our experiences yielded a better understanding of risk-based environments, care delivery models redesigned for reliability, and greater use of clinical protocols. We have significantly reduced admissions, readmissions, ED visits, stays in observation, and ancillary utilization while improving overall care delivery and the health status of the patients we serve.

I do not want to leave the impression that WMHS has conquered all challenges. Like other health systems, especially those serving economically stressed areas, we have difficulties recruiting in a number of specialties; moreover, because WMHS is a regional trauma center, call coverage is essential. Obstacles deeply embedded in the region include abject poverty, a high number of noncompliant patients, poor health, and an opioid epidemic. We continue to pursue savings opportunities, address inefficiencies, and review utilization. Staying ahead of the next wave of reimbursement reductions while improving quality, based on aggressive total-cost-of-care initiatives, will likely be our biggest financial challenge.

Fortunately, I have been blessed with a board and an executive team who truly understand the challenges. They always strive to take the organization to the next level in quality, patient safety, financial stability, and overall care delivery.

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