The construct of the Triple Aim, as originally created and continually promoted by the Institute of Healthcare Improvement (IHI), outlines the foundational goals of what most view as the future of healthcare delivery in optimizing health system performance:

1. Payment—reduced per capita cost;
2. Population health improvement; and

MOLDING THE CLAY OF CHANGE

The IHI was founded in 1991 as an outgrowth from work that began in the late 1980s by a visionary group that was committed to redesigning healthcare through a move toward reduction in errors, waste, delay, and unsustainable costs. The idea was to move medical care into a more service-oriented delivery system than the current industrial factory/volume-based approach. The first decade of the IHI’s efforts achieved corrections in care delivery defects and errors in areas such as the emergency department and intensive care unit. The second decade promoted efforts to find new solutions to old problems in the renowned 100,000 Lives Campaign and 5 Million Lives Campaign, which led to best practice changes within thousands of U.S. hospitals and prompted international improvements in healthcare delivery. The third decade has ushered in the articulation of the Triple Aim, which summarizes a natural progression of the IHI’s vision of improvements in health and healthcare delivery in many areas of the world.1-3

The bold, visionary, innovative goals of the Triple Aim are proving to be the authoritative base against which decisions are means-tested for many healthcare delivery organizations, payers, and patients. The move to achieve these goals has prompted much needed change. What is seen as best practices now may be vastly different in the future due to realities of market forces that will direct changes that are well beyond the original vision.

THE BLINDBLING GLIMPSE OF THE OBVIOUS: PROVIDER BURNOUT AND PATIENT ENGAGEMENT

Two key cultural tenets are missing from the Triple Aim: physician/provider burnout and individual patient engagement. These could be considered the fourth (Quadruple) and fifth (Quintuple) Aims, respectively. The three elements of the Triple Aim must be supported by top-functioning physicians and providers. An authoritative veterinary model of healthcare delivery excludes the patients’
participation, and that model hurts the goals of the Triple Aim. Patients have choices and substantial control of their healthcare outcomes through their actions. It is impossible to improve population health without the patients’ participation, ownership, responsibility, and engagement in shared decision-making.

A rising tide of concern centers on the reality that physicians and other healthcare providers are being pushed beyond human abilities to provide comprehensive care combined with significantly altering their delivery models (the Quadruple Aim). At the same time, pervasive regulatory documentation, which in many instances has nothing to do with the Triple Aim, has begun to negatively affect physician satisfaction. Those things that used to be expected and rewarded in physician/provider professional work are changing drastically. The problems with healthcare are system wide, delivery based, payer based, patient personal health behavior–related, and shared by all—not just the providers. Even the most perfectly designed delivery system will become dysfunctional if the leaders of the team lack the energy or desire to effectively carry out their responsibilities. Physician surveys indicate that as many as 60% of physicians have experienced or are experiencing multiple symptoms of burnout.

Patients rightfully own healthcare, and an authoritative veterinary delivery model is disrespectful to all involved. Patients deserve choice and quality, but they are poorly equipped to advance population health alone. Patients deserve complete information, effective coaching, individual monitoring, and educational support. Clinical decisions made together by providers and well-informed patients have been shown to improve satisfaction and outcomes, and reduce costs. Population health will always be best served when providers are well supported and prepared to meet patient care delivery challenges. They propose that in any business, care must be taken of the employees, because they are the resource for taking care of customers. This is true in healthcare, too, as nurses, physicians, administrative staff, supervisors, switchboard operators, housekeeping must be prepared and engaged so that they desire to provide great services to patients. Triple Aim goals are far more likely to be reached by systems that understand, engage, and support those who deliver care.

When patients trust their providers, compliance increases and outcomes improve.

There is a reason that "support staff" is called that. Each staff member should feel fully engaged in support of the healthcare organizational mission. This enhances continuity of care, adding to the momentum of patient engagement.

SUBSTANTIVE CHANGE REQUIRES DIVERSE APPROACHES

Movements to engage patients as responsible, accountable partners in their healthcare delivery are most successful when directly derived from patient–physician/provider relationships. When patients trust their providers, compliance increases and outcomes improve. Efforts to educate and coach providers with goal-directed incentives could greatly advance these goals. Finally, and very importantly, physician/provider coaching must also address the issues of physician/provider burnout.

When industry promotes the Triple Aim through employee programs, the forces of change come from very effective sources. For example, Hallmark, headquartered in Kansas City, Missouri, has been an innovator in employee health, a field that has long been ignored by other
large companies. Its innovation history includes the introduction of healthy onsite food service in 1923; an onsite medical department since 1956; the Healthworks wellness program, introduced in 1987; making it a priority to develop an integrated wellness plan in 2009; and introduction of the Hallmark Health Rewards Program in 2010.

The Hallmark workplace strategy has been to engage patients through financial rewards and monitoring of outcomes for actionable data to effect behavioral change. They offer an employee learning program with onsite health coaching and nutritional counseling as well as targeted health improvement workshops offered through the employee portal. Their programs, called “annual challenges,” include “Eat the Rainbow,” “Spring into Exercise,” and “Take the Pledge” to reduce sodium consumption. Hallmark-sponsored health improvement events and videos also are included as a more diverse approach to effectiveness. The top four risk conditions being addressed for Hallmark employees include: becoming “Healthy and Fit”; obesity; dyslipidemia; and back pain. Substantive employee participation with positive outcomes continues to prove that healthy behaviors will increase when patients are empowered with knowledge and health improvement coaching.

Hallmark has implemented innovative sales opportunities as a spinoff of what is proven to work well within the company. Businesses can adopt the Hallmark employee health model and provide incentives to their employees using Hallmark products.

Hallmark is a well-known master of emotional intelligence, communicating to customers with ingeniously creative products. These employee health–directed efforts use the same approach to provide for recognition of successes obtained toward employee health goals.

Another approach to improve patient health through addressing patient behavior is an ongoing study at Roper St. Francis in Charleston, South Carolina, focused on employees with diabetes. In the My Diabetes Program, in just one year Hgb/A1c levels less than 8 have improved from 61% of patients to more than 78%. During the same time, the percentage of employees with out-of-control diabetes (Hgb/A1c >9) decreased from 22% to less than 6%. The team approach to this success includes the patient’s primary care physician, nutrition coaching, personalized diabetes management training classes, and making sure that the patient has easy access to available medications.

Many companies provide bonuses to employees who participate in wellness programs. Increases in insurance premiums for smoking, elevated body mass index, and poor control of diabetes and hypertension have acted as incentives and greatly improved the health of employees across America. Patient responsibility can become a reality with health-promoting programs. This type of program is far less invasive than dealing with prior authorizations which has become for patients and providers.

Many healthcare providers have been misguided toward responses that are actually detrimental to healthcare delivery. In the chronic frustrations of providers in response to what is actually a small percentage of grossly noncompliant patients. Healthcare providers at many levels have long used cynicism, in reaction to professional fatigue, as a coping mechanism. Stress has always been high for healthcare workers, and it is steadily increasing in the face of so many encumbrances and distractions coming from outside of the exam room. Their stress-related cynicism must be recognized and managed through education in emotional intelligence techniques and coaching of providers and patients.

Athenahealth promotes that patient engagement is an essential strategy for achieving the Triple Aim of healthcare. They present true patient engagement as:

- The knowledge, skills, ability, and willingness of patients to manage their own and family members’ health and care;
- Healthcare organizational culture that prioritizes and supports patient engagement; and
- Active collaboration between patients and providers to design, manage, and achieve positive health outcomes.

Most patients will improve their health behaviors and become motivated to engage with their care plans when presented a model of well-informed, shared decision-making. Best patient care delivery and outcomes happen when providers and patients embrace a new culture of seamless integration and shared benefits. The challenges are nearly insurmountable when payers and healthcare plans disrupt provider–patient relationships by forcing patients to choose new providers because of their ever-changing insurance plans. The insecure, forced transition to unknown providers will never lead to best outcomes.

In the past, healthcare delivery responded to market gains by “harvesting” the high-paying fee-for-service model. Market forces are directing change with new laws and payer contract agreements that place value on innovation that contains cost while maintaining quality. Nothing in healthcare will change until there is substantial change in the way we pay for it.

Although most healthcare providers have seen outstanding financial successes in the last three decades, it has come at great expense to patients and payers. Medical breakthroughs and healthcare availability have advanced, but costs are beyond what society can economically tolerate. Patients now see health insurance premiums and deductibles at levels that promote them to avoid care rather than seeking it when it is needed. Many patients are affected by near-poverty standards of living, and healthcare debt has become a major cause of personal bankruptcy.

The use of electronic applications to bend the cost curve for healthcare will increase as patients become more technologically savvy. Smartphone application–based opportunities for electronic engagement are advancing. Apple
and others have been working on a wide range of very sophisticated applications for future patient engagement/empowerment. Many smartphone applications are available to monitor healthy activities for patients, and some are aligned with their healthcare delivery systems.

**Healthcare providers must provide opportunities for patients to secure their future needs.**

The realities of physical and financial health needs have motivated patients toward engagement with healthcare providers to stay healthy and minimize their personal healthcare costs. Healthcare providers must provide opportunities for patients to secure their future needs. Leading the way by example is Intermountain Healthcare in Salt Lake City. Their programs for engaging patients include personal primary care, shared patient–provider decision making, patient education, digital/mobile tools of care delivery, Live Well programs, and integrated care management for best outcomes to lower costs and achieve higher quality.¹⁵

An entire generation has grown up with copays and high deductibles of anywhere from $2000 to $10,000. Patients are experiencing severe sticker shock, and it is our role to assist them with understanding these new plans. Many—and likely most—patients will balance healthcare cost with total personal needs. Providers of healthcare are best suited to outline the risks of foregoing a prescribed treatment and guiding patients to choices that best accommodate their personal health and financial limitations.

Accountable Care Organizations (ACOs) such as Atlantic and Optimus Healthcare Partners ACOs in Northeastern New Jersey have proven outcomes data to document their care quality and patient engagement successes (personal interview with James Barr, MD, FAAFP, CMO Atlantic and Optimus Healthcare Partners). Patients’ needs are recognized and met to ensure higher quality and reduced costs. These programs put the needs of patients first. Programs that empower patients with knowledge and long-term disease management support are being successfully carried out with programs such as home monitoring, self-management, virtual patient visits, telehealth, and personal health technology apps.¹⁶

**NEW DELIVERY MODELS ARE NEEDED TO BEND THE CURVE OF HEALTHCARE COSTS**

The overlooked and underreported moral dilemma in healthcare is that evidence-based medicine outlines many best management guidelines, but our healthcare economic structure does not allow for the delivery of the care that would best advance the goals of the Triple Aim. This grave conflict is the bizarre dichotomy of discovery versus delivery in healthcare. Politically favored research is fanatically supported, while healthcare delivery for many common diseases is grossly underfunded or unavailable. Currently, the political and economic climate is favorable to the investment of millions of dollars to achieve advances in the treatment of many uncommon diseases. Over the last six decades, outstanding research discoveries have been made in healthcare for treating the millions of patients with common diseases, yet economic policies do not support the delivery of these services today. The focus of research must be drastically changed to concentrate primarily on the development of innovative delivery models for healthcare services that we already know are effective.

For example, the cost for renal dialysis is covered by the Centers for Medicare & Medicaid Services and represents over 20% of the Medicare budget. Every patient visit to the dialysis center costs around $4000. With vascular surgery support and other management needs the yearly cost comes to around $600,000 per dialysis patient per year. If an integrated, intensive outpatient care plan were implemented to prevent dialysis for a population, and the summary outcome was that 20 patients were delayed or prevented from dialysis for two years, then the dialysis cost savings could approach $24 million. No one doubts that appropriate, comprehensive preventative treatment for diabetes, hypertension, and elevated cholesterol would greatly postpone and even prevent thousands of patients from needing dialysis treatment. We should educate our renal patients about the benefits of lower cost, more convenient home peritoneal dialysis when the kidney begins its inevitable course toward failure, and not when hemodialysis is an acute emergency. The improvement in the suffering of patients with renal failure would be immeasurable.¹⁷

Why does implementation research for healthcare delivery models receive so much less support than seeking new discoveries that may not be available for patients due to dysfunctional healthcare policy? Some research seems structured and motivated solely for financial gain within a funding system that is seriously damaged. A larger portion of future research should be focused on effective modern research toward achieving the goals of the Triple Aim.

Future success will only come to healthcare organizations that embrace the Triple Aim with careful attention to the issues of provider burnout and patient engagement. All five Aims can align and likely will become the common standards for all parties who purchase, deliver, and pay for healthcare. The American healthcare market currently is undergoing vast changes, but the most advantageous combinations of efforts are as yet unknown. Early experiences show that value-based payment alternatives to fee-for-service care delivery do advance the goals of the Triple Aim. The health of patients and the financial viability of entities that deliver healthcare will advance when the
right models are employed. The best models have yet to be determined and likely will vary based on location and market opportunities. The current fee-for-service model that drives volume care is unsustainable and fraught with poorly aligned incentives.

While it was originally anticipated by many experts that patients would be responsible for 33% of their healthcare dollars spent, the new reality is that the patient is responsible for 50% to 100% of their healthcare costs, depending upon the deductible of the policy they have chosen. The typical employer mandate is a $2000 deductible, whereas a typical Affordable Care Act mandate is a $10,000 deductible. In reality, many patients present as self-paying patients. Patients have limited access to knowledge about healthcare utilization or costs. Providers and payers must transparently disclose costs so that patients can predict potential financial liabilities.

There is a very large healthcare “pie” in America, with costs exceeding $3 trillion in 2015. Future policies are set not to cut spending, but to moderate growth in spending. It is hoped that early adopters of innovative, best practice, evidence-based models will see significant economic gains, as well as improvement in the health of the populations that they serve. Those with an entrepreneurial mindset that welcomes innovation and embraces substantive healthcare delivery changes will find themselves leading the field. All must change in this new model. Already many major carriers are developing new alternative payment models designed to promote a more value-oriented approach in keeping with the culture promoted by the Triple Aim. However, the intense addiction to fee-for-service models has most resisting the Triple Aim move to value changes. This obstinacy greatly slows preparations for future challenges in most healthcare organizations.

**IMPROVING THE PATIENT-PROVIDER INTERFACE IS THE BEST OPPORTUNITY TO ACHIEVE MUTUAL BENEFITS**

Tremendous opportunities exist to advance healthcare outcomes with population health measures based on evidence-based medicine. The challenges of physician/provider burnout and patient engagement will never be solved through government or payer policies alone. It is up to each healthcare delivery entity to invent, explore, implement, and monitor policies that substantively address efforts to reduce provider burnout and improve patient engagement. Best outcomes will be seen for those who effectively mold delivery systems that embrace patient engagement while mitigating provider burnout. Improving the patient–provider interface should greatly advance the personal benefits of all by reducing provider burnout and advancing patient satisfactions. The greatest challenge is that this can only be achieved one provider and one patient at a time.

Healthcare economic forces will be driven by the needs of business, payers, policy makers, and, most importantly, patients. All in healthcare must follow the pathways outlined by the Triple Aim while embracing the challenges of provider burnout and the opportunities of innovative patient engagement.

**REFERENCES**