Whether as an invited speaker, board member, or expert panelist, my frequent travels afford me excellent opportunities to observe how health care reform is unfolding on the ground in real time. After delivering a favorite lecture – Population Health: Is It the Secret Sauce? – this spring, I had the pleasure of hearing, and seeing first hand, how one midsize integrated health care delivery system in northeastern Pennsylvania accepted the challenge and is transforming health care delivery.

The Lehigh Valley Health Network - principal care provider for 2 counties and service provider for a broader community comprising 12 counties - made a bold move when it decided to take on financial risk as part of being accountable for the health of its patient population. With value-based care and reimbursement as the goal, the network developed an economic model that is both effective and sustainable. Recognizing that comprehensive data and analytic capability would be critical to its success, the network partnered with its payer organizations to identify a claims analytics solution that incorporated clinical information (eg, data from electronic medical records), pharmacy data, billing information, and a scheduling component.

Populated with 3 years of prior claims, the new analytic framework provides a 3-year prospective view of the patient population and, thereby, the opportunity to identify patients at high clinical risk. Diabetes is the classic example: Clinical diagnostic codes identify patients with the condition; billing data reveal which tests have/have not been done; scheduling data reveal whether appointments have been made or missed; and, pharmacy data show which prescriptions have/have not been filled. A patient with diabetes and no claims history of foot examinations for 3 years is more likely to sustain clinical complications and incur higher health care costs in the future. This patient can be referred for an intervention by the health care team.

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Once the issue of analytic capability was resolved, the network embarked on what may be an even more complex challenge (ie, getting from here to accountable care) and already is making impressive strides. A 7-hospital collaborative has assumed responsibility for the collective medical expenses of employees and their dependents with the goal of improving care and decreasing inappropriate utilization. Chief Strategic Officer Brian Nester, DO, MS, MBA, noted that, “For years, primary care practitioners have wanted to provide value-based care. Now, with the aid of population health analytics, they will become the leaders in using data and sharing best practices.”

The preceding “accountable care in action” story sets the stage for this issue of Prescriptions for Excellence in Health Care that centers on the rationale for patient-centric, population-focused approaches to health care. The first article, “Patient-Centered Medical Homes: The Foundation of Accountable Care Organizations,” describes the evolution of the medical home movement and its integral role in current health reforms. “Patient Activation: Is It the Secret Sauce for Patient Engagement?” discusses this often overlooked but vital aspect of patient engagement, highlighting the Patient Activation Measure as a useful tool for incorporating patient-specific behavioral information into health care planning.

The third article, “Patient-Centered Care Is Accountable Care,” describes the Planetree organization’s long-standing dedication and considerable success in advocating for patient-centeredness. The outcomes of the project described in the final article, “Achieving the Triple Aim Through Community Collaboration,” are heartening – and clear evidence that, across the United States, health care is becoming more accountable.

As always, I welcome feedback from our readers at david.nash@jefferson.edu.

A MESSAGE FROM LILLY

Improving Patient Health: The Importance of Real-World Evidence for Health Care Decision Making
Carlos I. Alatorre, PhD, MBA and Christian Nguyen, PharmD, MBA, MS

Policy experts and individuals alike need timely insights on diseases, medicines, patient populations, and health care practices in order to make informed health care decisions. Real-world evidence (RWE) is helpful in assessing the value proposition of therapeutic interventions, particularly in terms of their application and sustainability in real-world medical practice. The effectiveness of approved therapeutic interventions depends in part on the decisions and actions that occur during real-world use, including the selection of a particular course of therapy, the patient’s tolerance level for the treatment, the use of concomitant therapies to treat comorbidities, and patient adherence to treatment once it is initiated. The impact of these factors on patient outcomes may be difficult to assess in traditional randomized controlled trials (RCTs) because these are typically conducted in tightly controlled settings with protocol-driven treatment assignments. Further, heterogeneous populations are generally underrepresented in RCTs, and treatment adherence is strongly influenced by the greater intensity of follow-up.

The key components of RWE supplement clinical trial information to provide valuable insights that inform decision making: (1) a relevant research question, (2) appropriate study design and methods, and (3) relevant data collected from real-world studies under routine care conditions. With massive amounts of data at their disposal for use in designing formularies and treatment pathways for their patient populations, payers increasingly consider RWE when making access and reimbursement decisions. In addition, RWE has been used more frequently for postmarketing safety assessments and benefit-risk management of medicines. Other areas wherein RWE can be of significant utility include...
characterizing disease epidemiology, determining inclusion/exclusion criteria for clinical studies, responding to customer questions, understanding drug use and patient adherence, and characterizing therapeutic impact on quality of life.

RWE brings value to health care stakeholders by obtaining evidence directly at the point of care to help improve:

- Delivery of care and patient health
- Efficiencies in the health care system
- Characterization of heterogeneous populations and underserved subpopulations
- Safety surveillance
- Access and reimbursement decision making

From a payer perspective, RWE may be helpful in clearly defining a population that will benefit from a therapeutic intervention, in reducing the risk of waste, and in managing budgets to control excessive utilization and cost.

From a health care provider perspective, RWE may help facilitate informed treatment choices based on patient outcomes generated from rich databases with valuable safety insights (eg, the right product for the right patient at the right time). Providers may find RWE useful in motivating patients to engage in their treatment plans and in facilitating discussions with payers to assure access to important treatments.

From a patient perspective, RWE provides valuable information on how patients suffering from the same illness benefit from particular treatment choices. This may help motivate them to engage in and adhere to recommended treatments.

Our company’s well-established focus on RWE includes a coordinated approach to harness its power to accelerate the flow of relevant evidence to benefit patients and to address the rising evidentiary demands of the US health care system. The approach is centered on customer-focused areas to support better health and economic outcomes, improve safety surveillance and risk management, and achieve appropriate levels of access and reimbursement.

Ultimately, we believe that a clear RWE focus will engender improved understanding and better inform health care decisions, which in turn will lead to better patient access to appropriate medicines, reduced health care resource utilization, and, more importantly, to improved patient health.

Carlos I. Alatorre, PhD, MBA, is Director of US Health Outcomes, Global Patient Outcomes and Real World Evidence at Eli Lilly and Company.

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Patient-Centered Medical Homes: The Foundation of Accountable Care Organizations

George Valko, MD

Is a patient visit to an expensive emergency department (ED) good for its hospital’s bottom line or is it a missed opportunity by the primary care doctor to improve care for that patient, avoid unnecessary use of the ED, and reduce costs for the entire system? Patient-Centered Medical Homes (PCMHs) are doing the latter (ie, providing quality care and reducing costs for their patient populations).

US health care system reform affects both health insurance and health care delivery. Delivery reform includes new organizational structures (eg, Accountable Care Organizations) that are associated with payment system reforms (eg, pay for performance, shared savings models, other quality incentives).

Because of the rigorous practice transformation and ongoing quality improvement required to become certified – and because of the superior clinical outcomes they produce – PCMHs are the key to success in this new environment.

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Founded in 1967 by pediatricians on the premise that special needs children must have their care coordinated and records easily accessible,2 the medical home concept was expanded in 2002 by the American Academy of Pediatrics to ensure that care is accessible, continuous, comprehensive, family-centered, coordinated, compassionate, and culturally effective.3 In 2004, the American Academy of Family Physicians developed its concept of the “medical home,”4 followed by the American College of Physicians’ “advanced medical home.”5 Along with the American Osteopathic Association, all 4 groups agreed on 7 joint principles in creating the PCMH6:

1. **Personal physician:** Each patient has an ongoing relationship with a personal physician trained to provide first contact, and continuous and comprehensive care.

2. **Physician-directed medical practice:** The personal physician leads an interdisciplinary team of individuals responsible for the ongoing care of the patient.

3. **Whole person orientation:** The personal physician is responsible for providing all of the patient’s health care needs or taking responsibility for appropriately arranging care with other qualified professionals.

4. **Care is coordinated and/or integrated:** The personal physician ensures care is coordinated across all elements of the health care system and the patient’s community.

5. **Quality and safety are hallmarks:** Physicians advocate for their patients to support the attainment of optimal patient-centered outcomes. Evidence-based medicine and clinical decision information technology are used to support optimal patient care, performance measurement, education, and communication.

6. **Enhanced access to care:** The practice seeks to create/implement options to improve access such as open access scheduling, expanded office hours, and new options for electronic communication.

7. **Payment Reform:** Payments should appropriately recognize the added value of caring for patients in a PCMH.

Although many practices function as a PCMH, receiving certification from and/or recognition by a national agency affords additional benefits. Among the first national agencies to offer PCMH certification – and probably the most widely utilized by insurers – is the National Committee for Quality Assurance (NCQA). NCQA developed quality standards and a detailed process designed to promote the advancement and modernization of primary care by means of ongoing guidance and periodic evaluation. When first issued in 2008, NCQA performance standards were as follows7:

- Access and communication
- Patient tracking and registry function
- Care management
- Self-management support
- Electronic prescribing
- Test tracking
- Referral tracking
- Performance reporting and improvement
- Advanced electronic communication

Although the primary focus of the 2008 Standards was infrastructure development and introduction of new office processes, they also emphasized redesigning workflows and roles to support a sustainable new delivery system. To achieve recognition, a practice need not show perfection, but may achieve Level I (lowest), Level II, or Level III (highest) recognition depending upon how many Standards are met.

In 2011, NCQA refined the Standards, reducing the number to 6 that are no less detailed:

- Access and continuity
- Identify and manage patient populations
- Plan and manage care
- Self-management support
• Tracking and coordinating care

• Performance measurement and quality care

The 2011 Standards were intended to leverage the new infrastructure to advance care delivery, and test the presence of true systems of care and team-based care. The Standards also were intended to promote continuous performance activities within a patient outcome-driven practice as well as to strengthen patient engagement.

As those who have been through the process are aware, NCQA Recognition is not easy to achieve. In addition, becoming an NCQA-PCMH does not guarantee that quality care is provided. This is the true work of the medical home – changing the culture of a practice to ensure continued improvement in patient care. That being said, receiving certification from a national agency has benefits and implications that warrant the hard work.

**PCMHs Improve Care and Efficiency and Reduce Costs:** Numerous studies have demonstrated that medical homes improve care and access, and reduce unnecessary medical costs. Consider the following studies:

- Geisinger, Pennsylvania: Achieved a 14% reduction in hospital admissions, a “trend toward a 9% reduction in medical costs,” and statistically significant improvement in quality of preventive, coronary artery disease, and diabetes care.

- Group Health Cooperative, Puget Sound, Washington: Achieved a 29% reduction in ED visits, an 11% reduction in ambulatory sensitive care admissions, and a 4% increase in patients achieving target levels on Healthcare Effectiveness Data and Information Set quality measures.

- Genesys Health Plan, Michigan: Achieved a 50% reduction in ED visits, a 15% reduction in hospitalizations, a 36% reduction in smoking, as well as a 137% increase in mammogram screening rates.

- HealthPartners Medical Group, Minnesota: Achieved a 39% reduction in ED visits, a 24% reduction in hospitalizations, a 129% increase in the number of patients receiving optimal diabetes care, and a 48% increase in the number of patients receiving optimal heart disease care.

In addition, Independence Blue Cross (IBC) in Philadelphia recently announced the results of a series of 3-year studies that demonstrate significant reductions in medical costs for patients with chronic conditions treated in primary care practices that have transformed into medical homes. Most notably, members with diabetes treated in a medical home practice had 21% lower total medical costs, largely attributed to a 44% reduction in hospital costs. Lower ED costs were noted after 1 year. IBC also found reductions in costs for members with chronic conditions such as coronary artery disease, congestive heart failure, chronic obstructive pulmonary disease, asthma, and hypertension.

**PCMHs Receive Enhanced Payments:** Because of documented improved care and lower cost, insurers are beginning to increase payments for PCMH practices. IBC in Philadelphia has increased payments to primary care providers and practices that become certified as an NCQA-PCMH. Other insurers are following suit. In addition, the improved quality scores achieved by PCMHs are resulting in increased quality payments.

**Market Share:** The Patient-Centered Primary Care Collaboration has been the leader in encouraging organizations to develop businesses in areas where there is a high concentration of primary care to help control their health care costs and provide quality care. Publications such as *The Patient-Centered Medical Home—A Purchaser Guide* help businesses encourage their health care plans to support PCMH development.

**Prestige:** Having PCMH certification is quickly becoming an important “seal of approval” as more and more institutions recognize the importance of
PCMH. Practices may proudly display the NCQA seal and advertise the recognition.

**Already Doing the Work**: Many primary care practices already meet many of the PCMH recognition criteria, reflecting the fundamental values of most primary care clinicians. However, in addition to the changes that benefit patients, the practice, and the staff, formal PCMH recognition leads to an increase in the value of the practice in the eyes of payers and hospital affiliates seeking cornerstones of quality care to take the lead in new payment models.

**Education of Residents and Students**: Practice sites that are participating in the education of residents and students should earn PCMH certification and should tackle the critical challenge of teaching the next generation of health professionals to function in interprofessional teams.12

In summary, because of its extensive practice redesign and ongoing quality improvement, the certified PCMH has been shown to improve patient care and reduce costs. Increasingly, companies are encouraged to do business in areas that have PCMH to ensure quality health care for employees at lower costs. PCMH practices are beginning to enjoy increased reimbursement through direct payments for NCQA Recognition and from insurers in exchange for improved quality scores. For all these reasons, PCMHs are now viewed as integral to health care reform on a local and national level.

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**Patient Activation:**

**Is It the Secret Sauce for Patient Engagement?**

*Keith Kosel, PhD, MHSA, MBA*

It is now generally accepted that the behaviors people engage in, and the health care choices patients make, have a profound impact on their health and the cost of health care. The literature makes clear the linkage between unhealthy behaviors such as smoking and obesity and a host of chronic conditions. Conversely, research has shown that regular exercise can have a pronounced effect on reducing the incidence of cardiovascular disease. At the same time, the Patient Protection and Affordable Care Act has ushered in new models of delivery and payment that reward providers for managing patients’ care and bringing about improved...
outcomes. Although this step toward improved health of the population is laudable, it remains to be seen whether it is feasible given our current approach to engaging patients.

An examination of the literature concerning virtually any clinical intervention (eg, managing patients with heart failure) shows mixed results for even the soundest clinical practice. Although we often ascribe these mixed results to the competency of the clinical personnel delivering the intervention or to demographic differences among patients, research conducted over the last decade suggests that something more fundamental may be at work here (ie, differences in patient activation).

Some clinicians encourage patients to engage in self-care without benefit of behavioral information about the patient’s capabilities (eg, knowledge, skills, confidence) for taking on a self-care role. Frequently, the result is a “one size fits all” approach to therapeutic self-management wherein all patients receive similar interventions regardless of the intervention’s appropriateness for their level of preparedness. If providers had more information on each patient’s level of knowledge and skill to perform self-management activities, they could target interventions to meet the patient “where he or she is” rather than making assumptions. This approach should lead to more effective patient self-management, better outcomes, and lower costs.

The question then becomes one of how do we learn about a patient’s knowledge and abilities and where these capabilities lie along a continuum from high to low. In 2004, Hibbard and colleagues at the University of Oregon developed and tested the Patient Activation Measure or PAM, a highly reliable, probabilistic, Guttman-like scale that reflects an individual’s developmental model of activation that, because of its psychometric properties, can be used at the individual patient level to tailor interventions and assess or monitor change.

The PAM is based on 13 questions of progressing capability across 4 levels of activation:

- **Level 1** – Patient starts to take a role (lowest level)
- **Level 2** – Patient builds knowledge and confidence
- **Level 3** – Patient takes action
- **Level 4** – Patient maintains positive health behaviors (highest level)

Studies have shown that patient activation can positively impact health behaviors. Activated patients are more likely to:

- adhere to treatment plans
- get preventive care
- seek out and use health information
- participate in shared decision making

- have clinical indicators (eg, low-density lipoprotein, HbA1c, blood pressure) that fall within normal parameters

Although improvements in health behaviors are important steps in the right direction, patient activation becomes an even more powerful lever if it can meaningfully impact utilization and costs. Studies have shown that activated patients have lower utilization of health care services, including fewer visits to the emergency department and fewer admissions to the hospital. In a recent article, Hibbard et al demonstrated that patients with the lowest levels of activation (Levels 1 and 2) had average costs that were 8% to 21% higher than patients with the highest levels of activation (Levels 3 and 4). For clinical practice, this suggests that it is not only important to assess a patient’s level of activation, but it is critical to help patients move to higher levels within the activation hierarchy. This requires interventions that go beyond addressing the clinical issue to provide a means for building a patient’s confidence, thus enabling her/him to move to higher levels of activation.

Importantly, the evidence shows that patient activation scores are significant predictors of future costs, especially among patients with chronic conditions. The fact that the PAM predicts costs after adjusting for demographics, case acuity, and health risk scores indicates that the activation level provides information beyond what is normally taken into

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consideration by a majority of risk profile models. As health care organizations transition from a volume-based, fee-for-service world to one that rewards outcomes and closely watches costs, knowing which patients carry the greatest cost risk for the organization will be critical.

Although it seems clear that patient activation is a strong predictor of how well a patient will handle self-management of care, the reality is that very few health care organizations actively employ the PAM as a predictive tool for better understanding their patients’ knowledge, skills, and confidence to take responsibility for their care. This can be traced to 2 critical factors: (1) lack of provider familiarity with the concept of patient activation and the PAM, and (2) uncertainty about which interventions are most effective for addressing the patient’s care needs while at the same time facilitating attainment of higher levels of activation. The first factor is easily addressed by the growing body of literature aimed at raising awareness of the patient activation concept and its positive impact on lowering utilization, improving healthy behaviors, and reducing cost. As more clinicians and health plans incorporate patient activation into their practices and report their experiences in peer-reviewed journals, more health care providers will be exposed to the subject and that, in turn, will drive greater awareness and continued growth in usage.

The greater challenge remains understanding which types of interventions are most effective at increasing activation while simultaneously addressing the patient’s clinical needs. A tailored intervention must not only be effective, but also provide positive reinforcement in the form of heightened self-confidence to allow the patient to move to successively higher levels of activation. Interventions that effectively move a patient from Level 1 to Level 2 are likely to be different from those needed to move a patient from Level 3 to Level 4. Once the interventions that produce the greatest impact on both activation level and outcome are identified, patient-specific offerings can be designed to optimize time and resources for both the health system and the patient.

Patient activation offers the promise of helping clinicians better understand their patients, particularly with regard to their ability to engage in self-care activities. The PAM provides a simple and effective way to incorporate patient-specific behavioral information into the nexus of care planning. Without a clear understanding of patient activation it will be nearly impossible for health care organizations to meaningfully and effectively engage patients in their care. Without engaged patients, the promise of accountable care may remain beyond our reach.

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Patient-Centered Care Is Accountable Care
Susan Frampton, PhD

Those of us who work in the health care industry often field health-related questions from our families and friends – “How do I choose a doctor?” “What should I do about this bum knee?” Lately, the conversation has changed. I am asked instead what I think about “ObamaCare” and, in particular, the accompanying shift toward universal coverage. My reply echoes the disparate feelings Dickens’ characters had about the French Revolution – it is the “best of times” for many patients and the “worst of times” for many providers.

The current revolution in our health care system
is characterized by an unprecedented commitment to patient-centric care that is woven throughout its defining document, the Patient Protection and Affordable Care Act (ACA). In addition to stressing the importance of patient and family engagement, the ACA proposes specific tactics such as patient partnership councils and shared decision making. We truly are moving beyond conceptual support to actual substantiation of strategies with the potential to make patient-centered care a reality.

The US Department of Health and Human Services has embraced patient and family engagement as a core focus for improving the quality of care laid out in its current National Quality Strategy (2011). The Centers for Medicare & Medicaid Services funds both research (via the Patient-Centered Outcomes Research Institute) and quality improvement activities inclusive of patient involvement (via the Partnership for Patients). Collectively, these initiatives are moving us in the direction of accountability and patient-centered care.

Accountability and patient-centered care go hand in hand. We cannot manage the health of a population without managing the health of individuals, and we will not succeed at this until we recognize, respect, and capitalize on the expertise that each person brings to his or her own health and to the care equation.

Patients and families have expertise about their bodies, preferences, and values. These shape the beliefs and behaviors that impact their health practices and health status and, ultimately, their health outcomes.

Our current health system has focused on tasks, tests, and technologies that enable providers to do more in less time with increased accuracy and better clinical outcomes, all but ignoring the voices of the patient and family. However, a “good clinical outcome” as defined by a provider may get in the way of the “best possible outcome” as defined by the patient.

Patients as Partners Rather than Outsiders

“As a patient, I rebelled against being denied my humanity and that rebellion led to the beginnings of Planetree. We should all demand to be treated as competent adults, and take an active part in our healing. And we should insist on hospitals meeting our human need for respect, control, warm and supportive care, a harmonious environment…a truly healing environment.”

-Angelica Thieriot (from audiotaped interview, 2003)

Often, we fail to consider patients’ feelings about how they are treated in our rush to provide what we believe they need (eg, the latest drugs, tests, technology). Then we wonder why patients aren’t more compliant with our treatment advice or why they turn up in emergency departments (EDs) as readmissions mere days or weeks following a hospital discharge.

This was the case for the founder of Planetree, one of the United States’ first patient advocacy organizations, incorporated in 1978. Angelica Thieriot and her patient-centered care pioneers countered the existing reductionist approach by promoting a more holistic one in which body, mind, and spirit were recognized and engaged to foster true healing. They espoused a philosophy that included patients as essential members of their own care teams. With access to understandable information about their conditions, patients could make informed treatment decisions in alignment with their personal values and needs. Once this philosophy was developed into a working model for change, its implementation resulted in improvements in staff satisfaction and patient engagement.

We have seen this movement evolve from Planetree’s grassroots efforts in the 1970s and 1980s to formal recognition by the Institute of Medicine in its landmark report, Crossing the Quality Chasm. Patient-centeredness was identified as one of 6 essential elements of quality health care, with a focus on “providing care that is respectful of and responsive to individual patient preferences, needs, and values and ensuring that patient values guide all clinical decisions.”

This high-profile endorsement contributed to a global phenomenon. We speak in terms...
of "health care consumerism" and "patient- and family-centered care" in the United States. In Brazil, the label is "humanization of medicine." In Europe, it is "person-centered care." The World Health Organization is about to launch a "people-centered care" agenda.

Whatever label we choose, we are describing a paradigm shift away from benign paternalism to active partnership. We are issuing an invitation to patients and their loved ones to cocreate a new care delivery system. The timing is synchronous with the emergence of value-based reimbursement approaches that hold providers accountable for delivering the highest quality appropriate care, and for delivering it in a way that is consistent with and inclusive of the individual’s preferences and values.

The literature supports such an approach to care planning, with numerous recent studies demonstrating that treatment plans based on both clinical evidence and the patient’s personal preferences may decrease costs and improve patient-centered outcomes. Understanding how a patient values the trade-offs of potential risks, benefits, and side effects of various options for treatment is essential to delivering accountable, patient-centered care. Creating a health care delivery system that cultivates this level of understanding will require a systemic culture change rooted in compassion.

**Staff: The Most Powerful Lever for Organizational Culture**

Most individuals who enter the health care field do so to help others, and most have an innate sense of empathy and compassion they wish to express through their work. Ironically, many nurses and physicians find that recent approaches to professional training and current practice environments are detrimental to their humanity and to the cultivation of relationships with patients and their families.

The patient-centered medical home concept is a model designed to address the need for a different environment of care, one in which ongoing, trusting relationships between providers and patients can be formed. In most health care organizations, a sustainable patient-centered culture begins with capable, visionary leadership that is anchored in compassionate human interactions. These behaviors must necessarily be evidenced from the board room to the bedside, from the chief medical officer or practice manager to the receptionist answering the phone. Specific relationship-building strategies such as leadership rounds, consistent face-to-face meetings with staff at all levels of the organization, transparent communication, and the ability to consistently inspire staff to exemplify the organization’s mission build organizational capacity for compassion.

Inspiring staff, engaging them in generating ideas to enhance the environment of care, and acting on those ideas is at the foundation of organizational culture change. Therefore, it is necessary to focus on the employee experience as well as the patient experience. The connection between staff morale and patient satisfaction is well documented. Research demonstrates that when health care staff are satisfied with the workplace, this positively influences the care they provide their patients. Consequently, effective organizational change efforts begin with a focus on staff. Listening to staff and supporting implementation of their ideas and solutions often results in improved patient experiences and increased workplace satisfaction and retention of valuable employees.

Establishing a respectful, responsive, and compassionate organizational culture thus facilitates the delivery of compassionate, patient-centered care. In addition to the altruistic value of such care, growing evidence demonstrates the power of empathic relationships between providers and patients to improve clinical outcomes and decrease costs. A study of patients with diabetes found that those who were under the care of empathetic doctors had better cholesterol and blood sugar scores. Similarly, Haslam found that patients have better treatment adherence and suffer from fewer major medical errors while under the care of...
empathetic doctors.\textsuperscript{15} and Rakel et al reported that “empathy in the therapeutic encounter resulted in faster recovery times of flu patients.”\textsuperscript{16}

How do patients define compassion and empathy in the clinical encounter? What do they feel is missing in the interaction between them and their care providers? Planetree’s work in the field over the past decade has examined this by means of related questions in over 6000 focus groups with approximately 50,000 participants. The top 3 concerns voiced by patients were:

• dismissal/trivialization of the patient’s voice
• absence of caring attitudes
• lack of continuity of care\textsuperscript{17}

We’ve touched on the need for new care models that build in continuity and compassion, but we still need to improve our listening skills. This is a particular challenge given the current health care culture in which physicians, on average, interrupt patients within 23 seconds of their opening comments\textsuperscript{18} and fail to ask patients if they have any questions in more than 50% of outpatient visits,\textsuperscript{19} and in which patients are afraid to ask their doctors questions for fear of appearing to challenge them.\textsuperscript{20}

Fortunately, we can influence the degree to which patients feel listened to, and how empathy is expressed and perceived in patient-provider encounters.

Malloy and Otto reported: “The exciting news from research is that empathy seems to be a mutable trait. Certain conditions can blunt expressions of empathy and, conversely, certain awareness-building and reflection activities seem to be able to up-regulate empathic behavior.”\textsuperscript{21}

In our work with provider organizations across the care continuum, we have found similar evidence. Implementation of Planetree’s patient-centered model of care begins with full-day staff retreats for all members of the “care team,” including physicians, other clinical staff, support staff, and leadership. The retreat format is structured as an immersion into the patient experience with opportunities for reflection. The result is sensitization to the lived experience of patients and families.

This program has produced some very positive outcomes. In a 300-bed community hospital with a 90% staff participation rate in the retreats over an 18-month time frame, patient satisfaction scores increased dramatically from the 18th to the 75th percentile, employee satisfaction rose from the 33rd to the 60th percentile, and ED patient satisfaction increased from the 44th to the 89th percentile during that same time frame.\textsuperscript{22} Similarly, a largely outpatient rehabilitation services provider saw employee retention rise to 99% and employee satisfaction move from 3.91 to 4.17 out of a potential 4.2 over a 4-year period during their implementation of staff retreats and other core patient-centered practices. The organization was subsequently named one of the Top 100 Employers in Quebec.\textsuperscript{23}

Summary

Building over a number of years in the United States and internationally, many forces are now aligned and bringing the patient to the front and center of the health care equation. Actively engaging patients in their own care while honoring their unique beliefs and values requires a new approach to health care; one that is grounded in an empathetic, compassionate organizational culture. Scientific evidence and patients alike support this path. As patient-centered care becomes a reality, a compassionate organizational culture plays a key role in enabling what Angelica Thieriot envisioned many years ago – healing health care rooted in a trusting partnership.

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Achieving the Triple Aim Through Community Collaboration

Keith Reissaus

Health care reform, Indiana’s collaborative nature, and the state’s population health needs provide laboratory conditions for innovation. Newly formed integrated health care organizations are seeking collaborations with nonmedical resource partners. Goodwill Industries of Central Indiana, Inc. (Goodwill) and Nurse-Family Partnership of Indiana (NFP), an evidence-based nurse home visiting health program, recognized this emerging trend and forged an innovative community collaborative with multiple health care systems in Indiana.

Overview of Partners

Founded in 1930, Goodwill employs over 3000 individuals in 60 locations throughout 29 central Indiana counties. The organization is a social enterprise that offers opportunities, provides services, and leverages its resources with those of other organizations to improve the education, skills, employability, and economic self-sufficiency of adults and the future employability of young people. Targeting serious social problems, Goodwill seeks to improve lives and communities by creating holistic, whole-family solutions to poverty by developing and implementing effective ways to help people become more productive, economically self-sufficient, contributing citizens.

Sixty-five percent of Goodwill employees have a disability or criminal record or lack a high school diploma. Goodwill also operates 9 Excel Centers with nearly 3000 adult students who are reengaging to earn a high school diploma. And now, Goodwill is implementing NFP in Indiana.

NFP is an evidence-based, nurse home visiting program that helps transform the lives of vulnerable, Medicaid-eligible women who are pregnant with their first child. The NFP program was developed over 35 years through extensive research that included randomized controlled trials. Research and evaluation is ongoing to ensure the program’s continuous improvement and relevance. NFP promotes long-term success for first-time parents and their children through improved pregnancy outcomes, improved child development, and greater employment and educational gain. Nurses begin home visits before the mother’s 28th week of pregnancy and continue these visits until the 28th week of pregnancy.
child’s second birthday. NFP nurses provide health and parenting resources to mothers during their visits and help them identify and connect with additional community resources. Headquartered in Denver, Colorado, NFP has been implemented in 43 states and 11 countries.

**Implementing NFP as a Community Collaboration**

In 2010, Goodwill convened a Community Advisory Board (CAB) to support NFP in Indiana. The CAB is a required element for all implementing agencies. This advisory board provides support to program operations and strategic advice to guide the program’s implementation in the community. Goodwill’s NFP CAB consists of a broad range of executives representing health care providers, health advocates, and social service organizations. Subcommittees include a return on investment (ROI) team and a newly forming Healthcare Integration Advisory Council.

The Collaboration is delivered through the CAB in a manner that has enabled the replication of NFP’s proven national results. NFP, Goodwill, and the CAB’s goals were intentionally aligned to ensure effective coordination of efforts. This mutual goal alignment and coordination of activities is the foundation of collective dealings with health care systems. Two systemic drivers enable the Collaboration: (1) Payment reform that rewards better health outcomes and lowers costs, and (2) A trend toward integrating and aligning medical care delivery across disciplines and settings, including the homes where NFP nurses already visit.

NFP reinforces and supports these health care system changes. In addition, health care professionals and organizations appreciate the strategic fit of Goodwill as a provider of employment, education, and other nonmedical resources to improve the social determinants of health that support health improvements, reduce costs, and improve the overall experience of the patient with health care providers.

**From Collaboration to Outcome**

The first implementation site of NFP in Indiana, Goodwill has the capacity to serve 600 families in Indianapolis. The implementation is comprised of 3 teams with 24 nurse home visitors, 3 supervisors, and 3 data coordinators. The first family was enrolled in November 2011 and, by August of 2013, more than 564 had enrolled and 286 babies had been born. As the Collaboration continues to grow, early birth and child development outcomes are promising and consistent with NFP’s national benchmark standards. These benchmark measures along with collaboration-specific outcomes are entered into an Indiana NFP ROI Calculator.¹

The ROI Subcommittee of the CAB is committed to investigating how NFP generates returns to public and private stakeholders. Partners on the ROI Subcommittee include experts from each of Indiana’s 3 Medicaid Managed Care entities and 4 of Indiana’s largest health care systems. Once the ROI Calculator was implemented, the ROI Subcommittee began questioning how a variety of entities might benefit from NFP’s expansion to more sites. Preliminary ROI Calculator results for Indiana are displayed in Table 1 and Figure 1.

**Figure 1. Resource Cost Savings per Family Served by Nurse-Family Partnership in Indiana: Total $11,008 (Present Value at a 3% Discount Rate)¹ (N=145,704)**

CONTINUED
Outcomes Are Leading to Sustainable Expansion Discussions

Although Indiana’s NFP CAB and its ROI and Healthcare Integration subcommittees have not made a formal commitment to serve as payers for NFP expansion and sustainability, they have indicated willingness to evaluate how NFP improves care, reduces costs, and creates better long-term outcomes among NFP’s participating families and their institutions. Acknowledging the early positive results being achieved, members of the Collaboration are actively working to validate the ROI Calculator estimates, and are helping to determine how best to fund a sustainable expansion of NFP in Indiana (estimated need/enrollment of 8000 families). Estimated total government savings for the 600 families already enrolled is $12,224,160 (by the 18th birthday of participating children), $6,723,288 of which is associated with reduced Medicaid payments1. These savings are largely related to increased graduation from Medicaid, reduced costs for expensive episodes of care, and fewer subsequent children born on Medicaid.

The Collaboration is developing a payment model that facilitates integration of NFP into the health system and that rewards the achievement of improved population health for first-time parents and children as measured by better outcomes and lower costs. A new payment model to sustain and expand NFP in Indiana and across the nation is likely to involve initial payment by Medicaid programs and shared savings over a 2-3 year period. Through the ROI Calculator, we know that NFP creates benefits to an array of government entities and private organizations. In its final form, the new payment model will utilize Medicaid and medical payment sources for an estimated 50%-60% of NFP’s total costs. The balance will come from other public and private sources as they begin to understand the benefits and cost savings from the NFP program. Although it is not the subject of this article, payment modeling is presented as an illustration of how far and how strong the Goodwill-NFP Collaboration has become in Indiana (Figure 2).

In conclusion, Goodwill’s implementation of NFP with key health care partners has clearly demonstrated how non-health care providers can become innovative elements within the framework for accountable care.

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Table 1. Present Value of Benefits and Costs per Family Served by Nurse-Family Partnership (NFP), Indiana, 20101 (N=145,704)

<table>
<thead>
<tr>
<th>Benefits of NFP</th>
<th>$ Per Case</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduced Smoking While Pregnant</td>
<td>$15</td>
</tr>
<tr>
<td>Reduced Preeclampsia</td>
<td>$621</td>
</tr>
<tr>
<td>Fewer Preterm First Births</td>
<td>$1880</td>
</tr>
<tr>
<td>Fewer Subsequent Births</td>
<td>$404</td>
</tr>
<tr>
<td>Fewer Infant Deaths</td>
<td>$21,306</td>
</tr>
<tr>
<td>Fewer Child Maltreatments</td>
<td></td>
</tr>
<tr>
<td>Substantiated Cases</td>
<td>$4725</td>
</tr>
<tr>
<td>Indicated &amp; Unreported Cases</td>
<td>$9305</td>
</tr>
<tr>
<td>Fewer Nonfatal Child Injuries</td>
<td>$785</td>
</tr>
<tr>
<td>Fewer Remedial School Services</td>
<td>$68</td>
</tr>
<tr>
<td>Fewer Youth Crimes</td>
<td></td>
</tr>
<tr>
<td>Arrests</td>
<td>$718</td>
</tr>
<tr>
<td>Crimes</td>
<td>$5444</td>
</tr>
<tr>
<td>Reduced Youth Substance Abuse</td>
<td>$26</td>
</tr>
<tr>
<td>More Immunizations</td>
<td></td>
</tr>
<tr>
<td>c Savings Net of Immunization Cost</td>
<td>$105</td>
</tr>
<tr>
<td>Total Benefits</td>
<td>$46,851</td>
</tr>
<tr>
<td>Resource Cost Savings</td>
<td>$11,008</td>
</tr>
<tr>
<td>Intangible Savings (work, quality of life)</td>
<td>$35,843</td>
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<tr>
<td>Cost of NFP</td>
<td>$7249</td>
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<tr>
<td>Net Cost Saving</td>
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<tr>
<td>Resource Cost Savings Net of Program Costs</td>
<td>$3759</td>
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<tr>
<td>Benefit-Cost Ratio</td>
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</tr>
</tbody>
</table>

1. Results obtained from the ROI Calculator model.
Note: At the time this article was written, Mr. Reissaus was Director of Nurse-Family Partnership for Goodwill Industries of Central Indiana, Inc.

REFERENCE


Figure 2. Sustainable Funding Options for Nurse-Family Partnership

- Pay for Success
  - Pay for Success Contracts
  - Social Impact Bonds
  - Public-Private Investment

- Evidence Based Payment
  - Maternal & Infant Early Childhood Home Visiting Grant
  - Medicaid fee-for-service and bundled and shared savings payments
  - Accountable Care Organizations, Medical Home and Federally Qualified Clinic evolving payment models

- Braided & Blended
  - Temporary Aid to Needy Families
  - Title V Maternal & Child Health Block Grants
  - Head Start and Early Head Start
  - Grants from Departments of Corrections and Departments of Education
  - Private foundations and philanthropy

Funding Sources: Fragmented/Silos → Integrated/Collective Impact