

Surveillance and Screening for Social Determinants of Health

The Medical Home and Beyond

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Social determinants—the circumstances in which people live and work-powerfully affect health. In fact, social and environmental factors are estimated to have twice the impact of quality health care on the overall health of an individual. Research in such diverse fields as epidemiology, neuroscience, genomics, and molecular and developmental biology is advancing our understanding of how social risk factors, manifesting as toxic stress, get "under the skin" of vulnerable children via epigenetic changes and disruptions to key physiological and neurocognitive pathways. For example, the Adverse Childhood Experiences Study demonstrated strong associations between childhood maltreatment and laterlife health and well-being. Hertzman described the profound, long-term influence of the "biological embedding of early experience."2 Mitigating the effect of harmful social determinants is critical for promoting the optimal health and development of children throughout their life span.

Beginning with Abraham Jacobi, MD, leaders in the field of pediatrics have recognized that addressing the social needs of a child and family is key to promoting child health and within the purview of the pediatrician. Bright Futures Guidelines for Health Supervision and numerous American Academy of Pediatrics policy statements support this concept and are published in hopes of informing this practice. Yet, studies suggest that few pediatricians routinely address social determinants of health.³ Barriers include lack of time, training, and knowledge of community resources.

Unfortunately, professional guidelines offer little guidance on how best to identify families' social risk factors as well as what to do when a social need is identified. As a result, the pediatrician may be understandably overwhelmed by the challenge of addressing the social circumstances of his or her patients' lives during a typical 15-minute visit. We recall a similar challenge that previously discouraged pediatricians' efforts to engage in the early detection of developmental concerns and problems. In the latter decades of the last century, advances in our understanding of early brain and child development encouraged early detection and intervention for children at risk for adverse developmental outcomes. However, how to best perform such early detection and ensure linkage to developmentally enhancing programs and services was unclear. In 2006, the American Academy of Pediatrics policy endorsing the process of developmental surveillance and screening as optimal practice for early detection, as well as the concurrent design of systems supporting the linkage of vulnerable children and their families to communitybased programs and services, strengthened pediatric practice and early detection efforts. Surveillance is defined as a flexible, longitudinal, and continuous process whereby knowledgeable professionals perform skilled observations during the provision of health care. Screening refers to the administration of a brief, standardized tool to identify children at risk for a developmental disorder. We suggest that, analogous to the changes during the past decade in policy and practice for the early detection of developmental concerns, the process of surveillance and screening may similarly be effectively applied to the identification of social determinants of health. Although child development is a process and social determinants are conditions, both may quickly and frequently change and therefore deserve ongoing and timely assessments through surveillance and screening. Based on our experiences in promoting children's healthy development, we believe that a comprehensive system that successfully engages vulnerable families and facilitates referral and linkage to community resources is critical to mitigating the adverse effect of social determinants. We therefore propose a new conceptual framework for addressing social determinants within and beyond the medical home.

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In 1989, one of us (P.H.D.) reviewed British and American recommendations for developmental monitoring and reconciled the differences in approaches by advocating for a comprehensive, integrated process described as surveillance and screening. Key surveillance components are readily adaptable to the identification of social determinants, including the following: (1) eliciting and attending to parents' concerns; (2) documenting and maintaining a social history; (3) skillfully and longitudinally observing parent-child interactions; (4) when concerns arise, soliciting input from others familiar with the child (eg, home visitors, child care providers); and (5) identifying risk (eg, parental discord) and protective (eg, social supports) factors.

Almost 20 years ago, Kemper and Kelleher⁴ recommended screening for global family factors that affect child health as part of routine pediatric care. Our prior randomized clinical trials demonstrated the positive effect of such screening on detection of multiple social determinants at visits and successful referrals of vulnerable families to community-based resources.⁵

Based on our collective experiences, we suggest the following guiding principles in implementing routine surveillance and screening for social determinants

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during pediatric care. First, surveillance, as previously described, should be performed at all pediatric visits. The identification of social needs via surveillance should, similar to surveillance for developmental concerns, trigger a referral to appropriate community resources. Second, screening with a validated tool should be performed when such ongoing surveillance detects a concern that requires further clarification, during initial intake with new families, with a newborn within the first 6 months of life, and periodically (eg, annually) at well-child care visits, since families' needs change over time. Third, global screening tools (eg, WE CARE survey, Pediatric Intake Form, SEEK parent screening questionnaire) may be used to identify basic needs such as food, housing, or employment, while specific screening tools may be used to identify sensitive family psychosocial issues such as maternal depression and intimate partner violence. Fourth, screening should be tailored to social determinants that are the most relevant to a family's context and, as such, to issues deemed most relevant to the community served by the medical home. 6 Surveillance and screening are especially important in early childhood because this is a particularly sensitive period for the developing brain.

Integrating the Medical Home With Community-Based Resources: Creating a Health Neighborhood

To effectively address social determinants, we suggest that the medical home concept be expanded to a health neighborhood, in which clinical practice is linked to community-based programs and services. Based on our experience, we believe in the feasibility and

applicability of such strategies as centralized access (eg, information and referral systems), care coordination, home visiting, and interagency collaboration and communication to address the social needs of children and their families. Dedicated staff such as community health workers, patient navigators, lawyers, and volunteers embedded in the medical home can facilitate families' linkages with available community programs.

Conclusions

Given the important role for pediatricians, by virtue of their unique access to young children and families and their potential capacity to mitigate the effect of adverse social determinants on children's health, we suggest the application of the process of surveillance and screening to the detection of and intervention for adverse social determinants. We are not suggesting that pediatricians do more, but rather they "do different" by applying the tools and support necessary to exert a greater effect on families' social circumstances. Detection of adverse social determinants must be viewed within the context of an evolving, comprehensive childhood system that ensures that early detection leads to referral and linkage to communitybased programs and services. Integrating the medical home with community-based resources within a health neighborhood will support families in addressing unmet social needs. Surveillance and screening for social determinants and ensuring families' linkage to community-based programs and services deserve consideration as a strategy to promote children's optimal health and development in the 21st century.

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