Medical Home Modules for Pediatric Residency Education

The medical home modules are endorsed by the Association of Pediatric Program Directors Curriculum Task Force. Development of the modules was funded by the American Academy of Pediatrics Friends of Children Fund.
Foreword

While inception of the medical home began with pediatrics over five decades ago\(^1\), adult and specialty care embraced this concept over the last ten years. Many national, regional, and local efforts surrounding adoption and implementation of medical home in existing practices demonstrate favorable results. Yet, only recently have residency programs addressed medical home in training for a new era of physicians. As a result, despite growing need and evidence that medical home education in residency trainings seems to demonstrate beneficial outcomes in most studies, there is no systematic approach to education of trainees on fundamental building blocks of the patient- and family-centered medical home and its central tenants.

In response to this gap, a Medical Home Resident Education Initiative Work Group (REIWG) was created in 2011 to understand the current state of pediatric residency programs nationally and respond to identified goals, gaps, or perceived barriers to pediatric medical home residency education. The REWG conducted a needs assessment of pediatric residency training programs, which suggested a need for improved medical home education, coupled with limits in faculty time, expertise, resources, and time in training. Resulting from the needs assessment, a medical home curriculum was developed by an interprofessional group of educators, medical home experts and stakeholders, and families. The modules are based on this curriculum. They serve as an effective strategy for dissemination of the curriculum and provide a needed resource for pediatric residency programs.

With an evolving landscape of medical home, residency education, and health care marketplace, it is paramount that residency training programs ensure their trainees are prepared as providers in a health care environment addressing care coordination/integration, practice transformation, value based payments, and the patient- and family-centered medical home. It is our hope, that these modules foster medical home adoption and implementation across a heterogeneous cohort of pediatric residency programs.

The authors would like to acknowledge the work and contributions of the REIWG for their ideas, support, and development of this work. The REWG represented members from: American Academy of Pediatrics (AAP), The Academic Pediatric Association (APA), Association of Pediatric Program Directors (APPD), Association of American Medical Colleges (AAMC), parents and caregivers, resident members, and staff. We would also like to acknowledge AAP staff for their technical assistance in organizing the REWG, materials, coordinating with our web designer, meetings, dissemination, and compiling of results.

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Background

The American Academy of Pediatrics (AAP) is the leading membership organization of the pediatric profession dedicated to the attainment of optimal physical, mental and social health and well-being for all infants, children, adolescents and young adults. The AAP is widely recognized as the standard bearer for the pediatric profession and through its membership of over 64,000 primary care pediatricians, pediatric medical sub-specialists and pediatric surgical specialists. The AAP impacts the lives of millions of families with children from birth to age 21.

A Medical Home Resident Education Initiative Work Group (REIWG) was convened under the auspices of the National Center for Medical Home Implementation (NCMHI) (www.medicalhomeinfo.org) to assess and address the needs in the area of resident education related to medical home for all children, including children with special health care needs, care coordination, and family-centered care, respectively.

The overarching goal of this initiative is to provide direction, tools and resources to residency program directors, faculty and others in their efforts to educate trainees regarding the core tenets of medical home including the promulgation of suggested strategies for medical home implementation at the hospital, practice and community levels.

One of the major activities of the REIWG was the development of a pediatric residency curriculum that addresses the core tenets of medical home. As part of this effort, a needs assessment was developed and disseminated to pediatric residency program directors through the Association of Pediatric Program Directors membership listserv to assess and define the current state of education and/or curricula for pediatric residents around medical home, care coordination, and children and youth with special health care needs (CYSHCN). The results of the needs assessment were reviewed and utilized to inform curriculum content.

The curriculum and related activities are aligned with 2013 Accreditation Council for Graduate Medical Education (ACGME) core competencies and are organized around five topic areas, or “building blocks,” of medical home: Care Partnership Support; Clinical Care Information and Organization; Care Delivery Management; Practice Performance Measurement; and Resources and Linkages.

Instructional design documents have been developed, which outline a set of learning objectives organized by residency program year with accompanying educational strategies for each of the five topic areas. Educational strategies are identified as being either “core” or “supplemental.” Educational strategies include those that are more self-study in nature that can be done independently or within a small group setting along with those that are experiential (interview, site visit, focus group, etc).

The curriculum is extremely comprehensive, and in that regard, allows residency program directors and faculty the flexibility to implement the objectives and strategies that are feasible for the program and that best meet the needs of learners.

In order to increase the availability, utility and flexibility of the curriculum for residency program directors, faculty and residents, a series of five educational modules on medical home were developed. The curriculum topic areas and learning objectives served as the foundation of each module.
Ideas for Use

Each educational module, both as a full set and individually, is designed to be incorporated into existing curriculum by residency program directors and faculty. It is anticipated that directors and faculty may choose only some, or all, modules to use with residents. If all modules are used, it is recommended that they be adequately spaced throughout a residency program. The modules are best applied to pediatric residency programs. These modules may help programs meet requirements in formal teaching about Systems Based Practice, provide a foundation for medical home principles as part of training in quality and formally teach residents about interdisciplinary team work.

The content of the modules address 2013 ACGME core competencies of Patient Care and Procedural Skills; Medical Knowledge; Practice- Based Learning and Improvement; Interpersonal and Communication Skills; Professionalism; and Systems-Based Practice:

**Patient Care and Procedural Skills:** Provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health; competently perform all medical, diagnostic, and surgical procedures considered essential for practice.

**Medical Knowledge:** Demonstrate knowledge of established and evolving biomedical, clinical, epidemiologic, and social and behavioral sciences, as well as apply it to patient care.

**Practice-Based Learning and Improvement:** Demonstrate an ability to investigate and evaluate the care of patients, appraise and assimilate scientific evidence, and continuously improve patient care based on constant self-evaluation and lifelong learning.

**Interpersonal and Communication Skills:** Demonstrate interpersonal and communication skills that result in effective exchange of information and collaboration with patients, their families, and health care professionals.

**Professionalism:** Demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles.

**Systems-Based Practice:** Demonstrate awareness of and responsiveness to the larger context and system of health care, as well as an ability to call effectively on other resources in the system to provide optimal health care.

Each module is organized in the following format:

- Learning Objectives
- Pre-Test
- Topic Overview/Commentary
- Case Study
- Summary
- Post-Test
- Reflections to Consider
- References
- Resources
The amount of time needed to complete each module is estimated at approximately 30 – 60 minutes. The modules are designed to be utilized in various residency training program settings. Examples include:

- Residents complete modules independently as a longitudinal curriculum over Program Year One to receive basic training in medical home principles.
- Residents complete a selected module in a pre-pediatric continuity clinic teaching session together as a small group and engage in small group discussion.
- Residents independently complete a selected module in preparation for a small group discussion as part of the pediatric continuity clinic curriculum.
- Residents complete a selected module and present on same to other residents during pediatric continuity clinic teaching time.
- Residents complete modules during specific rotations (eg, Module 4: Facilitating the Transition From Pediatric to Adult Care during an adolescent medicine rotation or all the modules during an outpatient rotation).

The modules are available for download on the American Academy of Pediatrics Web site, www.aap.org/medicalhome. Pediatric residency program directors and faculty may consider tracking results of residents’ pre- and post-tests over time to identify learning gaps and the degree to which educational strategies to address these gaps are effective.

Resources for Faculty Development

Pediatric residency program directors and faculty who would like additional information and guidance related to a specific area of medical home prior to implementing the modules with residents may wish to closely review the references and resources listed at the end of each module. Both sections include links to helpful articles, tools and other resources.

Pediatric residency program directors and faculty may find the following specific resources helpful in building greater knowledge of, and familiarity with, medical home principles and application of same into practice.

- Table 1 within “Patient- and family-centered care coordination: a framework for integrating care for children and youth across multiple systems.” Pediatrics. 2014;133(5):e1451–e1460. (http://pediatrics.aappublications.org/content/133/5/e1451.)
- “What is Medical Home?” National Center for Medical Home Implementation (https://medicalhomeinfo.aap.org/overview/Pages/Whatisthemedicalhome.aspx)
- Fostering Partnership and Teamwork in the Pediatric Medical Home: A “How-To” Video Series (https://medicalhomeinfo.aap.org/tools-resources/Pages/How-To-Videos.aspx)