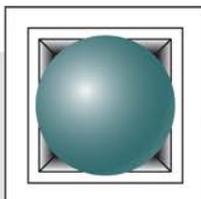


EDICAL HOME INNOVATIONS: WHERE DO ADOLESCENTS FIT?

The emerging medical home model, which emphasizes comprehensive, accessible and continuous care coordinated by the primary care provider, could substantially benefit adolescents. This report presents findings from interviews conducted with senior leaders of 12 medical home programs across the country, focusing on how the model has benefitted adolescents thus far. Key challenges remain, however. These include enrolling adolescents with appropriate primary care providers, addressing adolescent concerns about privacy protection, developing further strategies for increasing their utilization of necessary services, and allowing adequate time for providers to care for their complex needs.

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Barely a decade old, the medical home model is expanding rapidly throughout the primary care system. First introduced by the American Academy of Pediatrics (AAP) in 2002, the model emphasizes care that is comprehensive, accessible, continuous, and coordinated by the primary care provider.¹ Primary care physician groups have articulated joint principles to guide the development of medical homes,² and certification standards have been issued.³ Meanwhile, numerous public and private projects are underway, with Medicare and Medicaid recently rolling out medical home demonstrations to promote more effective and efficient models of primary care. From all appearances, the medical home model is rapidly becoming a pillar of health reform in the United States, affecting a steadily-growing number of practices throughout the country.

Now that the medical home is establishing itself as an effective approach to primary care, increasing attention is being directed at customizing the model for patient groups with distinctive health care needs. Adolescents, ages 12 to 21, are one such population, with unique health needs, service use patterns, and experiences with care that may benefit greatly from medical home innovations.

The adolescent years represent a critical opportunity not only for preventing problem behaviors and identifying health conditions, but also for enhancing health, with a real potential to bend the health care cost curve. Although adolescence is generally a healthy time of life, an array of physical, mental, and sexual health risk behaviors and disorders arise during this stage that can significantly impact a young person's health --not just for a few years but throughout life.

The statistics tell a disturbing story. From early childhood to adolescence, the prevalence of chronic conditions doubles.⁴ Fully half of lifetime diagnosable mental health conditions start by age 14,⁵ with 20-25% of adolescents suffering symptoms of emotional distress.⁶ A study by the Institute of Medicine (IOM) estimated that in 2007, the annual health care cost of behavioral, mental, and emotional disorders among young people was \$247 billion.⁷ In addition, sexually-transmitted diseases have reached an all-time high among adolescents, with up to one in four females testing positive for sexually transmitted infections.⁸ A new study reveals that many adolescents sample multiple hazards: More than half of high school students engage in two or more significant risk behaviors, and nearly a quarter engage in four or more.⁹

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The transformation of primary care via the medical home model could substantially benefit adolescents. Numerous studies, most recently a national report by IOM, document the enormous number of missed opportunities for this age group.¹⁰ Research shows that adolescents are not receiving recommended preventive care services and that their mental health and sexual health services often are not identified early and treated according to evidence-based recommendations.¹¹ When adolescents are asked how they experience health care, they cite a number of gaps and concerns, including health care providers not spending enough time to get to know them, confidentiality protections not being ensured, a focus on their problems rather than on their strengths, unappealing office space with little relevant, adolescent-specific information or support, and minimal opportunity for engaging with providers or giving feedback.¹² As a result, many adolescents simply drop out of the health system, foregoing the care they need.

This issue brief presents a picture of how the medical home model has addressed adolescents thus far, and how their unique health care needs are -- and aren't -- being incorporated into transformation activities. We examine particular challenges and innovations in serving adolescents in the medical home model and point to future directions that may benefit adolescents.

The information presented is based on interviews with senior leaders from 12 medical home programs across the country, comprising a wide spectrum of medical home models in terms of size, sponsorship, provider composition, patient population, and experience. All of the programs we selected care for adolescents, and the majority are NCQA-certified practices. We conducted the interviews in the winter of 2010, using a semi-structured format designed to elicit information on each of the seven Joint Principles of the Patient-Centered Medical Home, focusing on activities that were program-wide or at least present in multiple practices. Interviews typically lasted 30-45 minutes. Additional requests for information were made to follow up on specific topics. The views presented in this paper reflect only activities or suggestions discussed by the interviewees.

Our interviews were conducted with leaders from the following 12 medical home programs comprising public, private, and multi-stakeholder initiatives:

Public

- Community Care of North Carolina
- Illinois Health Connect
- Safety Net Medical Home Initiative (Colorado, Idaho, Massachusetts, Pennsylvania, and Oregon)

Private

- Blue Cross Blue Shield Michigan: Patient-Centered Medical Home Program
- Group Health Cooperative (Washington)
- Health Partners (Minnesota)
- QuadMed (Wisconsin)

Multi-Stakeholder

- Colorado Multi-Payer Patient-Centered Medical Home Pilot
- Hudson Valley P4P-Medical Home Project (New York)
- Maine Patient-Centered Medical Home Pilot
- Vermont Blueprint Integrated Pilot Program
- Washington Patient-Centered Medical Home Collaborative

Personal Provider

Medical home leaders reported that all of their programs have enhanced patient-provider relationships through empanelment -- ensuring that each patient has an assigned primary care provider (PCP) or team -- and also through efforts to strengthen patient engagement. Empanelment has enabled PCPs and their teams to better understand their patients' histories, priorities and to meet their need for continuous care in the medical home practice. The interviewees also emphasized that, as part of attempts to improve patient engagement, PCPs spend more time with their patients to enrich their relationship as well as to focus on goal-setting and patient responsibility. Many of the medical home programs have sponsored learning collaboratives to train PCPs in establishing effective patient-provider relationships.

Little has been done so far to match adolescents with PCPs who have particular expertise and interest in adolescent health.

One interesting example of the personal physician principle comes from Illinois Health Connect (IHC). This model creates a strong financial incentive for PCPs to see their own patients exclusively, since usually they are not reimbursed for seeing other providers' patients. It also offers education on continuity of care, with staff reaching out to patients who frequently switch PCPs to help them find one that best meets their needs. Evaluation results indicate that these efforts have helped IHC achieve higher patient and physician satisfaction scores.

Many techniques to enhance patient-provider relationships have benefitted the adolescent consumer. Nonetheless, little has been done so far to match adolescents with PCPs who have particular expertise and interest in adolescent health. In the medical home programs we surveyed, the focus has been on patients of all ages and not any particular subgroup, except those with chronic illnesses. Many medical home leaders noted that their programs, in fact, were

unaware of PCPs' particular training or experience in adolescent health and frequently commented that the inability to match adolescents effectively may actually stem from a dearth of adolescent health providers. Notable exceptions were Group Health Cooperative in Washington and Quad Med in Wisconsin. Their practices have identified PCPs who enjoy working with adolescents and have assigned new adolescent patients to these physicians. Pediatricians at QuadMed also make an effort to spend substantial time during appointments engaging with adolescent patients in order to better elicit and address their issues. Preventive care visits usually last at least 45 minutes and can be extended depending on the complexity of a patient's needs.

Almost all of the interviewed experts mentioned that their medical home programs are in the process of evaluating their patients' views of practice transformation, primarily via patient satisfaction surveys. With these evaluation results, programs will be able to pinpoint how practice transformation has affected patient engagement and continuity of care and to adjust their strategies accordingly. Interviewees also expressed an intention to roll out their medical home models to more pediatric practices, which will increase the availability of PCPs with expertise in adolescent health and the likelihood that adolescent patients will be matched to them.

Physician-Directed Practice

The use of physician-led teams, which all of the medical home demonstrations have implemented to varying degrees, has allowed practices to focus more attention on preventive services and care management. Teams also are equipped to adopt a more proactive approach to patient care, allocating more time for outreach, education, and counseling. To implement team-based care, medical home practices have added care managers as well as behavioral health specialists, community health workers, and quality improvement coaches. Medical home leaders noted that with electronic health records and empanelment, team members have been better able to arrange needed screenings and other components of preventive care. In the care management arena, a few programs utilize a combination of text messaging and other phone-based mechanisms to send out reminders, test results, and educational information to patients with chronic conditions such as asthma and diabetes. These programs also employ coaches and nurse teams to bolster patients' adherence to recommended care.

Team-based care has been particularly valuable in providing preventive care for adolescents, with members reaching out proactively to persuade adolescent patients to come in for care.

Overall, we learned that the use of team-based care has been particularly valuable in providing preventive care for adolescents, with members reaching out

proactively to persuade adolescent patients to come in for care, conducting health assessments, and providing behavioral health counseling. A few interviewees, though, commented that the use of electronic health assessment tools for adolescent preventive care, which include questions on sexual health risks, was problematic due to the difficulty in sorting out privileged and non-privileged information. One medical home leader noted that practices may not be very familiar with adolescents' special preventive needs and how best to address problems when identified.

Despite these challenges, medical home programs such as Group Health Cooperative have developed innovative team-based approaches to providing preventive care for adolescents. At Group Health, team members are able to quickly determine whether a patient needs a well check and administer a "Smart Set," a behavioral health questionnaire tailored to the patient's age. With this crucial information in hand, the subsequent interactions with the PCP can proceed more efficiently as can follow-up activities, whether that includes a phone call or a counseling appointment with a behavioral health specialist. Thus far, most care management programs have been designed for adults rather than adolescents.

Medical home leaders anticipate that continued progress in medical home transformation will improve the delivery of preventive services and care management to adolescents. In particular, they expect that further refinements of health information systems will likely resolve adolescents' confidentiality concerns, thereby permitting the wider use of electronic health assessment tools for adolescent preventive care. Some programs plan to integrate behavioral health services into medical home practices, with the unique behavioral health risks of adolescents taken into account through learning collaboratives and training programs for medical home team members. Additionally, care management programs are being developed not only for individuals with chronic physical conditions but also for behavioral health conditions such as obesity, depression, and substance abuse. Because so many adolescents are affected by with these conditions, the interviewees anticipate that medical home programs in the future will make available self-management tools specifically for this population. For example, QuadMed will soon implement a novel adolescent obesity program using social media and text messaging to send out reminders to patients to assist them in achieving behavioral goals.

Whole-Person Orientation

The medical home principle of whole-person orientation is meant to ensure that PCPs assume responsibility for providing or arranging for all of their patient's health care needs. To realize this vision of holistic care, many, though not all, medical home leaders reported that their

models have developed greater connections with specialists to create what is commonly known as the “medical home neighborhood.” Practices have also expanded their range of services to account for differences in patients’ backgrounds and are working to improve both the cultural competency of medical home teams and the health literacy of patients. For example, practices in New York’s Hudson Valley P4P Initiative use a standardized assessment to identify specific obstacles to care, including linguistic, religious, and cultural barriers. Medical home teams are diligent about doing this type of “whole-person assessment” to better manage patients’ care.

A common problem has been assuring confidentiality of services to adolescents, who often want to keep their health concerns -- particularly sexual health concerns -- private.

The implementation of holistic care in medical home practices has enhanced care for all patients, including adolescents. However, challenges remain. One problem faced by several medical home demonstrations has been assuring confidentiality of services to adolescents, who often want to keep their health concerns -- particularly sexual health concerns -- private. While many medical home providers appear to comply with state laws defining the extent of parental access to health care records for sensitive health services, interviewees acknowledged that there has generally not been much attention on this complicated issue.

Another, largely overlooked issue is improving the health literacy of adolescents. One interviewee mentioned that raising this literacy level is difficult due to the fact that most health education materials used by practices have been designed for adults. Another notable concern is that PCPs are often unable to effectively arrange the medical home neighborhood for adolescents because they lack knowledge about specialists with adolescent expertise. The identification of appropriate specialists typically occurs only after a considerable, often time-consuming search. One exception, Group Health Cooperative of Washington, has expanded its network to include a unique specialty adolescent center where patients with more complicated behavioral, emotional, and medical issues are referred. The Adolescent Health Center is staffed by an adolescent medicine specialist, a psychiatrist, psychologist, pediatric and psychiatric nurse practitioners, and master’s level psychotherapists who also provide consultation to primary care practices.

Medical home experts expressed the belief that more adolescents will benefit from whole-person care as more of them are seen in medical home practices and as more attention is focused on patient-centered care. Interviewees anticipate that they will step up their efforts to build their medical home neighborhoods and their practices will be seeking out and cultivating

stronger relations with adolescent health specialists, mental health services, and social service agencies.

Care Coordination

To ensure that care is coordinated or integrated across the health care system and the patient's community, all interviewees said that medical home practices have been trying to improve the exchange of health information. In most cases, this has taken the form of secure messaging systems, allowing PCPs and specialists to exchange forms and electronic health records. In addition, new patient portals have been established to enhance communication between patients and teams and to improve care management. Medical home leaders noted that computerized tools, such as e-mail and text messaging, are already used by many practices to send out electronic reminders to patients and to provide test results online. One example of expanded coordination activities is sponsored by Blue Cross Blue Shield Michigan, in which practices use patient portal systems to give patients greater access to their medical information. Also, both primary and specialty physicians in their organizations work closely to develop stronger referral patterns and shared responsibility for patient care and results.

Almost all medical home leaders emphasized that their programs' care coordination efforts have not been age-specific, so new approaches haven't yet been created expressly for adolescent patients. In fact, a number of interviewees said that their programs had not yet incorporated adolescents into communication systems, due to confidentiality issues. These concerns parallel those raised regarding the inclusion of adolescents in patient registries and electronic preventive health assessments.

Our interviews indicate that medical home programs are still in the process of setting up electronic tools for care coordination and expanding them to all practices, as they work out the boundaries of what is acceptable, legal, and required in the realm of patient privacy. Many medical home leaders were confident that these innovations would continue to improve as medical home transformations progress, medical home neighborhoods expand, and HIT systems become more widely adopted. They believed that it is too early to predict how adolescent patients will respond, although they recognize that this population is clearly the most receptive audience for HIT.

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Quality and Safety

Clearly, medical homes are working on a number of fronts to try to improve patient care. But how do they know whether their efforts are paying off? Almost all medical home leaders stated that they have been conducting evaluations that include both internal and external researchers to assess the effectiveness of their medical home models. These evaluations often assess practice performance related to selected HEDIS measures, utilization of services, costs of care, and patient experience. Several medical home leaders described specific, continuous quality improvement approaches such as using quality-improvement coaches into practices. Another approach involves applying "Plan-Do-Study-Act" cycles to test and refine small-scale changes using electronic patient registries and decision-support tools to provide feedback on clinical performance. Additionally, most programs have engaged in some sort of medical home certification program, usually through NCQA, though a few programs have developed their own customized guidelines. Importantly, a few experts said that their medical home practices have tried to enhance quality of care by emphasizing the role that individuals play in managing their own health, focusing on all patients rather than only those with chronic conditions. In these medical home models, PCPs draw up contracts with patients during the initial primary care visit to clarify their respective expectations and roles.

Although adolescents have been integrated into a number of activities to improve quality of care, thus far they have rarely received attention as a unique patient population.

A clear picture is emerging: Although adolescents have been integrated into a number of activities to improve quality of care, thus far they have rarely received attention as a unique patient population. For example, asthma care, immunizations, and well-child visits are monitored for children and adolescents (ages 0-21) as an undifferentiated group. Similarly, although registries can distinguish patients by age, in most cases adolescents are included as part of the general pediatric population. A few interviewees stated that they have started to collect screening data specifically for adolescents, but so far this information has not been used for quality improvement purposes.

Medical home leaders stated that their practices will continue to increase the capability of electronic registries, attain higher levels of medical home certification, and fully incorporate and distinguish particular patient populations. Many programs will also soon retrieve substantial clinical findings from their evaluation efforts and be able to adjust their medical home activities accordingly.

Enhanced Access

To live up to its name, a medical home must be open and accessible to patients. Almost all interviewees stated that their medical home programs had expanded patients' access to care, via such approaches as open scheduling, same-day visits, and expanded hours of service. Patients have also been able to set up appointments more easily and even have pertinent questions answered through e-mail messaging services. The multi-state Safety Net Medical Home Initiative has adopted several of these strategies to enhance access, including same-day visits and simplified appointment scheduling. During specified times, patients in these practices can also make drop-in visits, which are supported by nutrition and education programs catering to a variety of patient populations.

Access innovations may be a particular boon to adolescent patients who tend to use health services more sparingly than adults do.

Although practices are expanding avenues of access for all patients, it appears that this innovation may be a particular boon to adolescent patients, who tend to use health services more sparingly than adults do. Medical home leaders suggested that improved access will allow more adolescent patients to get the primary care services they need, which, in turn, will improve their health outcomes. Many interviewees observed that adolescents, who usually are tech savvy, are perhaps the most relevant patient population for access-enhancing electronic tools.

Most medical home programs will continue to implement strategies to expand access, with practices establishing new online capabilities. In a few programs, researchers will investigate peak hours for patient visits to determine how to most effectively expand hours of care. As programs analyze claims data and patient satisfaction surveys, the impact of enhanced access on all patients, including adolescents, will become clearer.

Payment for Excellence

As medical home programs evolve, they are increasingly making efforts to link payment to performance. Some medical home leaders have modified their fee-for-service payments to include per-member-per-month (PMPM) fees as well as pay-for-performance (P4P) incentives for achieving certain targets for process and outcome measures. Practices receive larger fees for earning higher levels of recognition as part of medical home accreditation. While PMPM fees are not a direct reimbursement of additional services offered within the medical home and therefore

not a sufficient payment for them, some programs have already begun using their PMPM and P4P payments to expand medical home teams and offer new services, such as health education.

One example of payment reform for expanded services was implemented by Blue Cross Blue Shield Michigan. Medical home providers are eligible for “T-Code” payments for care management and self-management services.¹³ This allows practices to support the follow-up services of nurses, social workers, nutritionists, and pharmacists. In addition, the physician organizations affiliated with Blue Cross Blue Shield Michigan are financially rewarded for implementing preventive health programs. These new payment reforms have strengthened the fiscal sustainability of the medical home team and enabled practices to deliver proactive care.

Because payment reforms have rarely been tailored to any single age group, they have not been used to improve care specifically for adolescent patients. New medical home revenues usually are applied to infrastructure improvements, staff expansions, and care management of chronic conditions. Our interviewees emphasized the need for continued refinement of payment structures to give medical home practices more incentives and rewards for innovative services, including those that particularly benefit adolescents, such as preventive services, more patient-provider interaction, and health education. Several leaders also suggested that medical home transformation payments not be contingent on patient encounters alone, but also on activities outside the visit, an endorsement of proactive care that would improve adolescents' ability to receive needed health care services.

Some programs use their enhanced payments to expand medical home teams and offer new services, such as health education.

Conclusions: Progress and Challenges

Our interviews with leaders from 12 diverse medical home programs show a broad range of efforts to create a more comprehensive model of primary care. Changes have taken place primarily in practice infrastructure, including health information technologies, team-based staffing arrangements, care management processes, enhanced access, and quality improvement, consistent with recommendations from medical professional organizations and NCQA. We found that most medical home innovations have been designed for the general population, although many benefit adolescents, particularly those focused on improving preventive care, appointment scheduling and the integration of behavioral health specialists and mental health services into the medical home. Importantly, we learned that the privately sponsored medical home initiatives in our sample, compared to public or multi-stakeholder initiatives, appear to be directing more

attention to the adolescent patient population. Among their innovations are extended time for preventive visits, electronic behavioral health questionnaires, interactive health education tools, text-messaging services, and a medical home “neighborhood” that includes a specialty adolescent center.

Still, according to most of our interviewees, the promise of the medical home for improving adolescent health outcomes has yet to be realized -- or even sufficiently contemplated. Medical home leaders raised a number of issues that significantly impede the implementation of medical homes for adolescents. One is the difficulty of motivating adolescents to come in for care, contributing to the delay in the early identification and treatment of behavioral and emotional health conditions so prevalent in this age group. In addition, many health care providers feel they have inadequate training, time, and treatment resources to care for adolescent patients. Regarding HIT, concerns about confidentiality discourage many medical home providers from integrating adolescents into health information systems. Overall, leaders noted that adolescents have been left out of the medical home movement. Notably, several experts expressed that their focus on reducing short-term costs has limited their ability to address the long-term savings that provision of effective care to adolescents could provide.

Our interviews provide further evidence that the concept of the medical home is continuing to spread throughout the health care system. New standards, quality improvement activities, and HIT infrastructure are being developed that elevate the patient-centered medical home’s standing as an innovative primary care model. However, shortcomings abound. The capacity for this model to rectify flaws in the delivery of health care services to adolescents has not yet been sufficiently recognized. As the medical home is refined and improved by clinicians, and as researchers and policymakers invest in its success, the needs of adolescents must be included and emphasized in their designs. Doing so will powerfully illustrate the medical home’s potential to reform the nation’s primary care system.

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Endnotes

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The National Alliance to Advance Adolescent Health provides education, research, policy analysis, and technical assistance to achieve fundamental improvements in the way that adolescent health care is structured and delivered in the United States. Its mission is to enhance the physical and emotional well-being of adolescents, especially those who are low-income and minority, by improving the health care delivery model for adolescents and achieving the infrastructure changes needed to support it. The National Alliance seeks to promote comprehensive, interdisciplinary models of physical, mental, behavioral, and reproductive health care that incorporate a youth development philosophy and operate in collaboration with schools and other community-based programs. It also seeks to ensure that all adolescents have health insurance coverage for the services they require.

For more information about our work and available publications, contact Corinne Dreskin at The National Alliance to Advance Adolescent Health: cdreskin@TheNationalAlliance.org. Also visit our website: www.TheNationalAlliance.org.

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