ONLINE FIRST

Addressing the Social Determinants of Health Within the Patient-Centered Medical Home

Lessons From Pediatrics

Arvin Garg, MD, MPH

Brian Jack, MD

Barry Zuckerman, MD

OCIOECONOMIC DISPARITIES IN HEALTH CONTINUE to exist, despite advances in medicine.1 Since the classic Whitehall studies, it has been well known that the social context in which an individual lives and works influences health.^{2,3} Mitigating the harmful consequences of social factors that contribute to health disparities has largely been left to the public health and policy communities, whereas clinical medicine has traditionally focused on identifying and reducing biological risk factors for an individual patient. The patient-centered medical home (PCMH), however, offers an important opportunity to promote population health through systematically addressing the social determinants of health.

Pediatrics first developed the concept of the medical home⁴ and continues to evolve clinical practice aimed at addressing social determinants because of children's exquisite vulnerability to the deleterious effects of the social and physical environment, especially the aggregation of social factors associated with poverty. Many programs that affect social risk have been demonstrated to be effective in pediatric practice; PCMHs under the accountable care organization model can accelerate the delivery of such innovative services that include new financial models designed to provide incentives for the adaptation to adult populations. Adaptation of such programs within the PCMH can be implemented in a variety of ways that will provide important data about what types of services best improve population health.

The following suggestions based on pediatric guidelines and practices can be used to inform the development of transformative PCMHs designed to address the social context of patient care, especially those PCMHs serving low-income populations.

Make Addressing the Social Determinants of Health a Key Tenet of Clinical Guidelines

Bright Futures pediatric guidelines are used by pediatricians to determine which tasks to perform at regular health

©2013 American Medical Association. All rights reserved.

supervision visits and emphasize the importance of viewing the child in the context of the family and community.⁵ Numerous American Academy of Pediatrics policy statements, including ones on the medical home, child maltreatment, early childhood adversity, and community pediatrics, stress the influence that social risk factors have on children's health, along with the role pediatricians have in ameliorating them. Emphasizing these and similar factors in adult guidelines may further enhance physicians' awareness of the importance of addressing social determinants within the PCMH.

Screen for Social Determinants at Medical Visits

Primary care screening strategies have been developed for specific psychosocial issues such as substance abuse, maternal depression, and intimate partner violence. There is emerging evidence that similar screening for basic unmet material needs (eg, food, employment, benefits, education) at pediatric visits can increase physician referrals and family contact with community resources.6 The PCMH offers new opportunities for monitoring the basic unmet needs of vulnerable adults, particularly the elderly, and linking them to community services.

Colocate Community-Based Resources in the PCMH

Colocation of community-based resources such as WIC (Special Supplemental Nutrition Program for Women, Infants, and Children) is commonplace in urban pediatric clinics. Colocation within PCMHs can address transportation difficulties, streamline community services for patients, increase patient satisfaction, and provide improved access to and more appropriate use of social services. Opportunities exist to broaden the type of community-based services (eg, housing programs, job training centers, GED [General Educational Development] programs, food pantries) needed

Author Affiliations: Departments of Pediatrics (Drs Garg and Zuckerman) and Family Medicine (Dr Jack), Boston University School of Medicine, Boston Medical Center, Boston, Massachusetts.

Corresponding Author: Arvin Garg, MD, MPH, Department of Pediatrics, Division of General Pediatrics, Boston University School of Medicine, Boston Medical Center, 88 E Newton St, Vose Hall Third Floor, Boston, MA 02118 (arvin.garg by adult patients, particularly in PCMHs serving low-income populations. These types of programs can affect social determinants, but ultimately their adoption and spread will likely be based on their own funding and the potential to create synergy with the health care system.

Develop "Outside the Box" Multidisciplinary Primary Care Interventions

Learning problems among low-income children are being addressed by programs such as the Reach Out and Read program that extended standard counseling by pediatricians to include giving parents books to take home to read to their children. Studies have shown that Reach Out and Read increases parental reading and improves children's language skills.8 Currently, Reach Out and Read reaches more than 25% of impoverished children in the United States.8 The medical-legal partnership model embeds legal services within the pediatric and some adult health care settings to address common legal needs of families (eg, housing conditions, food security, personal safety) that impair health. Health Leads is a pediatric care-based model that places volunteer undergraduate students in the waiting rooms of urban clinics to connect families having unmet basic needs with available community resources. Leveraging new visual media using visual simulation instead of verbal explanations, along with smartphone monitoring or communication, may also enhance patient wellness behavior, not as a stand-alone measure but as part of clinical care. Overall, PCMHs offer the opportunity (and, very importantly, the financial incentive) to address social determinants with "outside the box" interventions, multidisciplinary care teams, and technologically advanced health education efforts.

Integrate Home Visiting Programs With the PCMH

Home visiting programs could play an important adjunct role in assisting physicians address their patients' social determinants beyond the walls of the PCMH. A primary goal of these pediatric programs is to promote child development and parenting skills and assist parents with specific needs such as school enrollment, employment, and accessing social safety net programs. Home visits provide nurses and other paraprofessionals with a better understanding of the child's living conditions. Although nurse home visitation programs are also used in the geriatric population, their primary goal is to maintain or improve the functional status of the elderly, not necessarily to directly address social determinants. Because many of these determinants likely contribute to the readmission of elderly and chronically ill patients, home visitation may become an important costsaving investment. The "population management" function of the PCMH not only provides the opportunity to care for those patients who access medical services in primary care offices but also expands the scope of care to patients who do not make office visits. New models of care are now rapidly being developed to address this fundamental aspect of health care.

Conclusions

To further promote the health and well-being of adults and the elderly, pediatric programs such as those described above could be both selectively and systematically integrated within the PCMH to address the social determinants of health. The current climate offers health care systems an opportunity to design, implement, and study the effects of these programs. If these programs could be shown to improve population health and help to control costs in ways such as reducing hospital admission and readmission, among other important outcome measures, then broad dissemination can occur. In some cases the cost for these programs would be covered entirely or in part by public or other funds (eg, food pantries, medical-legal partnership), and the challenge is to integrate them into health care. Once shown to be effective, indicators related to the social determinants of care, including process and outcome measures, can then become part of the pay-for-performance and quality evaluation metrics of PCMHs.

Addressing social determinants of health within the PCMH represents a high-value benefit to the health care system and has the potential to reduce the long-standing socioeconomic disparities in health that continue to persist.

Published Online: April 25, 2013. doi:10.1001/jama.2013.1471

Conflict of Interest Disclosures: The authors have completed and submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest. Dr Garg reported receiving grants from the Eunice Kennedy Shriver National Institute of Child Health and Human Development and the Charles H. Hood Foundation. Dr Jack reported receiving grants from the Agency for Healthcare Research and Quality, the Patient-Centered Outcomes Research Institute, and the National Institute on Minority Health and Health Disparities; and receiving lecture honoraria and royalties for work outside the scope of this article. Dr Zuckerman reported no disclosures.

Additional Contributions: We would like to thank Webb Long, MD (Department of Pediatrics, Boston University School of Medicine, Boston Medical Center, Boston, Massachusetts), and Priya Sinha Garg, MD (Department of Pediatrics, The Floating Hospital for Children at Tufts Medical Center, Boston), for their feedback and comments on the manuscript draft. Neither of these individuals received any compensation for their contributions.

FERENCES

- 1. Marmot MG. Policy making with health equity at its heart. *JAMA*. 2012; 307(19):2033-2034.
- 2. Marmot MG, Rose G, Shipley M, Hamilton PJ. Employment grade and coronary heart disease in British civil servants. *J Epidemiol Communith Health*. 1978; 32(4):244-249.
- 3. Smith GD, Stansfeld S, et al. Health inequalities among British civil servants: the Whitehall II study. *Lancet*. 1991;337(8754):1387-1393.
 4. Sia C, Tonniges TF, Osterhus E, Taba S. History of the medical home concept.
- Sia C, Tonniges TF, Osterhus E, Taba S. History of the medical home concept. Pediatrics. 2004;113(5)(suppl):1473-1478.
- 5. Hagan JF, Shaw JS, Duncan PM. *Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents.* 3rd ed. Elk Grove Village, IL: American Academy of Pediatrics; 2008.
- **6.** Garg A, Butz AM, Dworkin PH, Lewis RA, Thompson RE, Serwint JR. Improving the management of family psychosocial problems at low-income children's well-child care visits: the WE CARE Project. *Pediatrics*. 2007;120(3):547-558.
- 7. Powell Davies G, Harris M, Perkins D, et al. Coordination of Care Within Primary Health Care and With Other Sectors: A Systematic Review. Sydney, Australia: Research Centre for Primary Health Care and Equity, School of Public Health and Community Medicine, University of New South Wales; 2006.
- **8.** Zuckerman B. Promoting early literacy in pediatric practice: twenty years of Reach Out and Read. *Pediatrics*. 2009;124(6):1660-1665.

©2013 American Medical Association. All rights reserved.

E2 JAMA, Published online April 25, 2013