ABSTRACT. To improve child health at a community level, pediatricians require knowledge and skills that have not been traditionally included in residency training. Recent policy statements from the American Academy of Pediatrics and requirements from Accreditation Council for Graduate Medical Education Residency Review committees emphasizing the importance of community pediatrics training have provided additional incentive for pediatric residency programs to actively explore methods of teaching the principles and practicing the practice of community pediatrics to resident trainees. With a growing number of diverse educational models in various stages of practice or development, common themes and approaches to promote successful teaching of community pediatrics and child advocacy can be described. This article defines strategies for 2 critical elements of community pediatrics training, engaging residents and building strong community partnerships, then highlights a number of educational models that illustrate key curricular components and methods. Published results from evaluations of some programs suggest that community pediatrics training of this caliber will cultivate a cadre of pediatricians (academic and community based, generalists and subspecialists, researchers and practitioners) who understand child health in the context of community and have the leadership and collaborative skills to improve the health of children in their communities. Pediatrics 2005;115:1150–1157; community pediatrics, child advocacy, pediatric residency education, competency project.

ABBREVIATIONS. AAP, American Academy of Pediatrics; CATCH, Community Access to Child Health; CBO, community-based organization; CBA, community-based association; PLC, Pediatric Links With the Community; CAI, community action initiative; COPC, community-oriented primary care; OHSU, Oregon Health and Science University; WIC, Special Supplemental Nutrition Program for Women, Infants, and Children.

R esidency training provides a unique opportunity for teaching the principles and establishing the practice of community pediatrics as integral to the professional role of all pediatricians.1 Residents who are able to recognize social factors that influence health, consider primary prevention strategies, and partner with communities in improving and advocating for child health are more likely to continue these behaviors once in practice.2 Because community pediatrics teaching is relatively new, the challenge has been to define priority competencies in community pediatrics and child advocacy and develop rigorous training initiatives that teach the knowledge, attitudes, and skills to achieve these competencies.3 This article addresses the practical aspects of teaching community pediatrics to pediatric residents and highlights examples of successful educational models. Although each residency program needs to consider which models of community pediatrics training fit best within its own institution and surrounding community, there are common elements to the planning and implementation of educational programs that, when followed, promote success. The framework for our discussion takes the form of 7 questions that are critical to consider when planning and implementing a community pediatrics curriculum.

QUESTION 1: WHAT IS THE RATIONALE FOR INCORPORATING COMMUNITY PEDIATRICS TRAINING INTO PEDIATRIC RESIDENCIES?

In 1999, the American Academy of Pediatrics (AAP) issued its first policy statement on community pediatrics, labeling it as integral to the role of all pediatricians.1 This idea is now further defined in the revised policy statement.4 David Satcher, MD, PhD, in another article in this supplement,5 has a powerful statement on the importance of this training for the future of child health. Within residency training, there is growing recognition of the need for education that extends beyond the hospital and clinical practice settings and an increasing demand for community pediatrics training from resident trainees and graduates.6–11
QUESTION 2: WHAT KNOWLEDGE, ATTITUDES, AND SKILLS DO RESIDENTS NEED TO IMPROVE THE HEALTH OF CHILDREN AT THE COMMUNITY LEVEL?

Within this supplement, the articles by Garfunkel et al12 and Rezet et al13 define and link community pediatrics core competencies with Accreditation Council for Graduate Medical Education standards for residency training. Additional national resources include the Ambulatory Pediatric Association Educational Guidelines for Pediatric Residency,14 the AAP Community Access to Child Health (CATCH) program,15 the Ambulatory Pediatric Association Training Residents to Serve the Underserved curriculum,16 and several excellent cultural-competency curricula.17–19 In addition to the wealth of resources that help to define these core competencies, each resident’s education will be shaped and strengthened by the partnerships with his or her local communities.

QUESTION 3: HOW CAN COMMUNITY PEDIATRICS TRAINING PROGRAMS BEST ENGAGE PEDIATRIC RESIDENTS?

Although residents are faced with numerous competencies that must be acquired in a short time span, effective strategies can maximize the synergy of competencies across learning venues. Each strategy can build on the previous one by establishing a foundation for resident buy-in with opportunities for participatory learning that then translate to self-motivation and leadership in community-based initiatives.

• Identify faculty, resident, and community leaders. Learners are motivated by leaders with passion and vision; with such motivation, they are more likely to embrace these principles, engage with their colleagues, and develop a vision for community pediatrics.20

• Engage resident leaders as true partners. True partnerships start at the beginning with involvement in the planning and implementation of the curriculum.

• Use data. Present local and national data on health disparities and the effect of the new morbidity and millennial morbidity21,22 on child health outcomes early on (eg, intern orientation) to emphasize the relevance of community pediatrics practice and training.

• Immerse residents in relevant community-based experiences. Residents’ understanding of child health outcomes in the context of community and family is enhanced by experiences that allow direct contact with children, families, and community resource providers.

• Discover where residents’ passions lie. Interviews or surveys help faculty to tailor experiences to each resident’s strengths, future goals, and learning styles. These assessments can be used to identify residents with a special interest in community pediatrics who may act as change agents or leaders.

• Gather partners as role models. Provide faculty advisors, feature pediatrician role models, and actively involve community-based organization (CBO) partners, interdisciplinary colleagues, and physicians as resident advisors and potential mentors who can inform and inspire residents in their community endeavors.

• Provide concrete, practical steps to begin realizing new roles. Fulfilling community roles and responsibilities can be overwhelming to residents who spend most of their training within a hospital setting. It is therefore critical to provide residents with practical steps and examples of involvement on an individual level, within their practice, and at a health policy or legislative level.23,24

• Offer choices and flexibility, which will allow residents to transition more effectively from the traditional medical learning environment of inpatient hospital services and outpatient clinics to using adult learning skills in community settings. Examples include choices in community projects, legislative issues, and community venues for learning.

• Listen to resident feedback and quickly implement changes. Regular, facilitated, structured sessions such as “experience-based discussions”25 give faculty specific areas to modify and give residents the forum to be involved in the development of quality community pediatrics education.

QUESTION 4: WHO OR WHAT ARE THE POTENTIAL PARTNERS OR RESOURCES IN YOUR COMMUNITY THAT CAN PROVIDE DIDACTIC AND EXPERIENTIAL OPPORTUNITIES IN COMMUNITY PEDIATRICS?

Equally important to laying the foundation for resident buy-in is the early and consistent involvement of community partners. Faculty must be able to identify community resources and forge meaningful partnerships between residency training programs and CBOs or community-based associations (CBAs). New Community Tools for Improving Child Health: A Pediatrician’s Guide to Local Associations, a publication by the AAP, CATCH, and the Asset-Based Community Development Institute,26 encourages pediatricians to collaborate with local associations, small face-to-face groups and organizations of local people who do work in the community without being paid. CBAs are effective partners because they reach and involve many more people in local action than institutions, are the most significant vehicle for changing attitudes and behaviors of the community, and consistently take on additional functions that reach beyond the members’ primary purpose. One effective way to identify potential partnerships and simultaneously engage more faculty in community pediatrics training is to survey all faculty (eg, generalists, subspecialists, community practitioners) as well as residents about their community linkages and associations. Most will have connections in the community either through work or personal interests and have spent time nurturing these relationships.

Another natural partnership is with local public health departments, which can provide assets and resources in population medicine, environmental health, community assessment, and geomapping, as well as links with schools, housing departments, and...
other community groups. Additional existing campus-community links often may be found by researching campus or institutional Web sites. Community-based pediatricians who are already deeply involved in the community should be sought as partners and role models for residents and may be identified through local AAP chapters. Partnerships within medical centers and larger universities and with other local community colleges and universities further enrich community pediatrics training initiatives by drawing on special expertise from schools of public health, dentistry, nursing, law, and education, among others, while teaching the importance of community and interdisciplinary collaboration.

QUESTION 5: WHAT CONSTITUTES MEANINGFUL PARTNERSHIPS AMONG ACADEMIC DEPARTMENTS OF PEDIATRICS, MEDICAL CENTERS, AND CBOs OR CBAs INVOLVED IN RESIDENT TRAINING?

Community pediatrics training and practice require an interdependent and reciprocal process between physicians and communities. Before engaging CBOs or CBAs in a dialogue about potential partnerships, it helps to become familiar with 1 of the models for active community collaborative education such as service learning. This model uses a structured orientation, community-based services, reflection exercises to encourage self-directed learning, evaluation of experiences, and promotion of the ethic of service. Service learning is directly applicable to partnerships between academic institutions and communities, is well known to CBOs and CBAs, and facilitates the initial discussions about resident learning in community settings. Active community collaborative education allows for the development of mutual respect and understanding over time, the foundation for establishing trust between partners.

In addition to trust, communication and consistency are critical to any partnership and should be anticipated and addressed before initiating community partnerships. A coordinator or central contact person who communicates with and visits CBOs frequently, schedules resident community-based experiences, and cultivates new community partnerships is invaluable in this process. Table 1 provides guidelines for building mutual respect, clear lines of communication, and strong, sustainable partnerships.

QUESTION 6: WHAT ARE THE KEY CURRICULAR COMPONENTS NEEDED TO ACHIEVE RESIDENT COMPETENCY IN COMMUNITY PEDIATRICS, AND HOW ARE THEY INCORPORATED IN EXISTING SUCCESSFUL TEACHING MODELS?

Across pediatric residency training programs, various models have been developed to engage residents in community pediatrics education. Curricular components that are universal to successful community pediatrics training models are summarized as a checklist in Table 2. The following paragraphs highlight several models that reflect best

### TABLE 1. Guidelines for Successful Community Partnerships

<table>
<thead>
<tr>
<th>Positive Steps</th>
<th>Pitfalls to Avoid</th>
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<tbody>
<tr>
<td>Involving CBOs or CBAs from beginning to end to set priorities, assess community assets and needs, establish common goals for resident education and community benefits, and provide a feedback loop for the development of community projects or interventions</td>
<td>Implementing ideas, changes, or projects or establishing resident curriculum for the community without direct input from the CBO or CBA</td>
</tr>
<tr>
<td>Identifying clear expectations on both sides for what residents, faculty, and the CBO or CBA can provide</td>
<td>Starting with false expectations about what residents, faculty, and the CBO or CBA can provide</td>
</tr>
<tr>
<td>Promoting dialogue on cultural awareness and understanding of community, CBOs, and medical culture</td>
<td>Assuming that cultural understanding applies only to the community of patients and not to medical and CBO culture</td>
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<tr>
<td>Maintaining a consistent contact person in the community and residency program</td>
<td>Rapidly turning over contacts in the community or residency program</td>
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<tr>
<td>Confirming preferred methods of communication (eg, e-mail, fax, phone, face to face)</td>
<td>Assuming the CBO or CBA has same access to e-mail, Internet, and fax</td>
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<tr>
<td>Providing clear benefits to CBO (eg, service provided by residents, increased access to medical expertise, recognition of CBO in academic setting, adjunct faculty status, compensation, collaboration for grant funding)</td>
<td>Assuming resident presence is enough and failing to acknowledge CBO partner’s importance within the academic institution</td>
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<tr>
<td>Ensuring resident responsibility and engagement with CBO clients by involving residents in ongoing services and hands-on activities</td>
<td>Avoiding show-and-tell experience that may contribute to CBO or CBA burnout because of lack of dynamic interaction and added burden</td>
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<tr>
<td>Developing realistic time table for project planning and implementation; reassuring residents that success of the project depends on the process of team building and partnership with the community</td>
<td>Encouraging residents to have a product without adequate planning for a true community partnership or project longevity</td>
</tr>
<tr>
<td>Incorporating project-evaluation measures that the CBO feels are important to the success of its mission</td>
<td>Focusing only on resident, faculty, or university interest in outcomes for measurement</td>
</tr>
<tr>
<td>Including community partners in publicity, publications, presentations, and funding opportunities in local community-based, hospital-based, or national settings</td>
<td>Not sharing limelight or potential sources of funding for sustainability of project</td>
</tr>
<tr>
<td>Actively planning for strategies to sustain partnerships even after a resident completes a project or rotation or leaves the local area</td>
<td>Lacking perceived long-term commitment to the community, leading to diminished trust</td>
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</table>
practices and innovations in community pediatrics across the country. These educational models are divided into the following 3 broad categories: community-based block rotations and cultural-immersion experiences, resident projects in longitudinal or block form, and universal integration of community pediatrics within other educational rotations and pediatric divisions.

Community-Based Block Rotations and Cultural-Immersion Experiences

Community-based block rotations and cultural-immersion experiences provide structured, facilitated transitions from the hospital to community settings. Residents learn through first-hand observation and direct participation about the health and social needs of children and families in their neighborhoods, homes, and schools. They gain awareness of families’ assets and needs, a knowledge of community resources, and respect for community collaborators outside of the medical field. Educational experiences such as these result in enhanced resident knowledge, attitudes, and skills useful for improving the health of children at the community level.36

The Pediatric Links With the Community (PLC) program at the University of Rochester (Rochester, New York) was instituted as a requirement for pediatric residents in 1996, and its curriculum has been described in prior articles.37–39 The PLC program provides all residents with a 2-week rotation working in collaboration with a variety of medical and nonmedical professionals at multiple CBOs and agencies focused on children who are vulnerable because of social or economic conditions or chronic health issues. Residents participate in community health conferences and cultural-competency training and are assigned readings. Approximately 75% of community-based experiences are consistent for all residents rotating on PLC; 25% are variable and based in part on residents’ interests and preferences. By June 2004, 200 pediatric residents had participated in PLC activities in collaboration with >40 different community organizations.

Two published reports from the Rochester program have demonstrated enhanced knowledge, attitudes, and skills among residents who participated in PLC. A narrative analysis of short essays written by residents revealed 3 themes: increased knowledge of lives in poverty, renewed enthusiasm for advocacy, and increased skill in making referrals. The essays demonstrated evidence of transformative learning,40 defined as a process among adult learners in which students pass through a discernible cycle of disorienting experience, emotional confusion, reevaluation of formerly held values and beliefs, and a new understanding that generates a commitment to action. Residents with new knowledge from community experiences, along with exposure to an interdisciplinary network of role models from the community, were inspired to recall their reasons for becoming physicians and affirmed a renewed enthusiasm for advocacy and confidence that they could effect social change. A second study, a survey of all graduates of the Rochester program from 1991 to 2001, compared the differences between pre- and post-PLC graduates in self-reported attitudes and competencies in community health and child advocacy activities. Although both groups’ attitudes toward community health activities were equally positive, those graduates who had participated in PLC had higher self-perceived competency in most activities.

Evaluation of another community pediatrics block rotation, at the Naval Medical Center San Diego (California), revealed positive improvements in resident self-perceived competence in community pediatrics.41 The University of California San Diego and the Naval Medical Center San Diego jointly developed a 1-month block rotation in community pediatrics for second-year pediatric residents. The curriculum provided experiential learning at various community sites and included child advocacy projects and school consultation requirements. Residents surveyed before and after completion of the rotation demonstrated statistically significant improvements in self-perceived competence in all 8 areas of community pediatrics.

More recently, the University of California San Diego and Naval Medical Center San Diego partnered to develop a community pediatrics curriculum that features cultural-immersion experiences. Hosted by leaders of cultural communities, these experiences provide a framework for intensive educational interactions with 1 cultural community at a time. This model is well described by Sidlinger et al39 later in this supplement.

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**TABLE 2. Curricular Components Universal to Successful Community Pediatrics Training**

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
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<tbody>
<tr>
<td>Structured, coordinated experiences with clear goals and objectives</td>
<td>Exposes residents to community health outside of the traditional hospital or private practice setting early in training, which may be enhanced by additional experiences later in residency</td>
</tr>
<tr>
<td>Exposure to community health outside of the traditional hospital or private practice setting early in training, which may be enhanced by additional experiences later in residency</td>
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</tr>
<tr>
<td>Thorough orientation of residents to the community (eg, driving directions, community contact numbers, appropriate attire, professionalism)</td>
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<tr>
<td>Experiential, hands-on learning with some opportunity for individualized resident experiences within the context of a core curriculum</td>
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<tr>
<td>Multidisciplinary and community-based educators (medical and nonmedical)</td>
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<tr>
<td>Curricula that provide evidence-based, scientific relevance to resident community experiences (including didactic sessions, reading materials, and case studies)</td>
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<tr>
<td>Training in diversity and cultural competency</td>
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<tr>
<td>Experiences that foster community networking and promote sustained partnerships</td>
<td></td>
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<tr>
<td>Specific skill-building experiences that translate to advanced competencies in community pediatrics</td>
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<tr>
<td>Opportunities for guided resident self-reflection and feedback</td>
<td></td>
</tr>
<tr>
<td>An iterative evaluation process that measures resident learning and CBO satisfaction and allows for curriculum and program evolution</td>
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</table>
Although block rotations and cultural-immersion experiences promote enhanced resident knowledge and attitudes, they may allow for only preliminary skill development. For this reason, many training programs have incorporated community-based child advocacy projects as a means for achieving additional skills and competencies in community pediatrics.

**Resident Projects in Longitudinal or Block Form**

Resident projects have been defined in a consensus statement from the national Dyson Initiative Collaborative Projects Work Group as “a mentored, hands-on experience in community-linked endeavors to prepare residents to be lifelong active leaders in improving and advocating for child health in the community.” A project may be completed by an individual or group of residents in a short, focused time block or a longitudinal time frame and generated from a resident’s area of interest or a community priority. Regardless of the project structure, residents benefit from a foundation of knowledge and training before engaging in projects, which includes an understanding of basic public health principles and practices. This training may be in the form of seminars, workshops, panel discussions, or other didactic sessions and is critical to successful project development.

Residents who are designing and implementing a project need to understand the expectations and time table for their efforts. In most cases, it is the process of skill and knowledge acquisition and not the specific project outcome that is the measure of success. Skills addressed may include but are not limited to community assets and needs assessment, community networking and collaboration, project summary and abstract design, focus-group conduction, survey design, evaluation, and public speaking. Barriers to project completion include time constraints and competing priorities from other rotations and responsibilities. Successful programs, anticipating these barriers, offer protected time for resident project development, encourage residents to work as partners, schedule regular meetings with individual faculty advisors and/or group sessions for feedback and individual resident project planning, and teach residents to lead and delegate so they can prioritize project tasks and engage assistance from program staff and students. Providing accountability and a time line for residents by scheduling specific time points throughout each academic year when residents present their projects (in progress or completed) to their advisors, colleagues, or department is another important strategy for successful project development and implementation. Preparation for these presentations reinforces specific skills in time management, proposal writing, poster design, and public speaking.

The University of Florida (Jacksonville, FL) Pediatric Residency Program uses a village model for projects in which each resident selects a population of children of interest to work with in a community action initiative (CAI). The population may be defined as children and families affected by a specific health issue, living in a defined geographic area, or who are part of a racial or immigrant group. Based on the community-oriented primary care (COPC) model, residents work with a faculty mentor and community health advocate to identify a health need of their population and then design, implement, and evaluate a CAI to address that need. Residents are introduced to the COPC curriculum during regular didactic conferences and have designated time for their CAI work during their second and third years of training. The work is supported by a full-time CAI director and the county public health department, which provides assistance with conferences, community assessment and geomapping, linkages with CBOs, and research infrastructure. Through their CAs, residents participate in local community boards and coalitions, receive grant funding such as CATCH, attend educational conferences, give presentations, and participate in scholarly endeavors. Portfolios are used to document progress and competency. Allowing residents to pursue their individual interests and/or passions through choice of villages promotes commitment on the part of the resident, demonstrates that community pediatrics is not just for generalists, and allows opportunities for clinical correlation. For example, 1 resident pursuing a career in pulmonology chose children with asthma as his population, and another resident working with children who are blind arranged to spend part of her continuity time at a school for children who are blind and deaf. The COPC model illustrates the importance of working with, rather than doing to, the community to effect change.

The Department of Pediatrics at Oregon Health and Science University (OHSU) requires all residents to complete a child advocacy project in addition to participating in a community-based curriculum that is integrated throughout the 3 years of residency. Faculty and a resident leader/CATCH liaison at OHSU actively promote the CATCH program to their residents. CATCH increases children’s access to medical homes or specific health services by supporting pediatricians, residents, and communities who are involved in community-based efforts for children. Over the last 3 years, 3 OHSU residents received resident CATCH grants in the following project areas: improving the medical home of children with autism, improving community education about vitamin D supplementation in breastfed infants, and planning and implementing a children’s safety center. By promoting CATCH opportunities and assisting with the development of grant ideas, faculty and resident leaders encourage increased resident interest and involvement in community-based efforts for children and adolescents. Even if a resident does not intend to apply for a grant, the CATCH application provides an excellent tool for residents to use when planning their projects in an organized format once they have identified an area of focus and learned about the community of interest.

Resident-community–partnered projects, resident CATCH projects, and CAs truly are the practical application of the principles of community pediatrics. Just as the direct patient encounter is essential to...
the training of a pediatrician, the project component is essential for active learning, skill acquisition, and advanced competency in community pediatrics. Hence, promoting intellectual rigor and scholarship in these project experiences cannot be overemphasized. At the University of Rochester, since July 2000, 40% of pediatric residents elected to participate in the 2-year Child Advocacy Resident Education track, a longitudinal elective for senior residents that teaches advanced-level competencies in community pediatrics through project design and implementation and intensive seminars. All 27 of these residents (100%) presented their projects as posters or presentations in conjunction with pediatric grand rounds. Forty-eight percent have obtained institutional review board investigator status to conduct research, and 33% have presented their research at peer-reviewed national meetings. Ultimately, the desired outcome of resident-community–partnered projects is for residents to graduate equipped to continue similar projects and community involvement in their future careers as primary care pediatricians or pediatric subspecialists. With appropriate training and faculty support, pediatric residents can engage in scholarship and research that contributes to the fund of knowledge on community health. Resources for resident project ideas, development, and financial support are shown in Table 3.

Universal Integration of Community Pediatrics Within Other Educational Rotations and Pediatric Divisions

The Indiana University Community Pediatrics Initiative is at the early stages of weaving community pediatrics training throughout the framework of residents’ didactic and clinical experiences to reinforce the principles and importance of community health and child advocacy at every level of pediatric care. The first steps in incorporation have been to provide multidisciplinary faculty development and implement a comprehensive continuity-clinic curriculum in which the medical home concept of accessible, family-centered, community-based, continuous, comprehensive, coordinated, and culturally effective care is interwoven. Case vignettes, a key component of the curriculum, are brief topics with 2 to 3 key discussion points and question probes such as: “What are the barriers in your clinic to providing a quality medical home for your patients with …?” or “How might culture affect the health education message you are delivering?” Vignettes are designed to be 5 to 10 minutes and may be delivered between patients during clinic sessions. Faculty development occurs with multidisciplinary, general faculty as well as adjunct faculty from CBOs. Sessions include medical home, models of health education, communication styles, continuous quality improvement, and service learning. Subspecialists participate in the community pediatrics perspective through involvement in legislative advocacy, partnerships with community faculty in presenting grand rounds, and involvement in resident community and continuous quality improvement projects. Evaluation for the continuity-clinic curriculum and faculty-development sessions is ongoing at this time.

The Children’s Hospital of Philadelphia Community-Based Pediatrics and Advocacy Program has promoted resident education and broader faculty development by introducing community pediatrics and advocacy topics into grand rounds, resident monthly core conferences, and other clinical rotations. Within the grand-rounds format, targeted legislative advocacy campaigns have proved to be an effective way to increase hospital-wide awareness of important topics and educate trainees, faculty, and staff about timely and effective advocacy. Together with a local community partner, residents create form letters to government officials that are distributed at grand rounds on child advocacy issues. Example advocacy campaigns have included mental health parity, substance abuse, and childhood lead poisoning. In the Appendix is an example of a self-directed advocacy project by an individual resident.

Faculty development in community pediatrics at the Children’s Hospital of Philadelphia has occurred by engaging faculty members from many subspecialty and intensive care services who then address community issues related to specific patients during rounds and didactic sessions with residents. Community pediatrics has been integrated with adolescent medicine and child development as those services have shifted from primarily diagnosis and treatment models to models that promote access to and integration of community resources into the care of patients and families. Community pediatrics training for residents merges with these 2 disciplines in two 1-month block rotations, child development and advocacy and adolescent medicine and advocacy, that occur during the first and second years, respec-
Community pediatrics education revitalizes the profession by involving pediatricians in the most important and difficult child health problems that exist today.

Departments of pediatrics and medical institutions benefit from the recruitment of high-quality resident trainees concerned about community health, a greater ability to teach and improve resident competency, the promotion of scholarly work by residents, an enhanced reputation for the institution within the community, faculty development across divisions, facilitated partnerships across departments, and improved patient and family satisfaction.

For residents and medical students, this training provides an important reconnection to interests and passions that may have led them to a career in medicine, advanced competencies in working with communities, and the acquisition of lifelong leadership skills relevant to careers in general and subspecialty pediatrics.

The communities in which residents train highly value the opportunity to influence and shape pediatricians at an early and formative stage of their careers. Communities benefit from enhanced service delivery, improved access to health care professionals, and positive synergy of ideas and opportunities associated with multidisciplinary collaborations.

Finally, community pediatrics training directly benefits children, adolescents, and their families. As defined by Palfrey et al., the millennial morbidity is now upon us. Only by training the next generation of pediatricians to tackle these childhood and adolescent morbidities will we improve the quality of life of our most vulnerable population: our children.

CONCLUSIONS

Rigorous residency training in community health and child advocacy will help fight the increasing effects of social and environmental risk factors on the health of children and adolescents. No single best-practice training model exists, nor should it, because each community and each residency training program is different in its resources and needs. Physician-community partnerships that capitalize on local strengths and focus on local issues will be effective and sustained. At a time when the health of children depends on collaboration, the sharing of strategies and lessons learned in community pediatrics training becomes particularly important. Published results from evaluations of some programs suggest that high-quality community pediatrics training will cultivate a cadre of pediatricians (academic and community based, generalists and subspecialists, researchers and practitioners) who understand child health in the context of community and have the leadership and collaborative skills to improve the health of children in their communities.

APPENDIX

[The following is an example of a self-directed advocacy project by an individual resident (B.A.)]

As a resident at the Children’s Hospital of Philadelphia, I mostly saw patients who were poor and minorities at my continuity clinic. Frequently, young children and infants presented with malnourishment resulting directly from drinking juice. During my 3 years I saw diarrhea, obesity, rickets, and even failure to thrive resulting from juice consumption. I was surprised to discover that much of this juice was distributed to these families free of charge through the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). These parents had seen nutrition counselors to obtain the beverage and universally believed that the juice was healthy for their children. Thus, when I was presented with the opportunity to pursue an advocacy project, I elected to petition the government to reduce the provision of juice as a dietary supplement for infants <1 year old.

What I discovered astonished me. In 1999, WIC spent $422 million on juice. I spoke on the telephone with the nutritionist from the nationally appointed committee responsible for determining what foods are given to poor families in the United States. At that time, there was no nurse, physician, or AAP representative on this committee. Although assuring me that they accepted advice from the AAP Committee on Nutrition, the nutritionist also informed me that juice was a necessary part of the breastfed infant’s diet, because exclusively breastfed infants are at risk for scurvy.

A quick literature search showed that breast milk easily meets infant requirements for vitamin C, even in mothers with scurvy themselves. I turned to the AAP. During an informative discussion with William Cochran, MD, a member of the AAP Committee on Nutrition, I lobbied him to consider limiting juice provision from WIC. Indeed, in 2001, the committee issued an AAP policy statement saying that juice should not be provided to children <6 months old. The minimum age for juice provision at WIC, however, remains 4 months. After failing to bring about change on a national level, I pursued getting the story told through some contacts at a few national television news centers. None were interested in the story.

A subdivision of the US Department of Agriculture, WIC cares for 2 million infants in the United States and spent almost 500 million dollars on juice in 2002. They still provide juice to children >4 months old. Clearly, WIC is a wonderful source of support to poor families, including breastfeeding advice and formula to those children who do not breastfeed. However, in this case, the evidence dem-
onstrates that provision of juice to these children is detrimental to their health.

As a result of this project, I have spoken frequently on the subject to faculty, residents, students, and politicians. More importantly, I have whetted my appetite for advocacy in pediatrics. Several small steps make a great leap forward, and through efforts such as these we can all improve the health of children in the United States.

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