

The "Every Child Deserves a Medical Home" Training Program: More Than a Traditional Continuing Medical Education Course

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ABSTRACT. *Objectives.* 1) To develop and implement an innovative, interactive, and nontraditional continuing medical education (CME) curriculum to educate primary care physicians, pediatric office staff, child health advocates, allied health care professionals, and parents of children with special health care needs (CSHCN) about the medical home concept of care and 2) to identify key partners in communities to plan the CME program and ultimately plan for fostering medical homes at the community and state levels.

Methods. Participant outcomes for the CME program and planning process include 1) explaining the elements of the medical home concept as applied to their practice environment or child's care; 2) understanding the concepts, skills, and information necessary to care successfully for CSHCN who are enrolled in managed care organizations; 3) accurately describing trends and developments in caring for CSHCN; 4) identifying programs in the community that serve CSHCN; and 5) assessing and, if necessary, improving pediatric office practices to ensure that they are sensitive to families of children and youths with special health care needs.

Conclusion. A diverse national committee that included physicians, nonphysicians, and family members developed the Medical Home Training Program curriculum. The medical home curriculum was written to meet the needs of the local community. The training program can offer CME credit and use a direct, outcome-based adult learning technique (eg, determine short- and long-term goals). Furthermore, the program parallels and complements the Healthy People 2010 goals and objectives. *Pediatrics* 2004;113:1479-1484; *children with special health care needs, training, curriculum, medical home, continuing medical education.*

ABBREVIATIONS. CSHCN, children with special health care needs; AAP, American Academy of Pediatrics; MCHB, Maternal and Child Health Bureau; MHTP, Medical Home Training Program; CME, continuing medical education.

Fifteen to 18 million children in the United States are estimated to have chronic illness or disability.^{1,2} In an effort to educate physicians, allied health care professionals, families, and others about children with special health care needs (CSHCN), ways to coordinate care better, reduce hospitalization, minimize duplication of services, link to community resources, and, ultimately, improve the qual-

ity of care, a training program was developed because "every child deserves a medical home." As a collaborative initiative of the American Academy of Pediatrics (AAP), Family Voices, the federal Maternal and Child Health Bureau (MCHB), the National Association of Children's Hospitals and Related Institutions, and Shriners Hospitals for Children, an innovative training program was developed to ensure that CSHCN have a medical home (care that is accessible, family centered, continuous, comprehensive, coordinated, compassionate, and culturally effective) in changing health care environments. Throughout the Medical Home Training Program (MHTP), practical strategies are presented with the expectation that participants will use these strategies to provide medical homes for CSHCN. The National Center of Medical Home Initiatives for Children with Special Needs (National Center) at the AAP implements this training program and provides training materials, community planning, community needs assessment, technical assistance, and follow-up.

HISTORY

In 1989, the MCHB awarded a grant to the Hawaii Medical Association to develop a curriculum to educate and engage pediatricians in caring for CSHCN. This program was then "exported" to 4 other states; Nebraska, Minnesota, Washington, and Wisconsin were given technical assistance and an opportunity to customize the training to fit their specific needs.

With growing interest in the training program, the MCHB, through a demonstration grant, moved to the AAP the activities of the Managed Care and Children With Special Needs: Building Medical Homes grant. The first major goal of this grant was to write a curriculum that could be used nationally. For the first year of the project, the Project Advisory Committee faced a challenge on how to best take a set of core principles and develop them into a curriculum that would be applicable in each community and state. Managed care and the many changes in health care financing affected reaching this goal. It was decided that several core principles should be included in the final product: families should be central to planning and presentation of the curriculum; each community is different, and, therefore, the curriculum should focus on similarities of communities, children, and families; communities have assets and they should be identified and built on; and adult learning principles that would encourage physicians to improve the care of this special population of

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children and, eventually, all children should be followed.

Beginning in 1997, Shriners Hospitals for Children awarded a grant to develop and implement the medical home curriculum at their 22 Shriners Hospitals. Under this grant, >75 authors and reviewers, representing a vast array of disciplines and organizations, worked collaboratively to write the first draft of the “every child deserves a medical home” training curriculum. Unique to traditional continuing medical education (CME) courses that use a homogeneous approach to curriculum development and facilitation, the “every child deserves a medical home” curriculum and program, from inception, used expertise from all different perspectives involved in the care of CSHCN.

From the core principles outlined in the MCHB and Shriners grants, >7 panels that included family members of CSHCN, primary care pediatricians, pediatric specialists, and other health care professionals were developed. These groups of 8 to 12 worked together to write the initial components using an interactive process. The last components to be developed allowed for face-to-face meetings for the writers to convene and discuss content, format, and the process.

Because of the need to customize and localize the curriculum, it was decided to develop the concept of a local planning committee that could take ownership of the program, provide local input, and ensure follow-up after the initial training. The curriculum was first pilot tested at the Chicago Shriners Hospital for Children in April 1998. Concepts of the medical home and topical issues were presented. Attendees reported that they were overwhelmed with information and gave feedback that the program needed more focus. They very much appreciated family involvement and requested more information about local resources that were available to them and their patients and families. With this information, a local resource subcommittee was established to develop a local resource guide for the second pilot program in Tampa, Florida, in March 1999. Local organizations were encouraged to participate and bring displays and materials to distribute at the training program. The local resource guide subcommittee and resource tables continue to be a very important part of the entire training process and program.

Since the second pilot in Tampa, the overall design has been completed, including some additional components. By the end of 1999, the AAP, Shriners, the MCHB, the National Association of Children’s Hospitals and Related Institutions, and Family Voices formally endorsed the curriculum. Currently, various individuals, communities, AAP chapters, states, pediatric residency programs, Shriners Hospitals, and child advocacy organizations educate and transform their communities in providing care for CSHCN by using the curriculum.

GENERAL COURSE GOALS

The general course goals are to 1) explain the elements of the medical home concept as applied to their practice environment or child’s care; 2) under-

stand the concepts, skills, and information necessary to care successfully for CSHCN who are enrolled in managed care organizations; 3) accurately describe trends and developments in caring for CSHCN; 4) identify programs in the community that serve CSHCN; and 5) assess and, if necessary, improve pediatric office practices to ensure that they are sensitive to families of children and youths with special health care needs.

Component Objectives

Through the curriculum planning process, educational objectives were identified. By the end of each component, participants will learn the following:

1. Common elements (the medical home concept)
 - Define the medical home concept.
 - Define the common elements and assess whether they have been incorporated into their personal practices.
 - Understand the personal importance of providing a medical home.
2. Family–professional partnerships
 - Promote family–professional partnerships to provide care, advocacy, and support in a manner that is coordinated and explicit about roles and expectations and ensures clear and consistent communication of information.
 - Define “family-centered care” through familiarity with the 9 elements of family-centered care.
 - Identify applications for applying family-centered elements in daily practice.
3. Practices, policies, and procedures
 - Examine office practices, layout, and other features with the philosophy that the medical home is the basis to care for CSHCN.
 - Identify the various strategies to enhance an office, physically and procedurally.
 - Discuss the role of financing, data management, and Physicians’ Current Procedural Terminology coding in a managed care environment that cares for CSHCN.
 - Identify practical methods of accommodating CSHCN into the practice.
4. Comprehensive, coordinated, collaborative care for CSHCN
 - Identify the components of a comprehensive service system for CSHCN and their families.
 - Identify local, state, and national resources and the function of each.
 - Discuss goals and strategies for effective care coordination.
 - Identify effective strategies for collaboration and communication among families and all professionals who serve CSHCN.
5. Transitioning children and youths to adulthood
 - Describe barriers that often interfere with a young person’s successful transition to work, independence, and adult health care.
 - Describe strategies and promising practices that can assist young people and their families and providers to overcome these barriers.
 - Assist youths to obtain the services and resources needed to transition successfully from

pediatric to adult health care and from school to work.

- Support self-determination of youths with disabilities in thoughts, words, deeds, and higher expectations.
6. State and local advocacy
 - Discuss the importance of advocacy for CSHCN with state and local organizations.
 - Identify actions that individuals can take to advocate for CSHCN.
 - Encourage partnerships to enhance advocacy action.
 - Apply advocacy skills to local case study.
 7. Surveillance and screening
 - Define and understand the importance of screening and surveillance activities for families, practices, and communities.
 - Identify the various types of screening and surveillance, and understand their importance as part of the care provided in the medical home.
 - Describe the barriers to screening and surveillance, and identify strategies to address them.
 - Describe strategies and promising practices for supporting screening and surveillance in the medical home.
 - Learn financing options and strategies for screening and surveillance services.
 - Identify next steps, timelines, strategic partners, advocacy, and legal issues that pertain to implementation of systems for screening and surveillance in practice.

TRAINING IMPLEMENTATION

The MHTP began national dissemination in 1999, with the first postpilot program in Philadelphia, Pennsylvania. An annual grant from Shriners Hospitals for Children allowed the training program to be organized at 4 to 5 Shriners Hospitals each year. The program is offered to anyone who cares for CSHCN in that community or state. Through a grant from the MCHB, technical assistance from the National Center and the training curriculum and all related materials are available for use by anyone who hosts a training program. In addition, training curriculum and materials are available online at www.medicalhomeinfo.org at no charge.

For each training site, a planning committee of 30 to 40 community representatives is identified and convened to assist in the planning, promotion, and implementation of the program. Committee members reflect the population of people who care for CSHCN, including but not limited to physicians, families, nurses, educators, public health representatives, mental health professionals, payers, legislators, and child advocates. The planning committee typically meets at least 3 times over a period of 6 to 12 months to strategize about program logistics, discuss local needs and ways in which the program can be tailored to address them, and determine the target audience and facilitators.

Target Audience

Typically up to 6 category 1 CME credits, with adherence to Accreditation Council for Continuing

Medical Education guidelines, are offered at each program. Consequently, the primary target audience for this program is physicians. The other half of the participants typically comprises families and allied health care professionals. Evaluation results consistently reflect participants' satisfaction with the multidisciplinary approach. In particular, physicians and families have expressed the benefits of attending the program together in a format more conducive to open dialogue than a typical office visit. They have noted that this program positively affected the way they communicate.

With such a divergent audience, there are many challenges. Faculty/presenters are faced with providing information to participants from various educational backgrounds, learning styles, and expectations. Frequently, some physicians come to the program expecting a traditional CME course and are surprised at the very interactive nature of the program. Occasionally, family members want to talk about their particular child in what may be an inappropriate forum.

Marketing the training program to individuals who are not caring for CSHCN or to those who are skeptics of this approach to health care has been a challenge. There has been a tendency to attract to the training program participants who are already interested in caring for this population of children. For widespread medical home implementation to occur, it is important to attract physicians who are not caring for this population or those who may do so if given additional training and skill development. The planning committee members brainstorm names of those who should be in attendance, strategize ways to attract them to the program, and then ask the planning committee members and faculty to use direct marketing strategies, including personal telephone calls, letters, and e-mail.

Faculty

Most CME activities would commonly include national experts in the field. This curriculum is based on the premise that there are local experts and they are the most appropriate faculty. At a typical meeting, there may be 12 to 20 local faculty, including but not limited to physicians, families, child advocates, youths, and other health professionals.

Flexible Program Design

With the training curriculum written from a national perspective, communities are expected to customize the material and add local information to fit their unique needs. The curriculum is formatted into 7 components that may be presented in a 1-day session or separately as shorter training modules. Typically, these sessions are held on Saturdays to ensure participation from families and other health care professionals, but many programs have been held on weekdays. The flexible design of the curriculum enables organizations to customize the program length and target audience. In addition, the training program has been used in nontraditional formats including 1-hour sessions at AAP chapter meetings, Family

Voices conferences, grand rounds, international conferences, and federal agency meetings.

In Illinois and Pennsylvania, state organizations have successfully implemented the MHTP in other formats. The Title V CSHCN program of Illinois offers the training program to Illinois physicians to ensure that they understand the medical home concept and ways to implement it into practice. After attending a training program or completing a condensed 2-hour CME module, the physicians are eligible for increased reimbursement for creating a care plan and telephone consultation and are offered technical assistance on ways to improve further their ability to provide medical homes in their practice.

The Pennsylvania AAP chapter modified the training curriculum to meet the needs and goals of their Educating Physicians in Communities program. Through Educating Physicians in Communities, regional teams that consist of physicians, practice managers, care coordinators, and family advisors visit selected physician offices, conduct a needs assessment to determine the degree to which they are providing medical homes, and then tailor a technical assistance and education plan to improve the offices' capacity to provide medical homes.

HEALTHY PEOPLE 2010

The training program has provided a unique opportunity (eg, local and state planning, agreement on core concepts, practical tools) to implement the Healthy People 2010 agenda using the existing MHTP curriculum. The 6 performance measures of this national agenda and related training components are shown in Table 1. That the curriculum was developed to address the specific needs of families and professionals while complementing the Healthy People 2010 core performance measures provided a unique opportunity to multiply the effect on both.

ANTICIPATED OUTCOMES

It is expected that as a result of implementing the MHTP, participants will have an increased understanding of what "medical home" means and ways to implement this philosophy of care into practice in their community and state. For achieving this anticipated outcome, a distinct awareness of local resources is critical. However, most participants com-

ment that a lack of knowledge of the resources that exist or the time to find them hinders this process. Therefore, during the planning process, resources are identified and ultimately distributed to participants at the program. Some planning committees choose to promote currently existing resource guides; others occasionally create their own. The goal of identifying and promoting these resources is to foster linkages between health care professionals, families, and other professionals, as well as to assist the community in building new partnerships and better use of existing services.

It is expected that each local planning committee will link to other state- and practice-level medical home and MCHB activities. Many states have state and practice mentor teams (including a Title V CSHCN representative, community pediatrician [Community Access to Child Health pediatrician], family member, family physician, and another member) for that medical home.⁴ If one does not exist, then it is recommended that the planning committee process be used to create a state medical home action plan. Some states have used the training program as a means of soliciting feedback on creating a state medical home plan. Ultimately, the state medical home plans are instrumental in achieving Healthy People 2010 goals and objectives. In addition, each state Title V program must report each year on how many CSHCN are receiving care within a medical home in the state. This program can aid with this reporting process.

EVALUATIONS

During pilot testing of the training program, several evaluations were developed to assess participants' knowledge levels before, the day of, and 6 months after the training program. It was subsequently determined that there were limitations in the program evaluation of the effect of the program because of the many concurrent activities and factors (eg, effect of state mentor teams, Community Access to Child Health planning grants, grassroots organizational initiatives).

From 1998 through 2000, a preevaluation was developed for physicians, allied health care professionals, and family members and was disseminated to participants after they registered for the training pro-

TABLE 1. Healthy People 2010 Performance Measures

Performance Measure ³	Medical Home Training Component Supporting Performance Measure(s)
Families of CSHCN will partner in decision making at all levels and will be satisfied with the services that they receive.	Component 2: family-professional partnership
All CSHCN will receive coordinated, ongoing, comprehensive care within the medical home.	Component 4: comprehensive, coordinated, collaborative care; component 6: state and local advocacy
All families of CSHCN will have adequate private and/or public insurance to pay for the services that they need.	Component 3: practices, policies, and procedures
All children will be screened early and continuously for special health care needs.	Component 7: surveillance and screening
Community-based service systems will be organized so that families can use them easily.	Component 4: comprehensive, coordinated, collaborative care
All youths with special health care needs will receive the services necessary to make transitions to all aspects of adult life, including adult health care, work, and independence.	Component 5: transitioning children and youths to adulthood

gram. Because most participants registered just a few weeks before the program, they were not able to send the evaluations back in time to compile and send responses to faculty for use in preparing their presentations. The preevaluations were still collected at registration for reporting purposes. Ultimately, it was determined that the responses were skewed because participants were being asked about material being covered in the training program. The term "medical home" was used in the preevaluation questions, and participants had not yet attended the training to obtain a clearer understanding of this concept.

A posttraining evaluation mirrored the preevaluation so that specific items could be compared. The postevaluation was sent to participants 6 months after the training; to increase response rates, a \$10 gift certificate was awarded to respondents. Generally, scores improved; however, because of the extensive scope of items being evaluated and the limited response rate, the data were determined to be statistically insignificant. Nonetheless, evaluation responses indicated that people had a better understanding of what medical home, cultural effectiveness, and accessibility meant after attending the program.

A third evaluation that was used on the day of the training program was used with all participants regardless of background and assessed participants' opinions on the content, structure, and faculty for the program. This evaluation is still used today because it provides the best feedback for planning future programs and recommending faculty for other conferences.

Because the pre- and postevaluations were not statistically significant and did not extrapolate specific outcome information tied to the training program, a new evaluation has been created. At the end of each training program, participants are asked to write down 3 goals or activities that they plan to implement on the basis of what they learned at the training program. Participants keep a carbon copy of their goal sheet, and the AAP staff keep 2 copies. Six months after the program, participants receive a copy of their original goal sheet along with a self-assessment tool to measure their progress toward reaching set goals. The goal-setting evaluations began in 2002, and this qualitative approach has provided better insight about the effect of this training program.

LESSONS LEARNED

Since implementing the training program in 1998 many lessons have been learned and may be useful when implementing future programs.

Physicians

Marketing the program to physicians who normally do not care for CSHCN and have no intention of doing so is the most significant challenge when implementing this training program. Many committees choose first to target physicians who are "on the fence" and would most likely care for CSHCN if given additional training and linked with helpful

resources and a supportive system. Traditional marketing does not effectively target this group of people. The planning committee is in the best position to identify the "fence sitters" and create a plan to ensure their attendance through a variety of personal outreach strategies.

Institutionalizing the training program within pediatric residency programs is critical. Residents are the future physicians who can ensure medical home implementation when they go into practice. In several locations, it has been difficult to obtain resident program leadership on the planning committee; consequently, they have not promoted or even required participation of pediatric residents. In other communities, the support of the department chair and pediatric program director has led to the requirement of participation by pediatric residents. Ideally, the residency programs would take information from the training sessions and implement it into the residency curricula and continuity clinic experiences. However, if the residency programs do not promote or require attendance at this program, then residents, who do not need CME, often will not see the value in attending a Saturday conference.

Families

Families are key partners in the development and implementation of the training program. Even if the target audience for a particular program does not include family members (eg, grand rounds), they should be consulted during the planning process and used as facilitators at the program/session to illustrate the importance of family-professional partnerships. One effective strategy to involve family representation has been to provide them a scholarship or stipend to cover the costs of child care and/or time away from work.

Others

It is imperative for the planning process to be multidisciplinary and include nurses, care coordinators, mental health professionals, education system representatives, early intervention representatives, legislators, payers, child advocates, and others who work with CSHCN. Physicians and families cannot provide medical homes in isolation. Their success is significantly dependent on partnerships with others who care for and work in the community and state. Early identification of key partnerships is instrumental. People who are invited to help plan the program later in the process may not be as interested or invested.

Process

Buy-in from diverse planning group members is essential and is a predictor of success. At the various training programs, significantly different leadership styles and levels of commitment from planning committee members have been observed. The level of commitment and involvement of the training chair, the level of participation and attendance of the planning committee, and the amount of representation by other partners are key indicators of the success of the training program and posttraining initiatives. Sites

with the most active members (as defined by attendance, projects accomplished, leadership, and setting and working toward long-term goals) have demonstrated the most successful outcomes.

For future programs with limited budgets, reducing marketing mailings can still be effective as long as there is commitment and direct solicitation/marketing by the planning committee. It has been determined that direct solicitation is more successful than mass mailings.

Writing the MHTP curriculum with >70 authors was a challenge. Previously, the curriculum was written via conference call or e-mail, which proved to be difficult. Because of this, it was decided that face-to-face meetings would be more effective. These face-to-face meetings dramatically improved the goals and objectives toward which the authors were working. Although it was a challenge to have so many authors, this process led to a better, improved project.

Community

Every community is different. The training program has been demonstrated to be flexible and fluid enough to accommodate unique community goals, needs, and barriers. Through the training program and planning process, a community has the opportunity to converge, establish new partnerships, strategize, and work collaboratively on providing medical homes to CSHCN.

REFERENCES

1. Newacheck PW, Strickland B, Shonkoff JP, et al. An epidemiologic profile of children with special health care needs. *Pediatrics*. 1998;102:117-123
2. Stein RE, Silver EJ. Operationalizing a conceptually based noncategorical definition: a first look at the US children with chronic conditions. *Arch Pediatr Adolesc Med*. 1999;153:68-74
3. McPherson M, Weissman G, Strickland BB, van Dyck PC, Blumberg SJ, Newacheck PW. Implementing community-based systems of services for children and youths with special health care needs: how well are we doing? *Pediatrics*. 2004;113(suppl):1538-1544
4. Sia C, Tonniges T, Osterhus E, Taba S. History of the medical home concept. *Pediatrics*. 2004;113(suppl):1473-1478

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