



**CHILD PUBLIC HEALTH AND THE QUALITY OF
PREVENTIVE PEDIATRIC CARE**

Background Paper

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CHILD PUBLIC HEALTH AND THE QUALITY OF PREVENTIVE PEDIATRIC CARE

INTRODUCTION

Even though financial access to health care for children has been improved through Titles XIX and XXI, utilization of pediatric preventive care remains substantially below recommended levels. In addition, there are notable differences between the intended and actual content of preventive care, perhaps reflecting practitioners' greater comfort with medical than behavioral and social issues. Consequently, the quality of preventive care is variable and sometimes fails to meet the needs of children and families. The responsibility for ensuring both access to and quality of care is shared by the public and private sectors. In the public arena, the Maternal and Child Health Bureau (MCHB), part of the Health Care Services Administration, directly addresses the need to ensure the quality of preventive pediatric care. In the private sector, its principle partner is the American Academy of Pediatrics (AAP).

The long-standing partnership between the MCHB and the AAP has been mutually beneficial, productive, and successful in launching a variety of important child health initiatives such as Bright Futures, CATCH (Community Access to Child Health), Healthy Tomorrows, Pediatrics Collaborative Care Program, Breastfeeding Promotion in Pediatric Office Practice, the Medical Home project, and Healthy Child Care America. These programs all assist pediatricians to participate in activities that contribute to the improvement of health in their communities. These national initiatives have been successful in establishing structure and guidance to ensure or improve the quality of care. However, their ultimate success depends not on the national alliances they represent but on the effect they have on the behaviors of individual health care providers as they interact with individual children and families.

Research has found that most macro-interventions aimed at changing physicians behaviors (i.e., promulgation of clinical guidelines, publication of policy statements and practice standards) have only a modest effect on clinical practice. Successful interventions appear to operate at a more micro level. These interventions tend to be tailored to the individual practice, meet a perceived need, and provide peer-to-peer interaction and technical assistance—criteria easiest to meet when initiated by colleagues within communities. Consequently, partnerships between public health and pediatrics to promote good quality preventive child health care are most likely to succeed when they occur locally among the community's public health and child health care professionals.

BACKGROUND

Changing Patterns of Morbidity

Over the past several decades, improved access to health care and medical technology, the improvement of children's nutrition, and the reduction in the incidence of severe, acute infectious diseases have shifted the pattern of childhood morbidity. Chronic health problems and mental health problems have attracted greater attention,¹ bringing a heightened awareness of health care disparities,² of the importance of preventive care, and of the value of partnerships between public health and pediatrics.

Problems with Health Care Access

Over the past decade, more children have enrolled in states' Medicaid and SCHIP programs, and the number of children with health insurance coverage increased from 86.1 million in 1997 to 89.9 million in 2003. During that same interval, the rate of uninsured children decreased from 13.9 percent to 10.1 percent. Clearly, health insurance improves access to and utilization of health care services. Accordingly, some indicators of utilization, such as childhood immunization rates, have increased along with increasing insurance coverage. Still, in 2003, the most recent year for which data are available, a substantial number of children—more than 12 percent—had no reported health care use during the previous year.³ Most children see a physician during the course of a year, but many young children (38%) are not fully immunized.⁴ A recent national survey (National Survey of Early Childhood Health) found that while only 2 percent of children did not have a regular source of care, 54 percent did not have a usual provider of preventive care. That same study found that children who are publicly insured are less likely to have a medical home.⁵

Problems with Health Care Quality

Just as health insurance does not ensure access, and access does not ensure utilization, utilization does not ensure that children's health care needs will be appropriately met. Appropriate care means that the child and family receive all the care they do need and do not receive care they do not need. Although overuse of some services is a problem and contributes to the occurrence of medical errors, preventive and health promoting services tend to be insufficiently utilized. Surveys of parents of young children find that many have unmet needs for information and guidance regarding their children's health and development.⁶ Many parents of children on Medicaid (43%) report that their children's health care provider did not ask whether they have concerns about their child's learning, development, or behavior.⁷ Up to one-third of parents of young children are not asked about their children's speech and language development.⁸ A large proportion of young children do not receive a developmental assessment. Receiving this important service is

related to the source of care and to the amount of time devoted to preventive visits.⁹ Less than one-half of adolescents discuss health behaviors with their clinician,¹⁰ one-third of children with persistent asthma do not get a prescription for long acting medications to control their asthma,¹¹ and low-income children with sickle cell disease do not regularly receive antibiotics to help prevent serious infections.¹² Physicians are particularly unlikely to ask parents about the kinds of family and community health risks to which public health professionals ascribe great importance (e.g., having income to meet basic needs, having sufficient emotional and social support, the amount of violence in the community).¹³

Quality Assurance and Improvement

Clearly there is substantial room for improving the quality of children's preventive services. Good quality requires providing patients with appropriate services in a technically competent manner, with good communication, shared decision-making and cultural sensitivity.¹⁴ In addition, it has been characterized as care that increases desired health outcomes consistent with professional knowledge.¹⁵ In other words, quality means "doing the right thing at the right time in the right way for the right person and having the best results possible."¹⁶ For some time, quality was considered a reflection of the personal competence of the individual care provider and was often measured at this level. However, it is now understood that 1) the complexity of modern medical care exceeds the capacity of individual clinicians, and 2) the behavior of individual clinicians is strongly influenced by the systems in which they operate. How well clinicians can apply current professional knowledge depends not only on their memory and observational skills, but also on the ready availability of clinical information and on the communication among professionals and between clinicians and patients. It also depends on how desired clinical behaviors are reinforced and if barriers to such behaviors can be eliminated. Recent efforts to improve quality of care take this perspective, leading to the conclusion that **good quality care depends on the existence of effective systems of care that integrate the efforts of a variety of professionals, including public health professionals.** Since most child health care is provided in practice settings, it makes sense to implement quality improvement activities in those settings. Research has clearly shown that practices can change and, as a result, the quality of preventive services can be improved.^{17,18} However, there have been very few efforts to improve practice systems by integrating public and private sector health care.

OPPORTUNITIES AND EFFORTS TO IMPROVE QUALITY

The Committee on Quality Health Care in America of the Institute of Medicine (IOM) advanced the quality field by proposing six aims for health care improvement. It proposed

that health care should be *safe, effective, patient-centered, timely, efficient, and equitable*. Thus far, there has been little disagreement as to the need to improve the quality of care or that these six aims are reasonable. However, this framework has not been widely applied to improving children's health care.

Efforts to improve the quality of child health care are increasing, but in both the public and private sectors the field is nascent and lacks a coordinated and comprehensive strategy. Most quality improvement activities have been either very broad, encompassing more than one of the six aims, or very narrowly focused on single child health problems or procedures. High-cost and potentially high-profit procedures and care, which tend to be overused, garner the most attention, while lower cost and under-used preventive services tend to escape scrutiny. Contributing to this imbalance is the paucity of research on preventive care which has created a dearth of evidence of its effectiveness¹⁹ and a lack of advice on how it can be improved.

The public sector, motivated by the practical and political considerations of managing the Medicare program, has contributed to quality improvement efforts through advances in measuring health care processes and, to a lesser extent, health care outcomes. Following suit, state Medicaid programs have taken some initiative to measure the quality of care provided to enrollees who are children. Medicaid's efforts have focused on its EPSDT program and on preventive care for children. These efforts have largely been restricted to monitoring the provision of services, essentially a measure of access and utilization, rather than examining other aspects of quality.²⁰

Public health's attention to quality can be viewed through the prism of its three core functions: assessment, policy development, and assurance.²¹ Although each of these functions are related to achieving good quality of care, public health professionals rarely talk about or use the term "quality of care". On the other hand, pediatric clinicians are quite comfortable talking about quality of care, but have no appreciation of what is implied by public health's core functions. These distinctions are primarily semantic and not substantive, and bridging them is a readily achievable goal.

The foundations for collaborative activity to improve quality are present within the traditions and mission of child public health.²² The MCHB's Strategic Plan for 2003–2007 is clear about the responsibility of the Bureau "to provide national leadership, in partnership with key stakeholders, to improve the physical and mental health, safety and well being of the maternal and child health (MCH) populations...."²³ This statement speaks specifically to improving health status, but several of the goals and strategies relate

to improving the quality of care. For example, Goal five, “Assure Quality of Care,” includes the following key strategy: develop and promote health services systems designed to improve quality of care. At the federal level, MCHB has initiated a number of important projects that focus on improving quality of care by enhancing systems of care. Included among these are the Bright Futures projects, the State Early Childhood Comprehensive Systems initiative, activities relating to medical home, and, especially, the Healthy Tomorrows Partnership for Children Program. There is little information about quality improvement efforts initiated by individual state Title V programs or by local public health departments or agencies, though no doubt some efforts have been made. Public health quality improvement activities will take notably different forms when implemented at the federal, state, and local levels.

The private sector, represented by the AAP, has set a primary policy goal of ensuring that all children have access to health care. However, over the past several years, the organization has focused increasing resources on developing national initiatives to improve the quality of care that children receive.²⁴ This is in keeping with the stated mission of the AAP: to attain optimal physical, mental and social health and well-being for all infants, children, adolescents, and young adults. To achieve this goal of optimal health, the AAP has committed “to *improving the health care system* to provide the best and safest health care for infants, children, adolescents, and young adults.”²⁵

The AAP’s national activities include the eQIPP Program (Education in Quality Improvement for Pediatric Practice), promulgation of policy statements related to health care quality, and the Functional Outcomes Project. In addition, the AAP has liaison relationships with other organizations that focus on quality of care issues and has a steering committee on quality improvement and management. Other AAP quality improvement activities were initiated through efforts of pediatricians within state chapters and are limited to those states. In fact, the AAP is beginning the third year of a four-year federally funded effort, the Partnership for Quality program to improve care for children with ADHD by supporting the development of a quality improvement infrastructure in state chapters. In the second year of this project, the AAP worked with four chapters and 65 practices; all chapters were engaged, felt successful, and plan to continue the work. In the third year, the AAP will work with an additional six chapters.

CONGRUENT MISSIONS TO IMPROVE CHILD HEALTH CARE QUALITY

Historically, a false dichotomy of population care versus personal/individual care has sustained a divide between public health and private sector health care. Barbara Starfield commented that, “The long history of unstable coexistence between public health and

private medicine has not been conducive to maximizing the health of the U.S. population.”²⁶ She suggested that the “special health care disadvantage of infants and children in the United States may be reversed or mitigated by policies aimed at explicit linkages between public health and private health systems.” The growing body of research on the social determinants of child health shows that, by failing to collaborate, the public and private health care sectors are preventing progress in improving the systems of care and the health of children and their families.²⁷

Opportunities for collaborations between public health and private sector medicine were actively explored a decade ago in a joint project of the American Medical Association and the American Public Health Association and summarized in *Medicine and Public Health: The Power of Collaboration*.²⁸ Although that project spawned some continuing activities between the organizations, child health issues have not received much attention. The framework that was adopted for this collaboration had a strong focus on preventive services and procedures, with several recent examples of public and private collaborations around immunizations, SCHIP and bioterrorism. However, the framework did not emphasize promoting health and well-being, a topic that is central to the missions of both the MCHB and the AAP.

The mission statements of the MCHB and the AAP are strikingly similar, and although their approaches to their missions differ, they are complementary and sometimes overlap. The mission of both the MCHB and the AAP are to improve/attain physical, mental and social health (i.e., well-being) for infants, children, and adolescents. The MCHB also explicitly addresses the health of families. The congruence of the missions of the two organizations provides a strong policy foundation for collaboration among these two leaders in child health.

The MCHB and the AAP share a great interest in and responsibility for the quality of preventive health care for children, including developmental services. Public health has a special interest in ensuring that children receive appropriate preventive health care, while child health care providers, including pediatricians, family physicians, and pediatric nurse practitioners, have the clinical responsibility for providing those services. In some settings and circumstances, public health has assumed a direct role for providing personal medical care services, usually to the poorest segment of the population. Given the relative lack of interest in preventive pediatric services by other agencies or organizations, this area is fertile ground for collaboration between the MCHB and the AAP, not only to improve quality but to explore and implement a basic reformulation of goals and objectives, content and processes.

The mission of the American Academy of Pediatrics is to attain optimal physical, mental, and social health and well-being for all infants, children, adolescents, and young adults. To this purpose, the Academy and its members dedicate their efforts and resources.

The mission of the Maternal and Child Health Bureau is to provide national leadership, in partnership with key stakeholders, to improve the physical and mental health, safety and well-being of the maternal and child health population, which includes all of the nation's women, infants, children, adolescents, and their families, including fathers and children with special health care needs.

ALL QUALITY IS LOCAL

A partnership between the MCHB and the AAP is necessary but not sufficient to improve preventive pediatric care. Past and current collaborations between these two entities have yielded policy statements, guidance and guidelines, technical assistance, credentialing and certification, and a plethora of other national activities. However, those efforts have had an impact on children's health and development only to the extent that they affected the clinical care of individual children and families. And the clinical care of children and families occurs in individual clinics and practices within communities.

If important child health outcomes are dependent upon the clinical care that is provided by individual child health care providers, it makes sense to target collaborative efforts specifically to influence local child health care practices. Consequently, **only when local partnerships between MCH and child health care professionals are formed will the full potential of the collaboration between public health and medicine to improve preventive pediatric care be achieved.** What would such partnerships look like and what would they do to improve quality? While previous work has examined the responsibilities of doctors for the health of the public,^{29,30} the role of public health professionals in improving the quality of individual patient care has not been as fully explored.

Local public health providers have a great deal to offer child health care practices in their communities, but their potential contribution is limited by their historical roles. Since public health has not focused on quality improvement, local child public health professionals are likely to be uncertain of how they can contribute to quality improvement in clinical settings and wary of assuming new responsibilities in this unfamiliar territory. In addition, though public health professionals have seen themselves as serving their

communities and community providers, public health's past roles have largely focused on issues they have identified themselves. Developing fruitful, ongoing partnerships with child health care providers that focus on improving the quality of preventive care would be a new and challenging undertaking for all parties involved.

There is little information on the current status of local partnerships between child health care practices and community public health services. Evaluation of the Healthy Tomorrows program has provided encouraging news, but that program consists of discrete projects and does not explicitly focus on widespread systems change.³¹ Title V Block Grant applications may include local liaison relationships in their appendices, but the data has not been analyzed. One small study from Iowa—a survey of primary child health care providers—found that only 3.9 percent of providers had formal relationships with public health agencies, 57.9 percent had informal relationships, and 38.3 percent have no relationships or an ill-defined one. That same survey found that 90.2 percent of providers rarely or never made referrals to public health (Personal communication, M. Gelhaus). Clearly there are bridges to be built.

If the quality of preventive health care services for children is to be improved, public health and private medicine will need to form collaborative relationships at the community level. Existing national level collaborations should continue, but they also should be designed to promote and support local partnerships. Table 1 lists some of the existing or potential partners at each of three levels—national, state, and community.

Table 1. Potential Partners to Improve Child Health Care Quality

National Partners

Maternal and Child Health Bureau
American Academy of Pediatrics
American Academy of Family Physicians
American Academy of Pediatric Dentistry
CityMatCH
National Committee for Quality Assurance
Centers for Medicare and Medicaid Services
Centers for Disease Control and Prevention

State Partners

Title V Programs: Maternal & Child Health and Children with Special Health Care Needs
State chapter of the American Academy of Pediatrics
State chapter of the American Academy of Family Physicians
Medicaid
Managed care organizations and insurers
Extension services
Area Health Education Centers
Health professional education programs
Academic medical centers

Local Partners

Public health agencies
City and county health departments
Public health agencies
Community health centers
Private child health care practices
Parents
Academic medical centers

**A QUALITY OF CARE FRAMEWORK FOR PUBLIC HEALTH
AND MEDICINE**

The IOM's six aims of health care provide a useful framework on which to build local public-private partnerships to examine and improve child health care. There is no single document that provides a comprehensive picture of the current quality of child health care in each of the six domains. Currently, the best source is a chartbook sponsored by The Commonwealth Fund.³² While that document provides data in each of the six domains, it does not draw conclusions for them. However, it would be fair to conclude that there is substantial room for improvement in each of the domains.

The IOM framework could be used to begin identifying opportunities for public–private partnerships around preventive health care. The following three questions can help identify opportunities:

1. What is known about the quality of preventive health care for children in each domain?
2. What are the barriers to achieving better quality in each domain?
3. What are the complementary and/or shared roles and skills of public health and medicine to address these barriers?

Completing the table below would be a good first step toward designing local collaborations between public health and child health practices to improve the quality of preventive care services for children.

Table 2. Addressing the Quality of Preventive Health Care for Children

| Domains of Quality | Current Quality | Barriers to Quality | Private Medicine’s Role | Public Health’s Role |
|---------------------------|------------------------|----------------------------|--------------------------------|-----------------------------|
| Timely | | | | |
| Effective | | | | |
| Efficient | | | | |
| Safe | | | | |
| Patient-centered | | | | |
| Equitable | | | | |

NEXT STEPS TOWARD COLLABORATION

Although completing the above table could help focus future collaborative efforts, the following activities should proceed at the same time:

1. The MCHB and AAP should develop and publish a shared vision statement of an integrated health care system to improve the quality of preventive care for children. They also should outline the respective roles and responsibilities of public health and medical care in an integrated system.
2. The MCHB and AAP should convene a joint meeting to discuss current collaborative activities and how such activities might be modified to focus on quality improvement at a local level. Other potential collaborators (e.g., American Public Health Association, CityMatCH, Association of State and Territorial Health

Officers, American College of Preventive Medicine, and the National Association of City and County Health Officers) might be invited to participate.

3. The MCHB and AAP should identify and support the development of new approaches for local public health agencies and child health care practices to improve the quality of preventive care in child health practices.
4. The MCHB should encourage Title V agencies to explore ways to better communicate and partner with other state-level agencies, organizations ,and programs around the issue of quality of preventive care for children.
5. The MCHB and the AAP should collaborate to produce and disseminate standards and care protocols for preventive pediatric care, including developmental services.

NOTES

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