

Principles and Theories of Community-based Education

American Academy of Pediatrics Committee on Community Health Services. The pediatrician's role in community pediatrics. *Pediatrics*. 1999;103:1304–1307

As clinicians and educators encounter new demands on their time and resources, it is important to reaffirm a vital and long-standing role of pediatricians—promoting the health and well-being of all children in the communities they serve. This policy statement provides a definition of community pediatrics and offers recommendations for ways pediatricians can reexamine and reaffirm their role as professionals in the community.

Charney E. Pediatric education in community settings: where do we go from here? *Pediatrics*. 1996;98:1293–1295

In 1997, the Residency Review Committee for Pediatrics (RRC) mandated that residents gain experience working in community-based settings. Charney reviews the program requirements of the RRC and highlights some of the ideas discussed during a conference on pediatric education in community services.

Charney believes that programs must be structured to emulate the practice of general pediatrics. It is important that medical students continue to choose careers in general pediatrics because generalist pediatricians are more able to work as advocates while providing traditional health care for their patients. According to Charney, it is time to move from a university-based setting to a community practice for the sake of the children in the community and the students being taught.

DeWitt TG, Starr S. Educating pediatric residents in community settings. *Curr Opin Pediatr*. 1995;7:489–492

As a result of recent health care reforms, there is greater demand for generalist physicians and pediatricians. DeWitt and Starr summarize a number of articles and discuss the theoretical and practical advantages of requiring residents to participate in a community-based rotation. The authors believe that traditional hospital training does not provide an adequate foundation for primary care issues and place an emphasis on the pediatrician's role as child advocate, especially for

underprivileged children. DeWitt and Starr suggest that community-based education would (1) increase the number of generalist physicians, (2) increase a resident's exposure to inner-city and rural communities, and (3) focus on competency-based outcomes instead of numbers of hours trained during the resident's rotation.

Recent literature has focused on curricular and structural changes. The authors assert that future studies must focus on the efficacy of these changes in educating pediatricians within the context of health care reform.

Haggerty R.J. Community pediatrics: can it be taught? can it be practiced? *Pediatrics*. 1999;104:111–112

In a brief commentary, Haggerty asserts that community pediatrics needs to be taught to pediatric residents, who then can practice with the proper resources and reduce the impact of the new morbidities on US children and adolescents.

Although rotations in community pediatrics traditionally have been less popular than subspecialty areas, the pediatric community is embracing them as community-based practices become more widespread. Significant barriers to the operation of a successful community-based clinic still exist, including lack of financial resources and increased amount of time required; however, as the field gains recognition and resources, Haggerty believes it is time to more fully realize the potential impact of community pediatrics.

Osborn LM. Implementing community-based education: essential elements and recommendations. *Pediatrics*. 1996;98:1264–1267

Osborn discusses Collins' and Porras' book, *Built to Last: Successful Habits of Visionary Companies*,¹ and incorporates basic elements of management into the design and implementation of community-based resident training programs. Collins and Porras identify a vision of how community experiences fit into the training of future health professionals and a supportive local environment as 2 elements in their analysis of companies that are highly regarded in their fields (ie, visionary companies).

To establish an effective program, it is important to have strong leadership. According to Collins and Porras, great leaders do not necessarily have charisma but, instead, a vision, knowledge, passion, and the willingness to work hard to achieve goals. The same is true with community pediatrics. Individuals who design community pediatrics programs must be committed to the project and establish a foundation from which the program will flourish. These leaders must be cognizant of common barriers to success, such as lack of funding and lack of personnel or time. In addition, program evaluation, a key element that often is overlooked, must be implemented and leaders must be accountable for program outcomes.

Roberts KB. Educational principles of community-based education. *Pediatrics*. 1996;98:1259–1263

A great deal of medical teaching is teacher-centered in the classroom and in the field. Roberts suggests that the medical field adopt an educational process that is resident-centered and cites a manual designed for the Save the Children Foundation² that describes the 4 elements of adult learning: (1) respect, (2) building on previous experiences, (3) immediacy of application, and (4) the opportunity to practice. None of these characteristics are used with a traditional teacher-centered approach.

If the medical classroom is going to become more learner-focused, educational plans need to be based on competency and performance rather than a designated structure. Roberts has identified the goals, needs assessment, objectives, methods, and evaluation (GNOME) planning process as an important part of developing a curriculum that is resident-centered and appropriate for adult learners.

Task Force on the Future of Pediatric Education. The future of pediatric education II: organizing pediatric education to meet the needs of infants, children, adolescents and young adults in the 21st century: a collaborative project of the pediatric community. *Pediatrics*. 2000;105:157–212

The health of children is critically dependent on advances in basic and clinical science and technology. Concern for the health of children and adolescents demands periodic reassessment of pediatric education so that future generations of pediatricians can better serve their patients. This report addresses the responsibility of physicians in maximizing potential benefits while minimizing the risk of harm and emphasizes the importance of improving the education of future pediatricians.

Weitzman M, Garfunkel LC, Connaughton S. Financing pediatric education in community settings. *Pediatrics*. 1996;98:1284–1288

Funding is the major barrier facing those who try to create a community-based training program. The potential cost of educating pediatric residents in an ambulatory setting is addressed in this resource for individuals interested in training residents and medical students in community-based settings. A 1985 study found that allowing residents to work in a clinic could lead to a 30% to 40% decrease in physician productivity, which amounted to \$21,500 in lost revenue for the clinic. Although it is true that ambulatory training is costly, some of the financial loss may be counterbalanced by benefits such as increased patient satisfaction and continuing education for primary physicians and pediatricians.

Young LM. The perspective of the community pediatrician. *Pediatrics*. 1996;98:1255–1258

A number of studies show that training in private community settings provides more experience for pediatric residents than training in the traditional hospital or clinical setting. Young discusses a number of issues that must be addressed as resident training moves from the hospital to ambulatory settings, such as the concern that allowing residents into community pediatrics is a drain on clinic finances and resources.

At Young's clinic, pediatric residents perform traditional clinical roles but also work with community resources and child advocacy programs to offer a full educational experience. To fully realize the benefits of a community-based resident training program, participating clinics should allow residents to focus on the office experience and developing relationships with patients. This interaction with patients is an essential aspect of the training program.

Implementing Training Programs for Residents

Alpert JJ, Blodgett FM, Gargas DC, et al. A survey of community (out-of-hospital) sites used in pediatric training. *Pediatrics*. 1991;87:719–721

Believing that pediatricians need a broad understanding of the realities of their patients' daily lives, the American Academy of Pediatrics Committee on Community Health Services studied community sites used for resident education in 1991 to find the frequency of visits to different community sites used in resident training programs.

The authors recommend that residents be placed in a variety of community-based settings, including child care centers, schools, courts, and sites that care for children with special needs. In addition, pediatric training needs to focus on early intervention, child protection, and substance abuse prevention.

American Academy of Pediatrics. Pediatric resident education in community settings: reports from workshops. *Pediatrics*. 1996;98:1296–1301

This article is an excellent resource for anyone interested in developing or refining a pediatric resident education program. The reports contain general and specific recommendations, as well as action steps that address a number of community-based pediatric residency training programs.

Broffman G, Stapleton FB. Integration of community pediatricians into an academic department. *Pediatrics*. 1995;95:85–88

As the missions of academic departments move into the community, the relationship between full-time academic and practicing pediatricians will be affected. The authors specifically discuss the history of the State University of New York at Buffalo, which was founded in 1845 as a community-based medical school. A number of advantages



have emerged from the community-based approach, including improved communication, research facilitation, and the inclusion of presentations. The program's success is attributed to extensive committee memberships, which help maintain the connection between school faculty members and community pediatricians who collaborate with the school. The arrangement offers pediatric students the opportunity to spend time in clinics throughout each stage of their education and enhances recruitment efforts.

Clemens CJ, Roberts KB. Research and progress in pediatric education: community experiences for residents: building a better rotation. *Pediatrics*. 1999;104:135–136

The latest RRC Program Requirements mandate that residents be prepared for the role of child advocate within the community. Clemens and Roberts support this concept of exposing pediatric residents to community-based health clinics, asserting that collaboration and shared efforts are key components to establishing strong community-based pediatric programs.

Some suggestions shared in the article include priming residents for cultural diversity, maintaining feedback and communication, identifying and recruiting a knowledgeable faculty, and finding ways to share resources. If this is accomplished, the authors believe that greater outcomes will be achieved in the future.

Education Committee of the Ambulatory Pediatric Association. *Educational Guidelines for Training in General/Ambulatory Pediatrics*. McClean, VA: Ambulatory Pediatric Association; 1985

This article is an excellent resource for faculty and students. In it, the committee outlines specific goals and objectives that may be used as the minimum core content for undergraduate and residency training programs in general/ambulatory pediatrics. Attitude, skills, and cognition are the 3 major areas discussed, and an overview is given of possible learning experiences that can enhance the student's ability to master objectives. According to this report, pediatrics will best be understood when the relationship between child, family, and community and the effect of health and disease on children's development are addressed.

Juster F, Edwards K. A rotation in chronic-care pediatrics with a focus on children and their families in the community. *Acad Med*. 2001;76:568

The New York Medical College organized and implemented a rotation for fourth-year residents focused on long-term care of children in outpatient settings. School personnel believed that the existing rotation did not give pediatric residents experience working with children in a variety of environmental settings. Through this program, students receive a greater understanding of the resources available to pediatric patients requiring long-term care, as well as the importance of considering multiple perspectives in chronic care pediatrics, including those of the parent and the child.

Scheiner AP. Guidelines for medical student education in community-based pediatric offices. *Pediatrics*. 1994;93:956–959

This study found that most practitioners believe the addition of either a medical student or a resident contributes intellectual stimulation and professional growth to the office setting; however, guidelines for placing medical students in community-based settings still are not available. Less than 5% of physician and patient contact results in hospitalization of the patient; however, the hospital is where medical students complete most of their training.

Scheiner presents a number of arguments about the necessity of placing medical students in community-based settings. Not only does this aid students in making career choices, it also allows them to acquire skills and knowledge specific to these communities. The community-based setting provides an understanding of community resources and child advocacy issues, and early one-on-one contact with patients allows students to experience a sense of responsibility, independence, and confidence. Scheiner explains a variety of guidelines and discusses what to look for when forming a program.

Shope TR, Bradley BJ, Taras HL. A block rotation in community pediatrics. *Pediatrics*. 1999;104:143–147

The University of California San Diego and the Naval Medical Center San Diego developed a 1-month block rotation in the field of community pediatrics for second-year residents. The curriculum exposed residents to the full range of issues facing US children and adolescents and included a community project to be designed and implemented by the residents. The project focused specifically on reaching vulnerable children—those with special needs, those who do not have access to a primary care physician or pediatrician, and those at risk for abuse and neglect—and a monthly clinic established in an impoverished area allowed residents to gain supervised experience working with immigrants.

Surveys taken by the residents at the end of the rotation indicated perceptions of great improvement in the 8 targeted areas of community pediatrics. The authors noted that this program was effective because it integrated 2 residency programs for the project, allowing both universities to promote personal relationships with community agencies, use faculty and volunteer time more efficiently, and give residents the opportunity to share ideas and views with students from other institutions.

¹ Collins JC, Porras JI. *Built to Last: Successful Habits of Visionary Companies*. New York, NY: Harper Collins; 1994:46–79

² Vella J. *Learning to Teach. Training of Trainers for Community Development*. Washington, DC: OE7 International; 1989:22–25

