Lucile Packard Foundation for Children's Health

Issue Brief

April 2013

A Triple Aim Practice for Children with Special Health Care Needs

by Edward L. Schor, MD and David A. Bergman, MD

Introduction

For more than a decade, the American Academy of Pediatrics has advocated for practices to become medical homes for children with special health care needs.[i] The medical home model, calling for care that is accessible, continuous, comprehensive, family centered, coordinated, compassionate and culturally effective, has been seen as a way to substantially improve the quality of care, reduce fragmentation of services, and potentially control some health care costs.

The medical home model also has been promoted by other provider groups, health care organizations and payers as a way to improve the quality and reimbursement of primary care. Financial incentives have been offered to practices that adopt medical home components, contingent on meeting certification standards.

More recently, the Institute for Healthcare Improvement has proposed a "Triple Aim" framework to optimize performance of health care systems. This framework endeavors to achieve the three aims of (1) enhancing the patient's experience of care, (2) improving the health of the population, and (3) reducing or at least controlling the per capita cost of health care.[ii] These interdependent goals are inherently long term and will require both persistence and substantial changes in the organization and provision of health care.

The Triple Aim framework has been less commonly used to guide health care at the practice level.

The Triple Aim framework has found acceptance among policymakers and some large health care organizations, but it has been less commonly used to guide health care reform at the practice level. In this Issue Brief we combine the medical home and Triple Aim approaches and outline a "Triple Aim Medical Home" that is offered as a way to improve the care of children with special health care needs, while improving the system of care for all children and lowering health care costs.

A table of the attributes of a medical home is presented in the framework of the Triple Aim so that the redesign of practices can be approached with a comprehensive vision and specific objectives in mind.

Characteristics of a Triple Aim Medical Home

Experience of Care

Patients' experience seeking and receiving health care services can shape their subsequent use of services as well as their adherence to

recommended treatments and health behaviors. Four categories of practice characteristics may color patient experiences: convenience, continuity and coordination, family-centered care, and accountability.

Convenience: Ready access to health care services, when and where they are needed, is not only appreciated by families but also contributes to higher quality of care. The sometimes inappropriate use of emergency departments and the growth in the number of retail clinics attest to the desire of parents to quickly access health care when they perceive a need.

Practices can improve convenience for their patients by adopting advance access appointment systems that allow same-day appointments. They can extend office hours into evenings, weekends and holidays, perhaps sharing responsibility with other practices. Convenience for both the patients and practice can be achieved through greater use of telephone, email and other health information technologies. Traditionally, medical homes have been seen as office-based. For the Triple Aim Medical Home, it will be important to look beyond the walls of the office to provide care at other more convenient sites such as retail clinics in shopping malls or schools. Accessing care through the internet can also increase convenience. Web-based visits, combined with home-based monitoring of important variables such as weight, oxygen saturation or temperature, can facilitate more convenient and sustained contact with families.

For the Triple Aim Medical Home, it will be important to look beyond the walls of the office to provide care at other sites.

Especially families of children with special health care needs also appreciate when additional service providers, such as mental health professionals or nutritionists, are co-located within the practice. Another alternative is having these providers available through telemedicine encounters or video conferencing. Having offices that are compliant with the Americans with Disabilities Act and are physically accessible for technology-dependent children is more than convenient, it can be essential. In some cases outreach services, such as home visits by a nurse or nurse practitioner for neonates or complex patients, is the most convenient approach for all concerned.

Continuity and Coordination: Parents of children with special health care needs consistently raise concerns about the fragmentation of care they experience. Each child should have an identified primary contact within a practice, which may or may not be a physician depending on circumstances. In addition practices should offer team-based care, the principles of which demand designated responsibilities and high levels of intra-team communication. Medical records should be available, up to date and used; that is, they should contain individualized care plans that are referred to whenever care is provided. The presence of a personal health record that provides bi-directional exchange of patient information allows the family to play an important role in ensuring continuity and care coordination. In addition, when practices serve children with special health care needs whose care typically involves multiple health care providers, there should be a designated care coordinator who, at a minimum, assists with referrals and follows up on their completion.

Children with special health care needs often suffer from poor vertical integration of care across the health care system. Patient goals and treatment plans devised in the hospital or specialty clinics are often not well translated into the primary care practice or the home setting. Providers in the Triple Aim Medical home will need to work closely with pediatric specialists, hospitalists and the family to develop co-management plans that define "who does what" in the care process and provide the family with a "telephone tree" of whom to call for problems.

***Family-Centered Care*:** All care, regardless of the child's health conditions, should be patient-centered, engaging the patient as a partner in decision-making and taking into consideration the patient's personal and cultural values and beliefs. Family-centered care begins with an understanding that the family is not only the child's primary caregiver, but also is responsible for decisions about the child's care. For these beliefs to take form requires that the goals of the family for the child guide the development of a care plan and are the basis for negotiated care priorities and specific management plans. The use of health care team members who are culturally sensitive and members of the family's community facilitates the incorporation of the family's values and beliefs into the care plan.

Care planning also should reflect an assessment of the child's functional health status and the family's personal and social circumstances. Ideally, care plans should incorporate a life course perspective emphasizing the provision of preventive and health-promoting services to maximize the child's health and well being.

Accountability: Families feel most comfortable and reassured when they not only know what care processes are in place and have access to written plans and protocols, but also know who is responsible for assuring that appropriate care occurs. The more complex the care the more important this becomes. Accountability has counting or measuring at its root, so clarity of responsibility is central. On many occasions, family members or even the child will be responsible for certain care processes; on other occasions members of the practice team, such as the practice's care coordinator or the primary care provider, will be responsible. Everyone involved in caring for the child should know what they are responsible for and who is responsible for other aspects of care. Families also need to be active participants in medical decision making. Providers and family members must work together to articulate personal preferences for desired outcomes and to make sure that medical decisions are consonant with the family's goals for the care of their child.

Population Health

Although the Triple Aim Medical Home may not readily assume responsibility for the health of the community in which it operates, it can at least come to recognize that the patients it does serve constitute an identifiable population. By considering their practice in this way, health care providers can begin incorporating a number of capacities that are not specific to individual patients and that can improve the health and experience of care of all the patients they serve. Key characteristics of practices desiring to incorporate a population health approach might include: accessible health and patient experience data about the population, enhanced access to

health information for patients and their families, reliable approaches to promoting wellness, a focus on the impact of the community on patients' health and well-being, and advocacy for the children within their served population.

Using Population Data

Improving the health of the patients in a practice requires knowing not only who comprises that population but also understanding their health care needs, circumstances, preferences and experiences. Population data can take many forms, but having it available and using it to guide practice organization and processes is necessary to having healthier patients. Having an electronic medical record system that meets meaningful use standards is increasingly necessary to effectively manage a practice. Little progress can be made improving the health of the practice's patients unless information about the patients can be aggregated and analyzed across all patients. At a minimum, practices should be able to create registries of patients based on key characteristics such as age, diagnoses, immunization status and medication use. In many locales, public registries of immunizations and other factors related to public health are available to physicians. These registries can be used to identify patients in need of services such as immunizations or well child care visits and to track and improve the percentage of patients who received the needed services.

Having an EMR system that meets meaningful use standards is increasingly necessary to effectively manage a practice.

Practices also can improve population health by routinely collecting information on patients' experiences. Regularly administering patient surveys is one method of obtaining that information. This allows the medical home to track patient experience in the aggregate and can help inform efforts to improve the process of care. Another is to constitute an advisory committee to the practice composed of parents and older children and adolescents.

Health Information and Education

There is considerable agreement that the health of individuals in large measure reflects their health behaviors. Practices can do much to improve the ability of their patient population to make wise health decisions. Individual health education about disease management and health promotion are valuable. For children with special health care needs. Some health topics, particularly those about health promotion and disease prevention, are amenable to more general approaches offered to an entire practice population. Today, the availability of various electronic media, from vetted websites to text messages, allows a wide variety of creative approaches to informing and educating patients and their families. The use of social media such as Facebook or Twitter is another important venue for providing health information to patients and families.

Wellness Culture

Promoting optimal population health requires that practices place health promotion at the top of their priorities for care. Adopting guides for patients and prompts for providers can increase the likelihood that preventive services and health promotion occur appropriately. Routinely including inquiries about exercise, nutrition, and other health behaviors in patient encounters conveys their importance. Sometimes these basic queries are erroneously omitted when children present with complex medical

problems. Families can be encouraged to change health behaviors through the use of such interventions as health coaches or motivational interviewing techniques. Linking the practice to community programs designed to promote wellness through referrals to those programs are also signals about the practice's commitment to improving the health of its patients.

Community Orientation

Effective health care cannot occur only within the confines of a practice – it must take account of and link to the community in which patients live. Having data about a practice population is an important first step toward knowing about the community. Clinically, providers should screen or inquire about the various community factors and social determinants that can affect patients' health. Though it may not be the responsibility of the practice to address these factors, practices committed to improving the health of the population they serve must be familiar with the resources in their community that can assist and support families. Beyond knowing about these resources, effective population care is best achieved by knowing and establishing collaborative relationships with the community's various service providers, and being an active participant in the development and implementation of programs such as health fairs, school presentations or public health campaigns.

Reducing Health Care Costs

Reducing health care costs has only recently been seen as an important role for individual health care providers and practices – rather, maximizing revenue has been a dominant driver of provider behaviors. The wider use of new and global payment strategies – such as capitated care and shared savings – are shifting responsibility for cost saving down to the level of practices and helping to align incentives so that practitioners are motivated to deliver appropriate care in a timely manner. Future limitations on national health care expenditures are likely to restrict the growth in payment rates for health care or possibly reduce those payments outright. Practices that are able to operate more efficiently, adopt management and treatment practices that reduce waste, and alter patterns of health care utilization are likely to thrive in and contribute to a higher value health care system.

Efficiency

Small independent practice, which has long been the model for primary care, is generally an inefficient way to provide services, as purchasing power is limited and staff responsibilities are often undifferentiated. Increasingly, practices are banding together or joining established organized health care delivery systems. These systems have been able to centralize administrative services and theoretically reduce their costs, purchase supplies, equipment and consultative services, and achieve greater value by applying lean approaches to work. Lean is an approach to staffing and work assignment that tries to maximize the value of each person's contribution toward achieving optimal patient care smoothly, in the shortest time and with the fewest resources. One core attribute of a lean patient care system is that, to the extent possible, individuals work at the top of their skill level. This may require revising job descriptions and providing ongoing staff

One core attribute of a lean patient care system is that individuals work at the top of their skill level.

education. Physicians see more complex patients; nurse practitioners provide primary preventive care, staff nurses manage follow-up calls and patient education, and so on. While this is more easily accomplished in larger practices and organized health care delivery systems, many of the same approaches can be incorporated into small practices willing to examine their operations, staffing and patient flow. Small practices also potentially can achieve some of the benefits of large, integrated health care systems by creating shared resources specific to their needs and the needs of their patient populations. Creating multi-practice after-hours care centers, sharing care coordinators, home visitors or mental health services, or jointly purchasing health information technology and consultative services are some examples of approaches that can increase efficiency by small practices in a community. Professional associations, public health departments or hospitals, can facilitate development of these kinds of shared resources.

Approaches to Care

Advances in technology and the openness of patients to new models of care offer exciting opportunities to restructure care. Simply making greater use of the telephone for patient advice and follow-up of care can reduce costs. Asynchronous communication with patients using email and text messages reduces the need to schedule real-time conversations, allowing more efficient use of patients' and providers' time as well as enhancing adherence to treatment recommendations and reducing unused appointments. New media has great potential to enhance patient education. Using time outside of the face-to-face encounter with practice staff to collect personal data, to do screening or to determine patients' care priorities can substantially streamline care while improving quality. Standardizing care processes and protocols also offer extensive opportunities to reduce costs. Nurse practitioners and physician assistants have long experience effectively managing many common pediatric health conditions using care protocols. To make more effective use of referral/consultation resources many health care systems are adopting structured referral processes that have been shown to substantially reduce unnecessary referrals.

Today, it is possible to use evidence to assess current practice.

Another approach to reducing costs while maintaining or improving quality involves the reduction of waste inherent in inappropriate and unnecessary care. The last decade has seen the rise of evidence-based medicine. Today, it is possible to assess current practice against the evidence base that supports its use. In many cases, such as the use of CT scans in mild head trauma, it is possible to reduce costs without adversely affecting the quality of care. Tailoring care to meet the needs of the individual patient is another way to increase efficiency. With the advent of personalized medicine it will be possible to use a mix of biological and psychosocial factors to predict the response of the individual patient to a proposed treatment and tailor the treatment appropriately.

Shifting Responsibilities and Venues for Care

Cost shifting between payers is a shell game that has not resulted in reduced societal health care costs. On the other hand, shifting care responsibilities following a lean approach has the potential to improve the quality of care while reducing costs. As mentioned, shifting and appropriately expanding responsibilities

among the staff of a practice can be beneficial economically and otherwise. Within the larger health care system more responsibilities are being shifted to primary care providers from specialty care providers and others, and many physician responsibilities are being shifted to mid-level and lay practitioners. Not only can these changes lower costs, they often lead to the involvement of types of health care providers whose orientation may be more community-focused and who are more familiar with and culturally attuned to the patient population Much is being asked of primary care practices – to integrate vertically with specialists, hospitalists and primary care physicians, and horizontally by coordinating care with community entities such schools, early intervention programs, or sports programs to more effectively manage children with chronic health problems. Similarly, primary care practices are being encouraged to assume responsibility for some dental and mental health care. Whether these changes will work to the advantage of primary care practices is not clear, but advantages to patients as well as to society by reducing health care costs and better coordinating care are likely.

Cautious, appropriate shifting of care responsibilities from practices to patients is also under way and has potential to reduce utilization and improve quality. Group chronic care appointments have been very successful in adult medical care and there is some experience within pediatric specialty settings. Some practices and schools are experimenting with group care models for asthma management and weight reduction. Primary care practices have sporadically experimented with group well child care visits, the feasibility of which is increased when the patient populations from which children are drawn is large and when practices are able to easily identify eligible families using electronic patient registries. Group visits offer the opportunity for patients and families to learn from one another as well as establish ongoing sources of support. Some primary and specialty care practices are also experimenting with social media programs such as Facebook to provide a platform where patients and families can learn not only from the primary care providers but also from each other.

Practices can do much to enhance the self-management abilities of individual patients and their families. Approaches include improving the quality of patient education by using qualified staff, standardizing what is offered, and using multiple modalities to teach and reinforce information. Facilitating communication between patients and practice staff through telephone, email, texting, websites and telehealth devices can allow families to comfortably do more on their own. Judicious use of outreach care can enhance families' capacity by more completely understanding the physical and social circumstances in which children live. Practices with electronic medical record systems can more readily monitor the clinical course and care of children with chronic health problems, individually and as groups. Finally, supplementing care plans with care protocols that families can implement can go a long way toward improving care while reducing utilization and avoidable costs.

Shifting care responsibilities from practices to patients has potential to reduce utilization and improve quality.

Cost efficiency can also be improved by shifting the venue of care away from the hospital and

practitioner's office to the home and community. Providing more home-based care allows the health care team to see how and if recommended treatment are taking place and medication given. By improving adherence through home monitoring and intervention the medical home can prevent unnecessary office visits and hospitalizations. In addition home visits provide a unique look into the family's social situation. Early identification of risk factors such as insufficient financial resources or family discord can help to prevent the typical health care crisis that precedes a visit to the emergency department or re-admission to the hospital.

Conclusion

The Triple Aim has captured the imagination of many in the policy arena as well as leaders of health care systems. It has become a part of the vernacular within these settings and is likely to play a key role in health care reform initiatives linked to the Accountable Care Act and otherwise. However, the distance is great between national health care policy pronouncements and the practice setting where care for children ultimately is delivered. Relying on modified payment strategies to change the organization and operation of community practice is an insufficient approach. Physicians and their practices need specific guidance and support to achieve the practice transformation that is necessary and desired to achieve the Triple Aim goal.

Medical homes, in their idealized form, provide the framework for pediatric primary and specialty care practices to contribute to a more efficient and effective health care system.[iii] Yet medical homes lack the overarching framework provided by the Triple Aim. In this paper many of the attributes of medical home have been organized to conform to that framework (see Table 1 below) and thus better allow practice transformation to contribute to health care system reform. While the special systemic needs of children with chronic health problems prompted the development of this combined approach, nothing that has been suggested is specific to them. A high performance health care system that provides a medical home to every patient in the framework of the Triple Aim will not only improve individual care, but also help rationalize the U.S. health care system.

Edward L. Schor, MD, is senior vice president at the Lucile Packard Foundation for Children's Health

David A. Bergman is associate professor of pediatrics at the Stanford University School of Medicine

Table 1: A Triple Aim Practice for Children with Special Health Care Needs

Practice Characteristic	Supportive Capacity and Processes
Experience of Care	
Access and Continuity	• Team care • Identified primary contact • Readily available record reviewed prior to encounter • Referral assistance to other providers and services
Convenience and Coordination	• Advanced access appointments • Extended office hours • Telephone hours • Co-location of service providers • Outreach care • Compliant with Americans with Disabilities Act
Family-Centered Care	• Personal health record • Negotiated care priorities and management plan • Functional health status assessment • Family psycho-social assessment • Life course prevention and health promotion
Accountability	• Designated responsibility • Individual care plan and emergency protocols
Population Health	
Data on practice population and their experience	• Use of patient registries • Electronic medical records • Use state immunization registry • Family/patient advisory committee • Patient experience survey
Wellness culture	• Prompts and guides for preventive care
Health information and education	• Use of media to educate and reinforce recommendations
Community orientation	• Collaboration with community agencies • Screening for social determinants affecting health and care
Reducing Costs	
Efficiency	• Participate in organized health care delivery system • Lean staffing patterns • Sharing resources with other providers in community • Ongoing staff education
Increasing Capacity	• Real-time and longer-term digital communications with patients, including e-mail and text messaging. • Advanced access appointment systems and reminders • Pre-encounter screening and data collection • Standardized care protocols • Monitoring referral and ER use • Standardized referral processes
Shifting Responsibilities	• Expanding primary care management responsibilities • Group visits • Self-management support

[i] American Academy of Pediatrics, Medical Home Initiatives for Children with Special Needs Project Advisory Committee. The Medical Home. Pediatrics, 2002; 110(1):184-186

[ii] DM Berwick, TW Nolan, J Whittington. The Triple Aim: Care, Health, And Cost. Health Affairs, 2008; 27(3):759-769

[iii] EH Wagner, K Coleman, RJ Reid, K Phillips and JR Sugarman. Guiding Transformation: How Medical Practices Can Become Patient-Centered Medical Homes. The Commonwealth Fund, February 2012

ABOUT THE FOUNDATION: The Lucile Packard Foundation for Children's Health works in alignment with Lucile Packard Children's Hospital and the child health programs of Stanford University. The mission of the Foundation is to elevate the priority of children's health, and to increase the quality and accessibility of children's health care through leadership and direct investment. The Foundation is a public charity, founded in 1997.

CONTACT: Lucile Packard Foundation for Children's Health, 400 Hamilton Avenue, Suite 340, Palo Alto, CA 94301
cshcn@lpfch.org | (650) 497-8365