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REVIEW ARTICLE

Patient engagement: Changing pediatric practice to improve patient care



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Abstract Twenty-first century health care has evolved into a patient-centred enterprise that has changed the relationship between doctors and patients. Society now sets a high expectation for clinicians not only to impart knowledge to people about their illnesses and prescribe treatments to improve their clinical conditions but also to work with patients to ensure that the treatments are acceptable to ensure the patients' adherence to the recommendations. Most physicians are not trained for this change, but the principles of patient engagement can help clinicians meet these new challenges and perform well on measures of patient satisfaction and compliance with care recommendations. This article presents the basics of patient engagement for clinical staff to aid the facilitation of new approaches to patient care.

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1. Background

The United States has observed growth in a new payment paradigm known as "value-based purchasing" over the past six years, and this approach has altered the accountability for patient treatment and adherence across the healthcare industry, including pediatrics. Although most of these changes are now directed at the Medicare program for

older adults, these programs have also become widely adopted by private payers and state Medicaid programs.

Value-based payments are based on the business concept of "value" in which the value of services is directly related to the quality of care and inversely related to cost. This concept permeates the business world and influences consumer purchases of everything from tomatoes to sailing yachts; i.e., purchasers seek the highest quality product or service at the lowest possible cost. Health care payers have been trying to achieve this goal for decades, and the Patient Protection and Affordable Care Act (PPACA) of 2010 has put the U.S. on a path to value-based payments. Payment systems now balance cost reduction with quality performance to determine provider reimbursement, and these programs fall into three general categories:

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- **Shared Savings Programs:** In these programs, providers are given a target cost reduction that lowers the provider's payments by a certain percentage. If the provider meets that target, the payer reviews the provider performance on several relevant quality measures that are based on the quality issues that are important for that patient population. Providers who perform well on the quality measures are rewarded via the receipt of a portion of the cost savings as a bonus payment. The original Medicare payment reform system that launched with the PPACA used this approach with variable results [1].
- **Capitation payments [2]:** The system involves the reprising of payment programs from the 1970s. These programs pay providers a fixed monthly amount for all services provided for a patient. Typically, these payments are made to primary care physicians for all of the care they provide for patients, so each practice receives a lump sum for all of the patients covered in this manner. Thus, if a primary care practitioner has 100 patients under the plan, the total paid will be 100 times the capitation amount allowed for each patient. Covered patients receive all of their care each month at the primary care practice with few exceptions, and if the patient decides to go outside the practice for care without a specific referral, then the patient is liable for the cost of that care.
- **Bundled payments:** In this system, the continuum of patient care is divided into "episodes" of care, e.g., a surgical intervention for joint replacement or a hospitalization for asthma, and all providers of care during that episode are paid a lump sum as a group for the entire episode. These programs are especially popular for surgical procedures; for example, "global payments" for obstetric care have been common for perinatal care for many years. In a bundled payment system, all of the providers of care are included in the lump sum payment, i.e., hospitals, labs, imaging providers and facilities, and therapists. Indeed, all providers are paid from a single global payment. Providers must work together in a business arrangement to receive and distribute the payments, and everyone involved in a patient's care may be at risk for any complications or adverse events that occur during the episode. In other words, if care for the patient costs more than the payment received for the episode, then the providers share the responsibility for the overrun.

The common thread through all of these new methods of financing health care is the increased responsibility of health care providers to gain the trust and cooperation of patients to ensure that the patients follow the recommendations that the provider makes regarding taking medications on schedule or making lifestyle adjustments. This new requirement is termed "patient engagement" [3] and connotes one of the most important changes in the health care system in the modern era. The Institute for Healthcare Improvement in Boston has advanced the concept of the "Triple Aim" for the health care industry as illustrated in Fig. 1 [4].

These strategic objectives have become a mantra for health care in the United States and several other countries

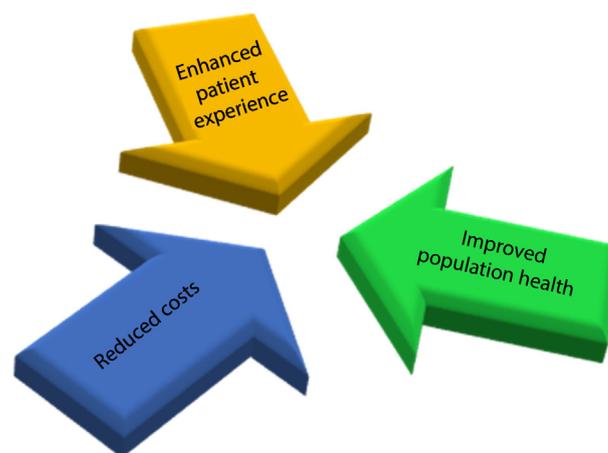


Figure 1 The Triple Aim of health care.

[5]. Experts agree [6] that achieving the Triple Aim requires providers, patients, and caregivers to work together to enhance access to care and the affordability of diagnostic and therapeutic modalities and to focus on improving individual and population outcomes.

2. Elements of patient engagement

Many pediatric primary care providers pride themselves on their ability to communicate with families and patients to help them understand prescribed tests and treatments. Gaining the trust of patients and caregivers has been a key characteristic of the primary care physician since the days of Aesculapius. However, medicine has evolved into a complex enterprise with multiple providers, exceptional technology, and more effective treatments and thus transcended the traditional medical approach that has been the foundation of health care for centuries. Team-based care is mandatory, and communication between everyone providing medical resources and the patients their families requires an extraordinary degree of coordination to create a clear, consistent message that respects the patient's level of understanding, culture, and socioeconomic milieu. Carman et al described a framework for patient engagement that addresses individual interactions and system design to ensure that patients, providers, and caregivers understand and participate collaboratively in patient care [7]. The authors describe different levels of interaction with patients that vary from consultation to full partnership between providers and families. Patient engagement relationships can differ across providers based on each provider's contribution to the patient's care from the traditionally close connection between patients and the providers whom they see most often, to the connection with providers who are less involved in direct patient care. Importantly though, engaging patients with all of their care providers both during acute episodes of care and throughout the care continuum must become a standard practice as a health care organization designs its policies, procedures, and operations. Patient engagement metrics must be included in the key measures that are tracked by leaders and frontline staff to anticipate problems and

vigorously intervene to ameliorate lapses in care that threaten patient and family engagement.

Building a patient engagement strategy for an organization is key to succeeding in a marketplace that is based on the Triple Aim. The three elements that create the foundation of patient engagement are illustrated in Fig. 2.

2.1. Assumption of responsibility for care by patients, families, and caretakers

In many medical cultures, the physician-patient-family relationship involves dominance on the part of the physician who provides “instructions” and “interventions”, such as medications or procedures, to “improve” a person’s health. We providers often struggle with the issue of adherence to our recommendations, which in U.S. culture are called “orders”. We expect patients to follow our directions, regardless of the economic costs or associated discomfort. We may prescribe medications or invasive tests that create significant pain or dysfunction for some people, and these patients may simply refuse to comply with our instructions. To truly engage patients and families in their care, they need to be very well informed of the positive and negative ramifications of the recommendations we make.

Many physicians are averse to making the time commitment required to fully inform patients and their caregivers; thus, patient care teams have been created with team members who excel in communicating complex information to patients and caregivers and care managers who can help track patient adherence to treatment recommendations and answer questions that might arise during a diagnostic or therapeutic episode of care. Although physicians are often patient care team leaders, one skill that must be developed and honed is the ability to participate as a member who values and empowers the input from other team members. Many physicians who are accustomed to being the “captain of the ship” find this new role as a team member difficult to assume, but the ability to foster the success of the team through involvement and esteem for other team members is a critical skill for physicians in the new era of health care.

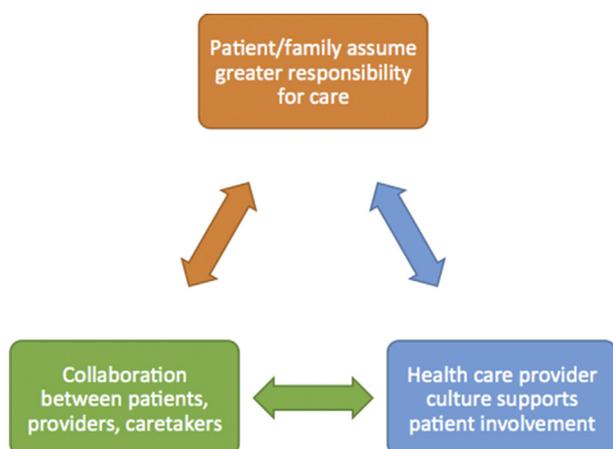


Figure 2 Elements of patient engagement.

2.2. Healthcare provider culture supporting engagement

As noted above, the culture of medicine is changing. Physicians are alternatively called upon to be team leaders and team members often within the same group of colleagues. The abilities to first understand the appropriate role at a given time and then effectively serve the right role at the right time require a level of finesse and emotional maturity that may take time to develop. The culture of a provider group that promotes patient and caregiver engagement refines these abilities in its teams. As one of the key members in that culture, it is incumbent on physicians to understand these group dynamics and learn to effectively leverage the skills and commitment of other team members to focus on providing the best possible patient care.

Provider groups now must include input from the patients and caregivers to ensure that the message presented to each person is clear and understandable. As physicians, we understand that patients may have a number of barriers to effective communication, e.g., language, educational level, emotional state, etc. For patients to engage in their care, they must clearly comprehend the recommendations and issues so that side effects are better tolerated and not used as a reason to stop a therapeutic or diagnostic regimen. Not all doctors are able to communicate with every patient effectively, so other team members can serve as effective resources for ensuring that patients and caregivers thoroughly understand the instructions they are given.

Another important aspect of an effective provider culture is the use of technology for communication and documentation. Team members must have all of the information about the patient and recommendations for care to provide a consistent message; therefore, everyone involved in the patient’s care must have access to the patient’s health records, and in today’s mobile, dispersed world, such access requires the use of electronic health records (EHRs). Although EHRs have had a bit of a rocky start in the U.S., many other countries have effectively deployed this technology across their health care systems and thus made clinical information readily available to everyone working with the patient. Features such as patient portals, which allow patients access to their records, can also engage patients and caregivers in rapid, succinct information exchanges with providers and allow for rapid modifications in treatments when situations change while documenting all changes in the electronic record. A survey commissioned by Xerox reported that 64% of U.S. adults do not currently use a patient portal, but 57% say that they would be “much more interested and proactive in their personal healthcare” if they had access to their medical records [8]. Clearly, many people would welcome an electronic means of communication with their providers, and such interactions could lead to greater engagement in their care and increased empowerment through information sharing.

Finally, having a strong attachment to the medical practice is another indicator of patient engagement. Businesses consider attributes such as “willingness to recommend” or “where I want my family treated” to be measures

of engagement, and these questions are now included in many patient surveys. Patients and caregivers who are attached to a medical system react to a change in their health status by notifying their providers rather than seeking care in an emergency department where they are often over-tested and may be over-treated. This factor places a huge responsibility, however. If patients and caregivers are inclined to contact their provider first, the provider must be accessible 24/7, and no physician has the stamina to maintain that level of availability. Enter team care again! Patients and caregivers must be confident that when they reach out to their provider, someone on the team will be continuously ready to provide them with personalized care recommendations based on their specific needs and clinical condition. Having trusted team members involved in care and using an EHR that contains all of a patient's information will ensure that patients receive the best possible care in the least costly manner. The practice must be able to provide this level of care to effectively engage its patient population; indeed, this aspect of care is foundational for an effective health care organization.

2.3. Collaboration between providers, patients, and caregivers

Using approaches such as the patient portal, providers and teams should be able to enhance their interactions with patients and their caregivers, but the ability to personalize care and empower patients to provide frank feedback to provider team members is a key element of ensuring engagement. Health care consumers often feel intimidated by the health care delivery system and quality data [9]. Patients and families seek providers who respond to their needs with empathy, and practices that can provide that type of caring environment will realize the greatest success. One aspect of that type of care is the ability to listen, understand, and respond effectively to patient concerns and then collaborate with patients and caregivers to determine the best solution to the patients' medical issues based on a mutual understanding and agreement on alternatives. To accomplish this goal, physicians and team members must be willing to adapt plans that are specific to individual patient needs, which may require creativity and forbearance. In cases in which a patient or family member is unwilling to follow recommendations, involving team members in attempts to employ other approaches to communication should be managed efficiently and with respect for the patient's needs. As patients gain confidence in the health care team, those discussions will become much less problematic.

3. Summary

Once patients and caregivers have engaged with a medical team, adherence to agreed-upon diagnostic and treatment regimens increases dramatically [10,11]. Patients realize the benefits of medical care and the improved health it produces, and the closer management of the patient's course of treatment leads to fewer complications that necessitate expensive emergency department visits and hospitalizations, which results in lower overall

costs. As each patient's health improves, the aggregate effect on the population is favourable and leads to an enhancement of the population's health status. The achievement of the Triple Aim is the ultimate goal, and patient engagement is clearly the key element that generates all of these positive outcomes. A great deal of effort must be exerted to create this environment, but patient-centered clinicians around the world are moving the health care delivery system to support increased patient and caregiver engagement.

Conflict of interest

None.

Appendix I. Other resources that are available to achieve a broader exposure to the concept

1. Agency for Healthcare Research and Quality, Guide to Patient and Family Engagement: Environmental Scan report, Publication #12-0042-EF, accessed August 2015 at <http://www.ahrq.gov/research/findings/final-reports/ptfamilyscan/>
2. Health Affairs Health Policy Brief, Patient Engagement (February 14, 2013), accessed August 2015 at http://www.healthaffairs.org/healthpolicybriefs/brief.php?brief_id=86
3. American Medical Association, Capitation, accessed July 2015 at <http://www.ama-assn.org/ama/pub/advocacy/state-advocacy-arc/state-advocacy-campaigns/private-payer-reform/state-based-payment-reform/evaluating-payment-options/capitation.page>
4. American Academy of Pediatrics, Alternative Payment Models, accessed August 2015 at <https://www.aap.org/en-us/professional-resources/practice-support/Pages/Payment-Models.aspx>
5. Patel K, Farmer S, George M, McStay F, McClellan M, Pediatric Asthma: An opportunity in payment reform and public health, Health Affairs Blog, September 18, 2014, accessed August 2015 at <http://healthaffairs.org/blog/2014/09/18/pediatric-asthma-an-opportunity-in-payment-reform-and-public-health/>
6. Anderson GF, Bilenker JH, Capitation payment rates and implications for the general pediatrician, Current Opinions in Pediatrics, October 1998, 10:5, 480–485.
7. Centers for Medicare and Medicaid Services, Bundled Payments for Care Improvement Initiative: General Information, accessed August 2015 at <http://innovation.cms.gov/initiatives/bundled-payments/>
8. Centers for Medicare and Medicaid Services, Shared Savings Program, accessed August 2015 at <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharedsavingsprogram/index.html?redirect=/sharedsavingsprogram>
9. Fisher ES, Staiger DO, Bynum JP, Gottlieb DJ, Creating Accountable Care Organizations: The Extended Hospital Medical Staff - A new approach to organizing care and ensuring accountability, Health Aff (Millwood). 2007; 26(1): w44–w57.

10. Centers for Medicare and Medicaid Services, Accountable Care Organizations (ACO), accessed August 2015 at <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/ACO/index.html?redirect=/aco>
11. National Governors' Association, Effect of Provider Payment Reforms on Maternal and Child Health Services, May 16, 2013, accessed August 2015 at <http://nga.org/cms/sites/NGA/home/nga-center-for-best-practices/center-publications/page-health-publications/col2-content/main-content-list/effect-of-provider-payment-refor.html>

References

- [1] Centers for Medicare and Medicaid Services, Shared savings program, accessed July, 2015, at <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharedsavingsprogram/index.html?redirect=/sharedsavingsprogram/>.
- [2] American Academy of Pediatrics, Alternative payment models, accessed July, 2015, at <https://www.aap.org/en-us/professional-resources/practice-support/Pages/Payment-Models.aspx>.
- [3] Healthcare Information Management Systems Society, Patient Engagement Toolkit, accessed July, 2015, at <http://www.himss.org/library/patient-engagement-toolkit>.
- [4] Institute for healthcare improvement, The IHI triple aim, accessed July, 2015, at <http://www.ihl.org/Engage/Initiatives/TripleAim/pages/default.aspx>.
- [5] Institute for healthcare improvement, IHI triple aim prototyping partners, accessed July, 2015, at <http://www.ihl.org/Engage/Initiatives/TripleAim/Pages/Participants.aspx>.
- [6] Hibbard JH, Greene J. What the evidence shows about patient activation: better health outcomes and care experiences; fewer data on costs. *Health Aff Feb 2013;32(2):207–14.*
- [7] Carman KL, Dardess P, Maurer M, Sofaer S, Adams K, Bechtel C, et al. Patient and family engagement: a framework for understanding the elements and developing interventions and policies. *Health Aff Feb 2013;32(2):223–31.*
- [8] Xerox Corp, Annual xerox EHR survey: Americans open to viewing test results, handling healthcare online, accessed July 2015 at <http://news.xerox.com/news/Xerox-EHR-survey-finds-Americans-open-to-online-records>.
- [9] Agency for healthcare research and quality, guide to patient and family engagement: environmental scan report, accessed August 2015 at <http://www.ahrq.gov/research/findings/final-reports/ptfamilyscan/ptfamily3.html>.
- [10] Rhee MK, Slocum W, Ziemer DC, Culler Sd, Cook CB, El-Kebbi IM, et al. Patient adherence improves glycemic control. *Diabetes Educ March/April 2005;31(2):240–50.*
- [11] Coulter A. Patient engagement – what works? *J Ambul Care Manag April-June 2012;35(2):80–9.*