

According to the US Department of Health and Human Services, “Social determinants of health (SDOH) are the conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks.”

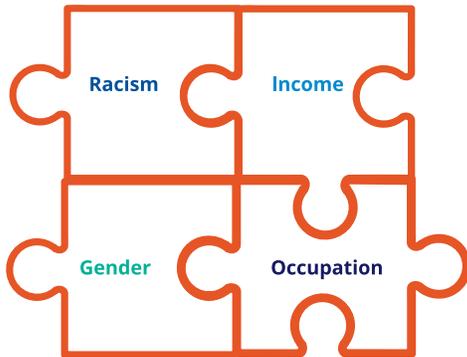
SDOH can be grouped into five domains:



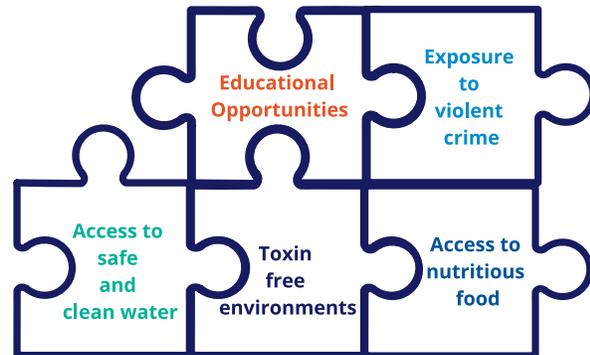
Multidisciplinary research on the impact of SDOH — including poverty, racism, and adverse childhood experiences (ACEs) — on health outcomes has led to a groundbreaking shift in our understanding of maternal and child health. For example, children exposed to psychosocial stimuli which result in frequent or sustained activation of stress responses are at greater risk of a range of physical and socio-emotional outcomes throughout their lifespans (including asthma exacerbations, obesity, cardiovascular disease, mental health disease, behavior disorders). Moreover, chronic exposure to these factors in critical periods such as infancy, childhood, and adolescence results in toxic stress which can lead to potentially permanent changes in the developing brain. These physiologic changes have been linked to delayed achievement of early developmental milestones, decreased educational attainment and decreased ability to cope with subsequent stressors.

Below are examples of both *intangible* and *place-based conditions* that can contribute to SDOH:

Intangible factors that contribute to SDOH



Place-based conditions that contribute to SDOH



The Importance of SDOH Screening

Increasingly, states and communities — along with health-care systems, clinicians and insurers — are seeking to proactively implement strategies to promote health and reduce health inequities. This includes taking steps to assess social needs at both the patient and population-health levels. The American Academy of Pediatrics (*Bright Futures* guidelines recommends a maternal depression screen postpartum and regular screenings for SDOH), the American College of Obstetrics and Gynecology (*Women's Preventative Service Initiative* recommends ongoing screens for anxiety and interpersonal violence), the American College of Physicians, and the American Academy of Family Physicians are just a few of the organizations that endorse the importance of screening for SDOH.

Screening and the Family Connects Model

The Family Connects nurse uses a proprietary *Family Support Matrix* to assess the family across 12 factors that are empirically linked to maternal, family, and child health and well-being. Each factor reflects: 1) health and psychosocial risk factors in early childhood; 2) parenting concerns about caring for a newborn; and 3) family needs for which the nurse makes recommendations and referrals to community resources.

This visit covers the following relevant to psychosocial and health factors:

- A systematic discussion about the family's supports, strengths, vulnerabilities and needs.
- Postpartum and infant health assessments.

- Reinforcement of connection to the medical home for caregiver and infant to reduce unnecessary emergency department visits.
- Breastfeeding support.
- Screening for SDOH and ACEs through nurse query regarding mental health history, substance use history, previous parenting history, interpersonal violence exposure, incarceration of parent or partner, history of abuse/neglect and involvement of Child Protective Services as a child or adult.
- Perinatal mood disorder screening.
- Postpartum care, including scheduling postpartum appointment as needed.
- Tobacco cessation referrals.
- Safe sleep practices and Sudden Infant Death Syndrome (SIDS) prevention.
- Caregiver-child interaction assessment and coaching.
- Intimate partner violence screening and referrals.
- Assistance with obtaining health insurance coverage/Medicaid, child care, and social services.
- A collaborative plan for recommendations and referrals to community services as identified by the nurse visitor and caregiver(s).

With patients' consent, the medical provider will receive a post-visit report after the Family Connects visit that details the identified risks and referrals. Providers have an important role to play in this partnership because they will follow up with the family at their next medical appointment. Needs can change over time and the family may have new psychosocial needs that can be identified via physician screening for SDOH.

Conclusion

Health is more than just physical health. The WHO defines health as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition.”

While screening and referrals in the postpartum period cannot resolve many of the complex and long-standing intangible and structural health inequities, the Family Connects model can help communities ensure that comprehensive care — care that encompasses the behavioral, emotional and social needs of families, in addition to physical health — is being addressed.

There is significant work to be done to build a bright future for families and communities and we look forward to continuing to support efforts at the local and national level.

Sources:

Advancing Health Equity by Addressing the Social Determinants of Health in Family Medicine (Position Paper). Accessed June 11, 2021. <https://www.aafp.org/about/policies/all/social-determinants-health-family-medicine.html>.

Chen E, Miller GE. Stress and inflammation in exacerbations of asthma. *Brain Behav Immun*. 2007;21(8):993-999. doi:10.1016.

Committee on Health Care for Underserved Women. ACOG Committee Opinion No. 729: Importance of Social Determinants of Health and Cultural Awareness in the Delivery of Reproductive Health Care. *Obstet Gynecol*. 2018;131(1):e43-e48. doi:10.1097/AOG.0000000000002459.

Daniel H, Bornstein, SS, Kane GC. Addressing Social Determinants to Improve Patient Care and Promote Health Equity: An American College of Physicians Position Paper. *Annals of Internal Medicine*. 2018; doi.org/10.7326/M17-2441.

Gundersen C, Mahatmya D, Garasky S, Lohman B. Linking psychosocial stressors and childhood obesity. *Obes Rev*. 2011;12(5):e54-e63. doi:10.1111/j.1467-789X.2010.00813.x

Felitti VJ, Anda RF, Nordenberg D, et al. Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. The Adverse Childhood Experiences (ACE) Study. *Am J Prev Med*. 1998;14(4):245-258.

Hagan JF, Shaw JS, Duncan PM, eds. Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents. Fourth edition. *Bright Futures/American Academy of Pediatrics*; 2017.

U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Healthy People 2030. Retrieved July 6, 2021, from <https://health.gov/healthypeople/objectives-and-data/social-determinants-health>.

Johnson K, Willis D, Doyle S. Guide to Leveraging Opportunities Between Title V and Medicaid for Promoting Social-Emotional Development. Center for the Study of Social Policy and Johnson Group Consulting, Inc. 2020. Available here: www.cssp.org/resource/guide-to-leveraging-title-v-medicaid-report.

Poulton R, Caspi A, Milne BJ, et al. Association between children's experience of socioeconomic disadvantage and adult health: a life-course study. *Lancet* (London, England). 2002;360(9346):1640-1645. doi:10.1016/S0140-6736(02)11602-3

Schilling EA, Aseltine RH, Gore S. Adverse childhood experiences and mental health in young adults: a longitudinal survey. *BMC Public Health*. 2007;7(1):30. doi:10.1186/1471-2458-7-30

Wilson SM, Sato AF. Stress and paediatric obesity: What we know and where to go. *Stress Heal*. 2014;30(2):91-102. doi:10.1002/smi.2501.