

MODULE 3

Pediatric Care Coordination Curriculum

Social Determinants of Health

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*Dr. Fleegler is a consultant to Veta Health. Otherwise, the authors have no conflicts of interest to disclose. 2 » Module Overview

4 » Facilitator Guide-Slide Deck

13 » Case-Based Learning

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Social Determinants of Health (SDoH)

Module 3-Objectives and Learning Goals

By the end of this session, participants should be able to:

- · Understand what social determinants of health and health disparities are.
- · Understand how social conditions influence health.
- · Recognize 5 core health-related social needs for screening and referral with implications for care coordination.
- · Understand the importance of bias and health equity.
- · Recognize some innovations aimed at addressing social determinants of health.

Note to the facilitator:

This module includes a didactic portion, a set of tools and resources, case studies, worksheets, and suggested literature.

Please be aware that it is crucial to include local-, state-, and region-specific content if this module is being implemented.

found in the module indicates places where the authors specifically call out the need for local content, but facilitators should feel free to include local content wherever they see fit. Local content includes, but is not limited to, the following:

- · Cultural aspects of community (including assets, vulnerabilities, and language)
- Sociodemographic factors
- Geography
- · Local, state, and regional resources

This module aims to assist learners in operationalizing the concepts related to social determinants of health, providing effective training to staff to deliver traumainformed care and using language that does not alienate.

Two tables are included below. The first is a high-level agenda of the module. The second is the Facilitator Guide that includes a breakdown of slide content and talking points. The facilitator should use the guide as a resource to tailor the training.

The curriculum is intended to be customized to fit the training needs of different audiences. Therefore, content from this module can be selected and incorporated into the training. However, a suggested agenda for implementing this module as a stand-alone is included.

Module Overview

The Pediatric Care Coordination Curriculum is offered for educational purposes only and is not meant as a substitute for independent medical judgment or the advice of a qualified physician or health care professional. Users who choose to use information or recommendations made available by the Pediatric Care Coordination Curriculum do so at their own risk and should not rely on that information as professional medical advice or use it to replace any relationship with their physicians or other qualified health care professionals.

Agenda Item	Time	Materials Required	Instruction/Notes
Presentation	45-60 min	PowerPoint slide deckComputerProjector	Learners may follow along using the PDF of the slide deck, which can be viewed on a laptop, tablet, or smartphone.
Case vignettes and group discussion	45-60 min	Case studies	The case studies can be found at the end of this Facilitator Guide. They can be printed or viewed on a laptop, tablet, or smartphone.

Orientation to the Module

Social determinants of health (SDoH) are the conditions in which people are born and live, learn, work, play, and age. SDoH are mostly responsible for health disparities—the higher burden of illness, injury, disability, or mortality experienced by one population group relative to another. Health equity is the opportunity for people to attain their full health potential without disadvantage because of social position or circumstance. SDoH, health disparities, and health equity are central themes of Module 3.

Learners may come to Module 3 with varying levels of understanding, comfort, and enthusiasm regarding the material. The authors have found that taking an inclusive approach that welcomes all viewpoints facilitates open discussion and perspective sharing. Including pieces of local information, resources, and contacts may help to complement the core material provided here.

Works Cited

- Promoting lifelong health for families and communities. In: Hagan JF, Shaw JS, Duncan PM, eds. Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents. 4th ed. Elk Grove Village, IL: American Academy of Pediatrics; 2017:15-40 https://brightfutures.aap.org/Bright%20Futures%20Documents/BF4_LifelongHealth.pdf
 Accessed June 3, 2019
- 2. Social Determinants of Health. https://www.who.int/social_determinants/sdh_definition/en/Accessed June 3, 2019

Abbreviations

ACEs - adverse childhood experiences

ADHD - attention deficit hyperactivity disorder

AAP - American Academy of Pediatrics

CDC - Centers for Disease Control and Prevention

CHW - community health worker

CMS - Centers for Medicare & Medicaid Services

HRSNs - health-related social needs

MIECHV - Maternal, Infant, and Early Childhood Home Visiting Program

PN - patient navigator

SDoH - social determinants of health

WHO - World Health Organization

SLIDE 1 » Title Slide atric Care Coordination Curriculum: Module 3 SOCIAL DETERMINANTS OF HEALTH Boston Children's Hospital W HARVARD IN TEACHING I **SLIDE 2 »** Educational Purpose Only-No Medical Advice The Pediatric Care Coordination Curriculum is offered for Educational Purposes Only educational purposes only and is not meant as a substitute for No Medical Advice independent medical judgment or the advice of a qualified physician The Pediatric Care Coordination Curriculum is offered for educational purposes only and is not meant as a substitute for independent medical judgment or the advice of a qualified or health care professional. Users who choose to use information or recommendations made available by the Pediatric Care Coordination physician or health care professional. Users who choose to use physicial or fleating transportations made available by the redistrict Care Coordination Curriculum do so at their own risk and should not rely on that information as professional medical Curriculum do so at their own risk and should not rely on that information as professional medical advice or use it to replace any advice or use it to replace any relationship with their physicians or other qualified health care professionals. relationship with their physicians or other qualified health care professionals. Boston Children's Hospital W HARVARD MEDICAL SCHOOL TEACHING HOSPITAL **SLIDE 3 »** Authors **Authors** · Clement Bottino, MD, MPH • Linda Sprague Martinez, PhD · Geoff Wilkinson, MSW • Eric Fleegler, MD, MPH* • Hannah Rosenberg, MSc · Richard Antonelli, MD, MS, FAAP * Dr. Fleegler is a consultant to Veta Health. Otherwise, the authors have no conflicts of interest to disclose.

Boston Children's Hospital W TEACHING

Learning Goals

- 1. Understand **what** social determinants of health and health disparities are.
- 2. Understand how social conditions influence
- 3. Recognize 5 core health-related social needs for
- 4. Understand the importance of bias and health
- Recognize some *innovations* aimed at addressing social determinants of health.





SLIDE 4 » Learning Goals

The goal of Module 3 is to provide an overview of SDoH and explain how they impact the implementation of care coordination activities. Addressing SDoH has the potential to improve health outcomes and enhance family engagement and experience of care. Clinicians should practice trauma-informed care, address unconscious biases, and strive for health equity. Application of these techniques also has the potential to support care team member wellness.

Facilitation Technique

Learners may feel reluctant to engage with the concepts presented in Module 3. They may have concerns about how and why health care should take on social issues. Individual political stances or personal identifications may also affect the dynamics of the learning environment. The authors have found that SDoH-learning audiences are often divided into groups of thirds: one-third may already feel on board (ie, engaged, enthusiastic, or perhaps concerned with social justice); one-third may feel resigned (ie, disengaged or perhaps feeling that SDoH are "not my problem" or "that's just the way things are"); and one-third may feel resistant (ie, antagonistic toward the material or perhaps feeling that it represents a liberal agenda). These divisions may correlate with learners' cultural backgrounds and/or political beliefs. Strive to promote a calm and respectful learning environment where all viewpoints are welcome. During group discussion, encourage learners to share their experiences as a way to encourage perspective sharing.

SLIDE 5 » Micro-Chapters

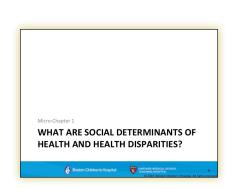
The slide deck is organized into 5 micro-chapters consisting of 10 to 15 slides each. Depending on time availability, short breaks may be taken after each micro-chapter.

Contents: 5 Micro-Chapters

- 1. What Are Social Determinants of Health and Health Disparities?
- 2. Let's Talk About Bias and Health Equity
- 3. How Do Social Conditions Influence Health?
- 4. Health-Related Social Needs: Screening and
- 5. Innovations for Social Determinants of Health



continued



SLIDE 6 » Micro-Chapter 1: What Are Social Determinants of Health and Health Disparities?

This chapter introduces SDoH and health disparities and provides a high-altitude view of how they can be understood using a socioecological framework.

What Are Social Determinants of

Social determinants of health are the conditions in which people are born, live, learn, work, play, and age.

Health?



SLIDE 7

There is no single definition of SDoH, but there is broad consensus that social factors impact health. In general, SDoH are the economic and social conditions that influence individual and group differences in health status.

Facilitation Technique

Depending on time, ask learners to share what the definition of SDoH means to them. In addition, asking them to share personal stories or anecdotes about how social conditions have affected their health or well-being (negative or positive) would also be interesting for discussion.

Useful Resources

Social Determinants of Health. https://en.wikipedia.org/wiki/Social_determinants_of_health Updated April 3, 2019. Accessed June 3, 2019

Braveman P, Gottlieb L. The social determinants of health: it's time to consider the causes of the causes. *Public Health Rep.* 2014;129(Suppl2):19-31. doi: 10.1177/00333549141291S206

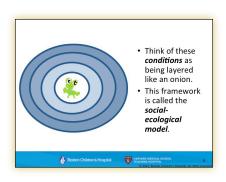
American Academy of Pediatrics Council on Community Pediatrics. Poverty and child health in the United States. *Pediatrics*. 2016;137(4):e20160339

Promoting lifelong health for families and communities. In: Hagan JF, Shaw JS, Duncan PM, eds. *Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents.* 4th ed. Elk Grove Village, IL: American Academy of Pediatrics; 2017:15-40 https://brightfutures.aap.org/Bright%20Futures%20 Documents/BF4_LifelongHealth.pdf *Accessed June 3, 2019*

Beck AF, Tschudy MM, Coker TR, et al. Determinants of health and pediatric primary care practices. *Pediatrics*. 2016;137(3):e20153673

Let's Learn Public Health. Social determinants of health – an introduction [video]. 2017. https://www.youtube.com/watch?v=8PH4JYfF4Ns Accessed June 3, 2019

Newnham N, Heywood J. What Counts. Boston, MA: Health Leads; https://healthleadsusa.org/what-counts/ Accessed June 4, 2019



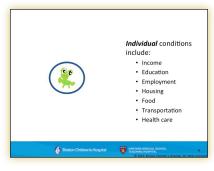
SLIDE 8

The social-ecological model considers the complex interplay between individual, relationship, community, and societal factors. The overlapping rings in the model illustrate how factors at one level can influence factors at another level.

Useful Resource

The Social-Ecological Model: A Framework for Violence Prevention. https:// www.cdc.gov/violenceprevention/publichealthissue/social-ecologicalmodel. html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fviolencepreventio n%2Foverview%2Fsocial-ecologicalmodel.html Updated January 16, 2019. Accessed June 3, 2019

SLIDE 9



These are personal or individual-level conditions (eg, the particular type and quality of employment or housing that a person experiences).

- · *Please note* that this is not an exhaustive list.
- · The list here focuses on *social* conditions (as opposed to biological or environmental conditions).
 - ~ For example, a person's employment may be socially influenced (eg, whether women are allowed to join the military), biologically influenced (eg, most professional basketball players are very tall), or environmentally influenced (eg. most fishing jobs are in coastal areas).
- · Social, biological, and environmental conditions are mostly inseparable.
 - ~ For example, a person's access to food is socially influenced (eg. whether neighbors are willing to share), biologically influenced (eg, preferentially giving food to daughters or sons), and environmentally influenced (eg, whether there is enough rainfall to grow crops).

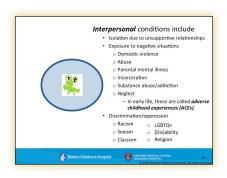
Facilitation Technique

It can be helpful here to focus on the big picture: What are the social conditions in a person's immediate vicinity?

It is okay if learners suggest that a particular factor (eg, health care) is more community-level than individual-level.

Facilitators can encourage participants to keep an open mind and to consider subtle or even counterintuitive ideas and relationships. For example, employment can be an individual-level condition (eg, the specific job that a person has) but also a societal-level condition (eg, the availability of jobs during an economic recession).

continued



SLIDE 10

The same as the key message for Slide 9. ACEs and discrimination/oppression will be presented in greater detail later in the module.

SLIDE 11



The same as the key message for Slide 9.

Useful Resources

NPR Video. No easy access: food deserts in D.C. [video]. 2018. https://www.youtube.com/watch?v=kQeorPkPLmU Accessed June 3, 2019

Urban Green Spaces. World Health Organization website. https://www.who.int/sustainable-development/cities/health-risks/urban-green-space/en/Accessed June 3, 2019

~ "Recent estimates show that physical inactivity, linked to poor walkability and lack of access to recreational areas, accounts for 3.3% of global deaths," according to the website.

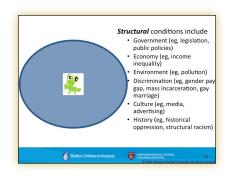
Health and Academics. Centers for Disease Control and Prevention website. https://www.cdc.gov/healthyyouth/health_and_academics/index.htm Updated August 17, 2018. Accessed June 3, 2019

~ According to the website, "Schools play a critical role in promoting the health and safety of young people and helping them establish lifelong healthy behaviors. Research shows that school health programs reduce the prevalence of health risk behaviors among young people and have a positive effect on academic performance."

Office of Disease Prevention and Health Promotion. Social Cohesion. https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-health/interventions-resources/social-cohesion Updated May 31, 2019.

**Accessed June 3, 2019

continued



SLIDE 12

The same as the key message for Slide 9.

Useful Resources

Chokshi DA. Income, poverty, and health inequality. JAMA. 2018;319(13):1312–1313. doi:10.1001/jama.2018.2521

~ According to the article, "[there is a] gap in life expectancy of about 15 years for men and 10 years for women when comparing the most affluent 1% of individuals with the poorest 1%. To put this into perspective, the 10-year life expectancy difference for women is equal to the decrement in longevity from a lifetime of smoking."

Pollution: The lead-crime hypothesis posits that the sharp decline in crime in the United States during the 1990s was in large part due to the removal of lead from gasoline during the 1970s (when young adults in the 1990s were infants and toddlers). Further details are available at: Lead-Crime Hypothesis. https://en.wikipedia.org/wiki/Lead%E2%80%93crime_hypothesis Updated May 27, 2019. Accessed June 3, 2019

Gender pay gap: Platt J, Prins S, Bates L, Keyes K. Unequal depression for equal work? How the wage gap explains gendered disparities in mood disorders. Soc Sci Med. 2016;149:1-8. https://doi.org/10.1016/j.socscimed.2015.11.056

"Highlights: Individual-level indicators of productivity do not fully explain the gender wage gap. The gender wage gap is evidence of structural workplace discrimination. Odds of mood disorders increased among women paid less than equally qualified men. Structural discrimination partially explains gender disparities in mood disorders," reports the article.

Mass incarceration: Wildeman C, Wang EA. Mass incarceration, public health, and widening inequality in the USA. Lancet. 2017;389(10077):1464-1474. https://doi.org/10.1016/S0140-6736(17)30259-3

~ According to the article, "Nearly one in three black men will ever be imprisoned, and nearly half of black women currently have a family member or extended family member who is in prison...The emerging literature on the family and community effects of mass incarceration points to negative health impacts on the female partners and children of incarcerated men, and raises concerns that excessive incarceration could harm entire communities and thus might partly underlie health disparities both in the USA and between the USA and other developed countries."

Media exposure: Media Influences on Health. RAND Corporation website. https://www.rand.org/topics/media-influences-on-health.html Accessed June 3, 2019

~ 'The media—everything from television, radio, and film to games, advertising, and social media outlets like Facebook and Twitter—can have significant impacts on individual and population health. Exposure to media, especially among youth, may affect health behaviors such as substance use, sexual activity, and eating habits," according to the website.

Structural racism: Bailey ZD, Krieger N, Agénor M, Graves J, Linos N, Bassett MT. Structural racism and health inequities in the USA: evidence and interventions. Lancet. 2017;389(10077):1453-1463. https://doi.org/10.1016/S0140-6736(17)30569-X

~ "Structural racism refers to the totality of ways in which societies foster racial discrimination through mutually reinforcing systems of housing, education, employment, earnings, benefits, credit, media, health care, and criminal justice. These patterns and practices in turn reinforce discriminatory beliefs, values, and distribution of resources," according to the article.

continued

Social conditions • Cross different layers (eg, discrimination as structural and interpersonal). • Cluster together (eg, unemployment, eviction, crime, domestic violence). • Flow in different direction (eg, eviction leading to unemployment leading to unemployment or unemployment leading to poor health or poor health leading to unemployment). • Interact with genetics and behavior to determine health.

SLIDE 13

This slide highlights how the various layers of the social-ecological model overlap and flow in different directions.

Facilitation Technique

Depending on time, encourage learners to brainstorm other examples that demonstrate how various SDoH cross, cluster, flow, and interact. For example, a lack of good-quality grocery stores in a community (eg, food deserts) will negatively influence an individual's food and eating behaviors, which will also be influenced by governmental policies about what foods are covered by supplemental nutrition programs (eg, soda). These factors may contribute to obesity, which may lead to interpersonal weight-based discrimination.

Useful Resource

For discussing the role of the Supplemental Nutrition Assistance Program (SNAP): What Can SNAP Buy? U.S. Department of Agriculture, Food and Nutrition Service website. https://www.fns.usda.gov/snap/eligible-food-items Updated September 4, 2013. Accessed June 3, 2019

SLIDE 14

Differences in social conditions can explain big differences in health.

Between individuals
Between groups of individuals (populations)
These differences are reflected in health disparities.

SDoH can explain much of the *variability* in health and well-being between people as well as groups of people. By "can explain," the idea is that social conditions have an impact, but as discussed above, they are not the full story—biology, environment, and behavior also explain variability in health, but again, these factors are intertwined with social conditions. This variability is reflected in health disparities, a concept covered in more detail in the next slide.

Facilitation Technique

Encourage learners to consider how SDoH affect *individual patients* and *populations of patients* (eg, patients with asthma). Also, consider asking learners to share personal experiences with witnessing how social conditions have shaped the health of close individuals (ie, family and friends) and groups (ie, their neighborhood or workplace).



SLIDE 15

Health disparities are about group differences. Because these differences are due to social factors (eg, what race or gender a person is or where they live), they are considered to be largely preventable (not inevitable). These ideas are explored further in later slides. The article by Ordera and Artiga (see Useful Resource, below) is excellent and highly recommended for reading.

Useful Resources

Orgera K, Artiga S. Disparities in health and health care: five key questions and answers. https://www.kff.org/disparities-policy/issue-brief/disparities-inhealth-and-health-care-five-key-questions-and-answers/ Published August 8, 2018. Accessed June 3, 2018

SLIDE 16

This slide highlights how health disparities are both a cause and a consequence of unfairness at the population level. As stated above, the article by Ordera and Artiga (see Useful Resource below) is excellent and highly recommended.

Facilitation Technique

Depending on time, ask learners to discuss if (and, if so, how) disparities affect the health and well-being of their patients, their communities, or themselves.

Useful Resource

Orgera K, Artiga S. Disparities in health and health care: five key questions and answers. Henry J. Kaiser Family Foundation website. https://www.kff.org/ disparities-policy/issue-brief/disparities-in-health-and-health-care-five-keyguestions-and-answers/Published August 8, 2018. Accessed June 3, 2018

Why Do Health Disparities Matter?

- Disparities create unfair advantages and disadvantages
- By systematically structuring opportunity and assigning value on the social interpretation of how one looks (eg, race or gender).
- Disparities sap the strength of the whole society through the waste of human resources.
- Disparities result in unnecessary costs.
- o Addressing health disparities is increasingly important as the population becomes more diverse.





SLIDE 17

This slide shows a screenshot from Google Maps of Washington, D.C. A 2018 study conducted by the Virginia Commonwealth University Center on Society and Health found that average life expectancy in Washington varies as much as 27 years across census tracts. The highest average life expectancy was in census tract 8.01, the Foxhall area of Georgetown. The lowest was 88.04, a neighborhood in Trinidad near Gallaudet University. As shown in the Google Maps screenshot, the driving distance separating these 2 census tracts is 4.8 miles, or 26 minutes by car.

Summary quotes from the study are as follows:

- "The study examined mortality rates across the region's 1,223 census tracts and found that life expectancy at birth—how long a newborn baby can expect to live—varied by 27 years. The census tracts with the lowest and highest life expectancies were both in the District, ranging from 67 years in a neighborhood of Trinidad near Gallaudet University (tract 88.04) to 94 years in the Foxhall area of Georgetown (tract 8.01). Other reports have shown striking geographic differences in other health measures such as infant mortality, obesity, heart disease and
- "Findings show that health in metropolitan Washington is shaped less by health care than by factors like income, education, housing, transportation, and the environment. In addition, people of color and immigrants were more likely to live in neighborhoods with fewer resources ("islands of disadvantage"), which lack the conditions for good health."
- What are census tracts? "Census tracts are small, relatively permanent statistical subdivisions of a county (or independent city in states like Virginia) created by the U.S. Census Bureau and updated every 10 years. Designed to provide stable estimates of population data, and typically smaller than ZIP codes, census tracts contain a population between 1,200 and 8,000 people, with an optimum size of 4,000 people."

Facilitation Technique

Encourage learners to explain the large differences in life expectancy using the social-ecological framework detailed above. Learners may be ask about the apparently very high life expectancy in Georgetown. Per the study, the average life expectancy of all of Georgetown is 86 years, whereas the life expectancy in the Foxhall area of Georgetown is 94 vears. Because census tracts are small (smaller than ZIP codes), this area may have a particularly high concentration of healthy older individuals (similar to what are called Blue Zones—regions of the world where life expectancy is much higher than average). For details, see the Blue Zone page on the Wikipedia website (https://en.wikipedia.org/wiki/Blue_ Zone).

Useful Resource

Woolf SH, Chapman DA, Hill L, et al. Uneven opportunities: how conditions for wellness vary across the metropolitan Washington region. Richmond, VA: Virginia Commonwealth University Center for Society and Health; 2018. https://www. mwcog.org/healthindicatorsreport/



SLIDE 18

Health equity is about fair opportunities to achieve health and wellbeing. This means more than *equality*, which implies having the same opportunities (and which is insufficient in light of health disparities). The graphic in the slide shows creatures of different sizes being supported by platforms of different sizes to reach the fruit on the tree branch. The platforms symbolize opportunity, and their different sizes reflect equity. If the platforms were all equal (ie, the same) size, the smaller creatures would not be able to reach the fruit. This distinction between equity as fairness and equality as sameness is key to understanding. Title V programs can play a key role in assessing and improving health equity. An example is the Health Equity Zones Initiative in Rhode Island, which utilizes community health workers to screen for SDoH and facilitate a smooth referral process to appropriate services.

Facilitation Technique

Depending on time, ask learners to use the teach-back method to explain what health equity means to them or what their clinic (or community or society) would look like if health equity was a reality. The concept of health equity will be discussed again in Micro-Chapter 2.

Useful Resource

Achieving Health Equity. Robert Wood Johnson Foundation website. https://www.rwjf.org/en/library/features/achieving-health-equity.html Accessed June 3, 2019

Health Equity Zones Initiative. State of Rhode Island Department of Health website. http://www.health.ri.gov/programs/detail.php?pgm_id=1108 Accessed June 3, 2019

SLIDE 19

In Summary

What Are Social Determinants of Health and Health Disparities?

- Social determinants of health are the conditions in which people are born, live, learn, work, play, and age
 - Can be understood using a social-ecological frame Can explain big differences in health between individuals
- and between population groups • Health disparities refer to differences in health between
- Occur across many dimensions (eg, race, gender, income)
- Health equity means fair opportunities to be healthier and is a framework for addressing health disparities.



Use the summary slide for Micro-Chapter 1.

Facilitation Technique

Depending on the availability of time, ask learners to do a teach back, summarizing the points in their own words.

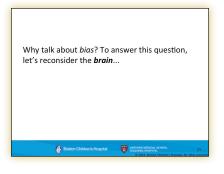


SLIDE 20 » Micro-Chapter 2: Let's Talk About Bias and Health Equity

Facilitation Technique

Discussing bias may be challenging or uncomfortable for some. Practice situational awareness of the learners' group dynamic. In the event that any learners report feeling challenged or uncomfortable, try engaging the group to consider multiple perspectives rather than stopping the conversation. A helpful mnemonic (detailed below) is C.A.R.E.—Conscious empathy, Active listening, Responsible reaction, and Environmental awareness.

SLIDE 21



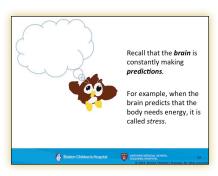
A central idea in this section is that the human brain is predisposed toward bias. This is not to say that bias is destiny. Rather, bias is similar to stress: It has roots in the brain, and with proper awareness and training, it can be managed and mitigated.

Useful Resources

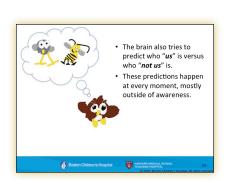
Kristof N. Our biased brains. The New York Times. May 7, 2015. https://www. nytimes.com/2015/05/07/opinion/nicholas-kristof-our-biased-brains.html Accessed June 3, 2019

Project Implicit. Implicit Association Test. https://implicit.harvard.edu/implicit/ takeatest.html

SLIDE 22



Like stress, bias has its neurological roots in the predictive nature of the brain. See Slide 38 for a detailed explanation of the predictive brain.



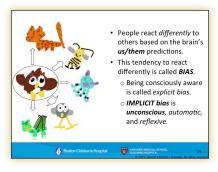
SLIDE 23

The same as Slides 21 and 22.

Useful Resource

Henderson L. Why our brains see the world as "us" versus "them." The Conversation. June 21, 2018. https://theconversation.com/why-our-brains-seethe-world-as-us-versus-them-98661 Accessed June 3, 2019

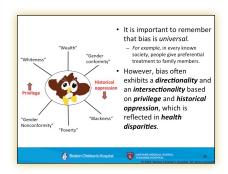
SLIDE 24



Most people think of bias as explicit bias-intentional acts of discrimination, such as hate crimes, racist comments, or sexist jokes. The focus here is on implicit bias, which operates outside of conscious awareness. Implicit bias manifests as patterns and habits of thought that influence gut reactions and decision-making processes. These, in turn, can influence care provision and, on a macro-level, health care disparities.

Useful Resource

Gupta A, Institute for Healthcare Improvement. What is bias, and what can medical professionals do to address it? [video]. http://www.ihi.org/education/ IHIOpenSchool/resources/Pages/AudioandVideo/Anurag-Gupta-What-Is-Bias,and-What-Can-Medical-Professionals-Do-to-Address-It.aspx Accessed June 3, 2019



SLIDE 25

The graphic in this slide shows what are called "axes of privilege/ oppression." The idea is that biases often follow a gradient, from high to low, with greater privilege at the higher end and greater historical oppression at the lower end. This graphic shows only a few of the many axes of oppression/privilege that have been described. An important point here is that people on the more privileged end of the axis (whiteness, for example) may have limited awareness of it because the experiences of oppression and discrimination (which bring the axis into awareness) may not be internalized as lived experience. This slide presents a conceptual bridge between implicit bias (present in individual brains) and, on a population-level, axes of privilege and health disparities. Healthy People 2020 defines a health disparity as:

"...a particular type of health difference that is closely linked with social, economic, and/or environmental disadvantage. Health disparities adversely affect groups of people who have systematically experienced greater obstacles to health based on their racial or ethnic group; religion; socioeconomic status; gender; age; mental health; cognitive, sensory, or physical disability; sexual orientation or gender identity; geographic location; or other characteristics historically linked to discrimination or exclusion."

Facilitation Technique

As mentioned above, learners may engage with the material, disengage (ie, "not my problem"), or feel antagonistic toward it. Practicing openmindedness, intellectual humility, and empathetic curiosity toward the perspectives and experiences of others can help build personal awareness and group cohesion.

Useful Resources

Gupta A: Institute for Healthcare Improvement, How does implicit bias affect health care? [video]. http://www.ihi.org/education/IHIOpenSchool/resources/ Pages/AudioandVideo/Anurag-Gupta-How-Does-Implicit-Bias-Affect-Health-Care.aspx Accessed June 3, 2019

Disparities. https://www.healthypeople.gov/2020/about/foundation-healthmeasures/Disparities Updated May 31, 2019. Accessed June 3, 2019

Crenshaw K. Why intersectionality can't wait. The Washington Post. September 24, 2015. https://www.washingtonpost.com/news/in-theory/wp/2015/09/24/ why-intersectionality-cant-wait/ Accessed June 3, 2019

Carbado DW, Crenshaw KW, Mays VM, Tomlinson B. Intersectionality: mapping the movements of a theory. Du Bois Rev. 2013;10(2):303-12. doi: 10.1017/ S1742058X13000349



SLIDE 26

This study presents some startling findings. Probe learners' reactions to the findings and encourage learners to describe their interpretations through the lens of implicit bias.

Details About the Study (from the abstract)

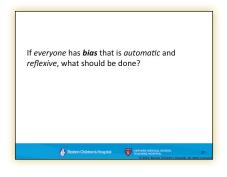
"Black Americans are systematically undertreated for pain relative to white Americans. We examine whether this racial bias is related to false beliefs about biological differences between blacks and whites (e.g., "black people's skin is thicker than white people's skin"). Study 1 documented these beliefs among white laypersons and revealed that participants who more strongly endorsed false beliefs about biological differences reported lower pain ratings for a black (vs. white) target. Study 2 extended these findings to the medical context and found that half of a sample of white medical students and residents endorsed these beliefs. Moreover, participants who endorsed these beliefs rated the black (vs. white) patient's pain as lower and made less accurate treatment recommendations. Participants who did not endorse these beliefs rated the black (vs. white) patient's pain as higher, but showed no bias in treatment recommendations. These findings suggest that individuals with at least some medical training hold and may use false beliefs about biological differences between blacks and whites to inform medical judgments, which may contribute to racial disparities in pain assessment and treatment."

Useful Resources

Hoffman KM, Trawalter S, Axt JR, Oliver MN. Racial bias in pain assessment and treatment recommendations, and false beliefs about biological differences between blacks and whites. Proc Natl Acad Sci USA. 2016;113(16):4296-4301. doi: 10.1073/pnas.1516047113

Somashekhar S. The disturbing reason some African Americans may be undertreated for pain. The Washington Post. April 4, 2016. https://www. washingtonpost.com/news/to-your-health/wp/2016/04/04/do-blacks-feelless-pain-than-whites-their-doctors-may-think-so/?utm_term=.2cbc894e459a Accessed June 3, 2019

SLIDE 27



This slide sets up the upcoming slides focusing on strategies and solutions.

The first steps to addressing bias are to recognize it and increase personal awareness through humility and openmindedness. A helpful pneumonic is o Conscious empathy Active listening Responsible reaction Environmental awareness

SLIDE 28

Humility and open-mindedness are considered intellectual virtues because they promote critical thinking and the pursuit of truth. CARE is a helpful technique for building awareness and mitigating the effects of implicit bias. Karith Foster created and teaches the CARE model in her workshops and presentations.

Ask learners if they use any mental tools or approaches for reducing implicit bias.

Useful Resource

Intellectual virtue. https://en.wikipedia.org/wiki/Intellectual_virtue Updated September 20, 2018. Accessed June 3, 2019

Foster K. The art of defying stereotypes. TEDx Lincoln Square. March 2017. YouTube. https://www.youtube.com/watch?v=TVGCTS8iiDU Published May 4, 2017. Accessed June 3, 2019

SLIDE 29

This slide aims to provide real-world, practical solutions for addressing implicit bias. Ask learners if they have used these or other approaches to address bias, and if so, what was the result?

Useful Resource

The above-mentioned resources from the Institute of Healthcare Improvement on bias are excellent and highly recommended.

Boynton-Jarrett R, Flacks J. A Strengths-Based Approach to Screening Families for Health-Related Social Needs. Washington, DC: Center for the Study of Social Policy; MLBP; 2018. https://cssp.org/wp-content/uploads/2018/08/Strengths-Based-Approaches-Screening-Families-FINAL.pdf Accessed June 3, 2019



W :::

SLIDE 30

This slide aims to re-center the focus on the shared mission in health care, which is health equity. As detailed in Slide 18, health equity is about fair opportunities to achieve health and well-being. The graphic shown here is the same as that in Slide 17—creatures of different sizes being supported by platforms of different sizes to reach the fruit on the branch above. The platforms symbolize opportunity, and their different sizes reflect equity. If the platforms were all equal (eg, the same) size, the smaller creatures would not be able to reach the fruit. This distinction between equity as fairness and equality as sameness is key to understanding this. As before, ask learners to teach back what health equity means to them.

Useful Resource

Achieving Health Equity. Robert Wood Johnson Foundation website. https://www.rwjf.org/en/library/features/achieving-health-equity.html Accessed June 3, 2019



• Health equity is a **Health Outcomes** guiding framework for achieving the Triple Aim of Population health. o Experience of care. o Per capita cost. In other words... "No Equity, No Triple Aim. HARVARD MEDICAL SCI-TEACHING HOSPITAL

SLIDE 31

This slide shows the Triple Aim developed by the Institute for Healthcare Improvement to optimize health system performance. The Triple Aim is about simultaneously improving patient experience of care (including quality and satisfaction), enhancing population health, and reducing the per capita cost of health care. The key message of this slide is that health equity should serve as the guiding framework for achieving the Triple Aim. This is summarized by the statement "No Equity, No Triple Aim" and detailed in the article by Geoffrey Wilkinson.

Facilitation Technique

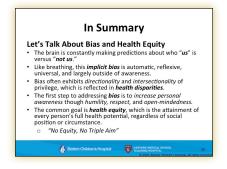
Ask learners to explain how health equity relates to the Triple Aim. Encourage learners to use the ideas presented in this module (eg, SDoH, HRSNs, health disparities, and bias) to frame the discussion.

Useful Resources

Wilkinson GW, Sager A, Selig S, et al. No equity, no Triple Aim: strategic proposals to advance health equity in a volatile policy environment. Am J Pub Health. 2017;107(S3):S223-S228. doi: 10.2105/AJPH.2017.304000

IHI Triple Aim Initiative. http://www.ihi.org/Engage/Initiatives/TripleAim/ Pages/default.aspx Accessed June 3, 2019

SLIDE 32



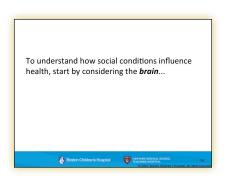
Summary Slide. Encourage learners to teach back the information in their own words.

HOW DO SOCIAL CONDITIONS INFLUENCE HEALTH? HARVAS

SLIDE 33 » Micro-Chapter 3: How Do Social Conditions Influence Health?

In this section, the brain takes center stage at the interface between social conditions, particularly adverse childhood experiences, and chronic activation of the stress response.

continued



SLIDE 34

Presentation of the following 6 slides can be relatively brief and rapid. The bulk of time and discussion can be given to Slide 41 (the ACE pyramid) as detailed below.

SLIDE 35



This straightforward statement sets the stage for the upcoming slides. Presentation can be brief (a few seconds) with quick transition to the next slide. Feel free to read the background information or skip it and move on.

Background Information

There is emerging consensus in neuroscience that a primary and fundamental function of the brain is to predict, similar to the idea that the primary function of the heart is to pump (blood). The brain receives information via the 5 senses (eg, sight, sound, smell, taste, and touch) from inside the body (this is called interoception, a rumbling tummy, for example) and from throughout the brain itself (this is called intrinsic brain activity, a daydream, for example). Moment to moment, the brain processes this incoming information and predicts its own activity in the very next moment. These predictions play out in the flow of electrical impulses, neurotransmitters, and hormones, which in turn, influence the state of the body and brain. The brain receives this new information, makes more predictions, and the cycle continues. Most of the time, this cycle occurs outside of awareness, but occasionally, people are aware of predictions, such as while watching a scary movie or swerving a car on a patch of ice.

Useful Resources

Feldman Barrett L. The predictive brain. https://www.edge.org/response-detail/26707 Accessed June 3, 2019

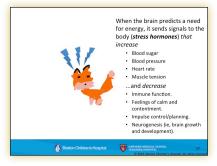
Bubic A, von Cramon DY, Schubotz RI. Prediction, cognition and the brain. *Front Hum Neurosci.* 2010;4:25. doi:10.3389/fnhum.2010.00025

When the brain perceives a threat, it predicts a need for energy (to fight or This prediction is called stress HART TEAC

SLIDE 36

As stated above, presentation can be brief. One interesting side note is that it makes no difference to the brain whether the perceived threat is actual (ie, physical danger) or imagined (ie, a scary thought, as shown in this slide).

SLIDE 37



As stated above, presentation can be brief. The main idea is that when a stress response is activated, the body mobilizes systems that will improve chances for survival (by fighting harder or running away faster) at the expense of longer-term processes like fighting disease, feeling calm, controlling impulses, and growing the brain. This has important consequences for health and brain development, as will be discussed in upcoming slides.

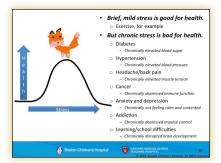
Also, the term neurogenesis means the growth of new brain cells.

Useful Resource

Patton RS; Khan Academy. Responding to stress [video]. https://www. khanacademy.org/test-prep/mcat/processing-the-environment/stress/v/ responding-to-stress Accessed June 3, 2019

~ This video details the physiology of the fight or flight response.

SLIDE 38



As stated above, presentation can be brief. The main point is that chronic stress is bad for physical and mental health and brain development.

Useful Resources

Chronic stress as bad for physical health: Patton RS; Khan Academy. Physical effects of stress [video]. https://www.khanacademy.org/test-prep/mcat/ processing-the-environment/stress/v/physical-effects-of-stress Accessed June 3, 2019

Chronic stress and anxiety, depression, and addiction: Patton RS; Khan Academy. Behavioral effects of stress [video]. https://www.khanacademy.org/test-prep/ mcat/processing-the-environment/stress/v/behavioral-effects-of-stress Accessed June 3, 2019

Disrupted brain development: Centers for Disease Control and Prevention. Preventing adverse childhood experiences (ACEs) online training module 1 lesson 1 [video]. https://www.youtube.com/watch?v=d-SSwYTe8TY Accessed June 3, 2019



SLIDE 39

As previously indicated, presentation can be brief. The main idea here, looping back to the predictive brain concept, is that the combination of uncertainty (ie, unpredictability), threat (ie, being on guard), and feeling out of control (ie, feeling powerless or helpless) acts as a toxic cocktail, sending the stress response into overdrive. Children and youth with special health care needs (CYSHCN) are more likely to be exposed to adverse childhood experiences. The 2016 National Survey of Children's Health data show that 37% of CYSHCN had 2 or more ACEs compared to 18% of children without special health care needs. In addition, children with intellectual and developmental disabilities are at higher risk for abuse and neglect.

Facilitation Technique

The core health-related social needs detailed in the next section are each characterized by uncertainty (eg, food insecurity and housing instability). In addition, consider how ACEs are characterized by both uncertainty and powerlessness. For example, if a parent has been drinking alcohol, will she or he explode with an act of physical violence? And, if so, can anything be done to stop it?

Useful Resources

On the effects of chronic toxic stress: Tough P. The poverty clinic: Can a stressful childhood make you a sick adult? The New Yorker. March 14, 2011. https://www. newyorker.com/magazine/2011/03/21/the-poverty-clinic Accessed June 3, 2019

Nadine Burke Harris: How does trauma affect a child's DNA? Ted Radio Hour. National Public Radio. August 25, 2017. https://www.npr.org/templates/ transcript/transcript.php?storyId=545092982 Accessed June 3, 2019

Notable quote by Dr. Burke Harris during the interview: "Well, imagine you're walking in the forest, and you see a bear. Immediately, your hypothalamus sends a signal to your pituitary, which sends a signal to your adrenal gland that says, release stress hormones adrenaline, cortisol. And so your heart starts to pound. Your pupils dilate. Your airways open up. And you are ready to either fight that bear or run from the bear. And that is wonderful if you're in a forest, and there's a bear. But the problem is what happens when the bear comes home every night. And this system is activated over and over and over again."

Mattson G, Kuo DZ; American Academy of Pediatrics Committee on Psychosocial Aspects of Child and Family Health and Council on Children with Disabilities. Psychosocial factors in children and youth with special health care needs and their families. Pediatrics. 2019;143(1):e20183171. doi: 10.1542/peds.2018-3171

continued



SLIDE 40

Same as above (Slide 39). An absence of protective, supportive relationships magnifies the sense of unpredictability and helplessness, turning chronic (but potentially manageable) stress into toxic (unmanageable) stress.

Facilitation Technique

Facilitators or learners may have personal experiences with toxic stress. If time permits and there is a sense of positive receptivity and engagement with this topic among group members, offer an opportunity for sharing experiences. Given that these are potentially sensitive and deeply personal topics, practice moment-to-moment situational awareness and empathetic sensitivity toward all individuals who are present.

Useful Resources

See Useful Resources above (slide 39).

Toxic Stress. Center on the Developing Child at Harvard University website. https://developingchild.harvard.edu/science/key-concepts/toxic-stress/
Accessed June 3, 2019

Shonkoff JP, Garner AS; American Academy of Pediatrics Committee on Psychosocial Aspects of Child and Family Health, Committee on Early Childhood, Adoption, and Dependent Care, and Section on Developmental and Behavioral Pediatrics. The lifelong effects of early childhood adversity and toxic stress. *Pediatrics*. 2012;129(1):e232-e246. doi: 10.1542/peds.2011-2663

Garner AS, Shonkoff JP; American Academy of Pediatrics Committee on Psychosocial Aspects of Child and Family Health, Committee on Early Childhood, Adoption, and Dependent Care, and Section on Developmental and Behavioral Pediatrics. Early childhood adversity, toxic stress, and the role of the pediatrician: translating developmental science into lifelong health. *Pediatrics*. 2012;129(1) e224-e231. doi: 10.1542/peds.2011-2662

American Academy of Pediatrics. Toxic Stress on Children: Evidence of Consequences. https://www.aappublications.org/toxic-stress Accessed June 3, 2019

Early Brain and Child Development Initiative. https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/EBCD/Pages/default.aspx

**Accessed June 3, 2019

The Resilience Project Initiative. https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/resilience/Pages/Resilience-Project.aspx

**Accessed June 3, 2019



SLIDE 41

The ACE Pyramid provides a helpful framework for understanding and explaining how ACEs (and adverse social conditions, in general) negatively impact development, behavior, health, and ultimately, mortality.

Facilitation Technique

Encourage learners to explain the ACE Pyramid in their own words.

Useful Resources

About the CDC-Kaiser ACE Study. https://www.cdc.gov/violenceprevention/ childabuseandneglect/acestudy/about.html Accessed June 3, 2019

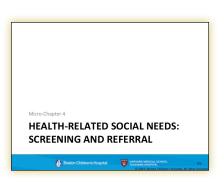
Burke N. How childhood trauma affects health across a lifetime [video]. TED Talks. 2015. https://www.youtube.com/watch?v=95ovIJ3dsNk Accessed June 3, 2019

In Summary **How Do Social Conditions Influence Health?** · Stress can be understood as the brain's predictions about the body's energy needs. Although some stress is good, chronic activation of the stress response is bad for health. For children, in particular, stress disrupts brain development. Supportive relationships can buffer chronic stress, but adverse childhood experiences, such as abuse and neglect, characterize toxic stress that increases the risk of numerous health problems.

Boston Children's Hospital W HARVARD TEACHING

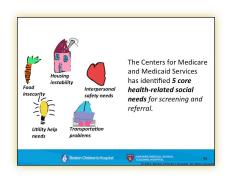
SLIDE 42

Summary slide. Encourage learners to explain the information in their own words.



SLIDE 43 » Micro-Chapter 4: Health-Related Social Needs: Screening and Referral

This section focuses on practical approaches for addressing SDoH and the implications for implementing care coordination activities.



SLIDE 44

Although SDoH encompasses a broad range of factors, CMS has identified 5 core health-related social needs (HRSNs) for screening and referral by health care teams. These core HRSNs are described in detail in the following slides and, additionally, in the CMS Accountable Health Communities screening tool (see Source/Useful Resource below). The Accountable Health Communities initiative will be discussed in more detail in Micro-Chapter 5.

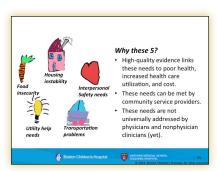
Facilitation Technique

Emphasize to learners that these core HRSNs are not an exhaustive list of social needs. Rather, these are needs that CMS has identified for targeted *screening and referral*; reasons for selecting these 5 needs are detailed in the next slide.

Useful Resource

Centers for Medicare and Medicaid Services. The Accountable Health Communities Health-Related Social Needs Screening Tool. 2018. https:// innovation.cms.gov/files/worksheets/ahcm-screeningtool.pdf Accessed June 3, 2019

SLIDE 45



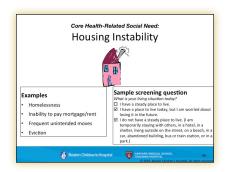
This slide provides the rationale for why these 5 core HRSNs were selected for systematic screening and referral.

Facilitation Technique

Depending on time availability, ask learners to share their thoughts on why HRSNs are not universally addressed by health care teams. The upcoming slides go into detail on each of the 5 core HRSNs.

Useful Resource

Billioux A, Verlander K, Anthony S, Alley D. Standardized screening for healthrelated social needs in clinical settings: the accountable health communities screening tool. National Academy of Medicine. 2017. https://nam.edu/wpcontent/uploads/2017/05/Standardized-Screening-for-Health-Related-Social-Needs-in-Clinical-Settings.pdf Accessed June 4, 2019



SLIDE 46

There is no standard definition of housing instability. However, the common theme in each of the examples presented here (homelessness, frequent unintended moves, and eviction) is a lack of stability and the threat of losing one's home. Recall from the previous section that *unpredictability* and *threat* are primary contributors to chronic over-activation of the stress response. The sample screening question shown in this slide is sourced from the Accountable Health Communities Health-Related Social Needs Screening Tool (see Useful Resources below). The checked boxes may indicate unmet HRSNs and can prompt further conversation and referral.

Facilitation Technique

Encourage learners to read the sample screening question aloud and discuss their thoughts about how housing instability has impacted their patients or, if they feel comfortable, themselves or people in their lives.

It is important to note that asking these types of questions can be very challenging for physicians and nonphysician clinicians as well as families. There are often cultural barriers, and these questions can be misinterpreted, especially by families who use English as their second language. When screening for SDoH, consider cultural aspects of the populations for whom care is provided. How will the questions be interpreted by diverse communities?

If available, share local or practice-level data on housing.

Finally, it should be emphasized that these screening questions are meant to start a conversation. For example, a person living in sheltered housing (ie, a homeless shelter) is experiencing housing instability. However, if the person is on a waiting list for more stable housing and endorses no current unmet needs related to housing, then a referral may not be necessary.

Learners may have questions about what can be done to improve someone's situation. For example, if a person is living in sheltered housing or having difficulty paying rent or utility bills, learners may respond by saying, "What can be done? We can't be expected to provide money for rent, utility bills, groceries, or gas." Encourage learners to keep an open mind because these are social problems (ie, social determinants of health), and solutions may be more challenging than standard medical problems (ie, prescribing penicillin for strep throat).

The key point is that *screening starts the conversation*. With time, persistence, diligent efforts, and better resources (across the entire health care and social service systems), the needle will begin to move on these issues.

Also to note is that the sample screening question presented here is neither the only nor the best question for assessing housing instability. There are many other questionnaires and screening tools that can be used.

Useful Resources

Centers for Medicare and Medicaid Services. The Accountable Health Communities Health-Related Social Needs Screening Tool. 2018. https://innovation. cms.gov/files/worksheets/ahcm-screeningtool.pdf Accessed June 4, 2019

Housing Instability. https://www.healthypeople.gov/2020/topics-objectives/topic/ social-determinants-health/interventions-resources/housing-instability Updated May 31, 2019. Accessed June 3, 2019

Braveman P, Dekker M, Egerter S, Sadegh-Nobari T, Pollack C. How does housing affect health? Robert Wood Johnson Foundation website. May 1, 2011. https://www. rwif.org/en/library/research/2011/05/housing-and-health.html



SLIDE 47

Food insecurity is generally defined as limited or uncertain access to adequate food. Another definition of food insecurity is the disruption of food intake or eating patterns because of lack of money and other resources. The sample screening question shown here is sourced from the Accountable Health Communities Health-Related Social Needs Screening Tool. The checked boxes may indicate an unmet HRSN and can prompt further conversation and referral.

Background Information

The U.S. Department of Agriculture codified food insecurity as part of ongoing efforts to measure the nutritional status of the American population. An estimated 1 in 6 U.S. children live in food-insecure households.

Facilitation Technique

See Facilitation Technique for housing instability (Slide 46) above.

Useful Resources

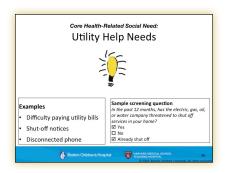
Centers for Medicare and Medicaid Services. The Accountable Health Communities Health-Related Social Needs Screening Tool. 2018. https://innovation.cms.gov/ files/worksheets/ahcm-screeningtool.pdf Accessed June 4, 2019

American Academy of Pediatrics and the Food Research and Action Center. Assessing Food Insecurity: A Toolkit for Pediatricians. 2017. http://frac.org/ aaptoolkit Accessed June 4, 2019

An excellent toolkit with summary statistics, screening tips, and informational resources

Food Insecurity. https://www.healthypeople.gov/2020/topics-objectives/topic/ social-determinants-health/interventions-resources/food-insecurity Updated June 4, 2019, Accessed June 4, 2019

SLIDE 48



Like housing instability, there is no standard definition of utility help needs (also called energy insecurity). Also, like housing instability, utility help needs encompass challenges related to the ideas of threat and unpredictability, as illustrated in the sample screening question shown here. This question is sourced from the Accountable Health Communities Health-Related Social Needs Screening Tool (See Slide 46, Useful Resources). Here, the checked boxes may indicate an unmet HRSN and can prompt further conversation and referral.

Facilitation Technique

See Facilitation Technique for housing instability (Slide 46) above.

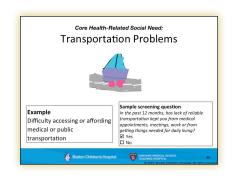
Useful Resources

Centers for Medicare and Medicaid Services. The Accountable Health Communities Health-Related Social Needs Screening Tool. 2018. https://innovation.cms. gov/files/worksheets/ahcm-screeningtool.pdf Accessed June 4, 2019

Energy Insecurity. Children's Health Watch website. http://childrenshealthwatch. org/3169-2/ Accessed June 4, 2019

Hernández D. Understanding "energy insecurity" and why it matters to health. Soc Sci Med. 2016;167:1-10. https://doi.org/10.1016/j.socscimed.2016.08.029

continued



SLIDE 49

There is not a standard definition for transportation problems. However, transportation problems can be viewed as a barrier to accessing care (ie, inability to travel to medical appointments due to transportation-related issues), but—just as with housing instability, food insecurity, and utility help needs—uncertainty plays a key role. This is illustrated in the sample screening question shown in this slide: "...has lack of reliable transportation kept you from medical appointments..." The sample screening question is sourced from the Accountable Health Communities Health-Related Social Needs Screening Tool (See Slide 45, Useful Resources). The checked boxes may indicate an unmet HRSN and can prompt further conversation and referral.

Facilitation Technique

See Facilitation Technique for housing instability (Slide 46) above.

Useful Resource

Centers for Medicare and Medicaid Services. The Accountable Health Communities Health-Related Social Needs Screening Tool. 2018. https://innovation.cms.gov/files/worksheets/ahcm-screeningtool.pdf Accessed June 4, 2019



SLIDE 50

Interpersonal safety needs are the most challenging of the core HRSNs because addressing these needs often requires team members with specialized training and skills (eg, mental health, social work, or child protection). As above, the key point is that screening gets the conversation started. The checked boxes may indicate an unmet HRSN and can prompt further conversation and referral.

Facilitation Technique

See Facilitation Technique for housing instability (Slide 46) above.

Useful Resource

Centers for Medicare and Medicaid Services. The Accountable Health Communities Health-Related Social Needs Screening Tool. 2018. https://innovation.cms.gov/files/worksheets/ahcm-screeningtool.pdf Accessed June 4. 2019

continued



SLIDE 51

As part of its Screening in Practice initiative (described in detail in Micro-Chapter 5: Innovations), the American Academy of Pediatrics (AAP) has launched the Screening, Technical Assistance, and Resource (STAR) Center. STAR Center contains a plethora of screening recommendations, screening tools, related AAP initiatives, technical assistance, FAQs, and resources for clinical practices. STAR Center provides technical assistance and resources for screening not only for SDoH but also for child development and maternal depression, which are the 3 target areas of the AAP Screening in Practice initiative, described later in Innovations). This slide shows a screenshot from the STAR Center webpage (see Source/Useful Resource below). Note that the terms SDoH and HRSNs are used interchangeably on the STAR Center webpage.

Facilitation Technique

Read the text at the top of the slide and point out that the STAR Center also provides assistance with and resources for child development and maternal depression screening.

Useful Resource

The Screening Technical Assistance & Resource (STAR) Center. https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/Screening/Accessed June 4, 2019

SLIDE 52



Before the learning session, search the internet for online referral tools for community services in the area.



Alternatively, depending on time availability, encourage learners to search for these tools during the session. There will also be opportunities to do this during the group discussion portion of the module

Useful Resources

Cartier Y, Fichtenberg C, Gottlieb L. Community Resource Referral Platforms: A Guide for Health Care Organizations. San Francisco, CA: SIREN; 2019. https://sirenetwork.ucsf.edu/sites/sirenetwork.ucsf.edu/files/wysiwyg/Community-Resource-Referral-Platforms-Guide.pdf Accessed June 4, 2019

This SIREN community resource guide was developed with 8 different companies providing community resource services.

211. http://www.211.org/ Accessed June 4, 2019

In Summary Health-Related Social Needs There are 5 core health-related social needs that Medicare and Medicaid have identified as targets for screening and referral by physicians and nonphysician clinicians. Housing instability Food insecurity Utility help needs Transportation problems Interpersonal safety needs To facilitate screening and referral, there is a growing number of online resources available. Boston Children's Hospital W HARVARD MEDICAL SCHOOL TEACHING HOSPITAL

SLIDE 53

Summary slide. Encourage learners to explain the information in their own words.



SLIDE 54 » Micro-Chapter 5: Innovations for Social Determinants of Health

The final chapter of Module 3 provides a high-altitude "forest view" and explores some recent innovations aimed at moving the needle on SDoH.

SLIDE 55



Presentation of the slides in this micro-chapter can be brief. Focus on the big picture, providing learners with a broad overview of each innovation. Learners can feel free to explore each innovation via the applicable websites included in the Case Studies section at the end of the Facilitator Guide.



SLIDE 56

ACA coverage expansions led to large gains in health insurance for low-income individuals and people of color, helping to narrow longstanding disparities in coverage.

Background Information

HealthCare.gov states that the ACA has 3 primary goals:

- · Make affordable health insurance available to more people. The law provides consumers with subsidies (premium tax credits) that lower costs for households with incomes between 100% and 400% of the federal poverty level.
- Expand the Medicaid program to cover all adults with income below 138% of the federal poverty level. (Not all states have expanded their Medicaid programs.)
- Support innovative medical care delivery methods designed to generally lower the costs of health care.

Facilitation Technique

Depending on political stance, learners may have differing opinions about the ACA and the government's overall role in health care. Attempt to keep discussion focused on the ACA as an initiative aimed at reducing disparities and addressing SDoH.

Facilitation Technique

Depending on time, ask learners to discuss if (and, if so, how) disparities affect the health and well-being of their patients, their communities, or themselves.

Useful Resources

Affordable Care Act (ACA). https://www.healthcare.gov/glossary/affordablecare-act/ Accessed June 4, 2019

Hayes SL, Riley P, Radley DC, McCarthy D. Reducing racial and ethnic disparities in access to care: Has the Affordable Care Act made a difference? https://www. commonwealthfund.org/publications/issue-briefs/2017/aug/reducing-racialand-ethnic-disparities-access-care-has Published August 24, 2017. Accessed June 4, 2019



SLIDE 57

According to the AAP website, "The Screening in Practices Initiative offers information and resources, including screening recommendations, practice tools, and individualized assistance, to help pediatric health care providers implement effective screening, referral, and follow-up for developmental milestones, maternal depression, and social determinants of health."

Background Information

As stated on the AAP website, "Funded by a 3-year grant from The JPB Foundation, the overall goal of the Screening in Practices Initiative is to improve the health, wellness, and development of children through practice and system-based interventions to increase rates of early childhood screening, referral, and follow-up for developmental milestones, maternal depression, and social determinants of health."

"The initiative includes 3 major components:

- 1. The National Technical Assistance Resource Center on Screening (NTARCS) provides evidence-informed technical assistance and resources to assist practices in implementing effective screening, referral, and follow-up for developmental milestones, maternal depression, and social determinants of health.
- 2. The Screening in Practices Learning Collaborative works with a diverse group of pediatric primary care practices to measure, evaluate, and improve upon screening, referral, and follow-up using quality improvement methodology.
- 3. The multi-disciplinary National Advisory Board (NAB) on Screening provides high-level strategic oversight for the initiative and works to advance a national agenda on screening."

Useful Resource

About the Initiative. American Academy of Pediatrics website. https://www.aap. org/en-us/advocacy-and-policy/aap-health-initiatives/Screening/Pages/Aboutthe-Initiative.aspx Accessed June 4, 2019



SLIDE 58

Background Information

"The American Academy of Pediatrics created this site—which includes video-based training modules, conversation simulations, a screening tool selector, and a resource center—to help you learn more about the screening process for maternal depression, developmental concerns, and social determinants of health. Useful for doctors, nurses, front office staff, care coordinators, and others involved in the process, this resource will help you gain a better understanding of the importance of family-centered screening and how you can work together to implement a comprehensive, effective process," according to the AAP website.

Facilitation Technique

The Screening Time website is excellent and has a range of high-quality resources, including simulation. Depending on time availability, explore this website with learners.

Useful Resource

Where to Start. https://screeningtime.org Accessed June 4, 2019

Innovation #3: SIREN - Social Interventions Research & Evaluation Network (University of California, San Francisco) Contains an extensive evidence library, screening tools, implementation resources, and archived webinars.

SLIDE 59

The mission of SIREN "... is to catalyze and disseminate high quality research that advances efforts to identify and address social risks in health care settings."

Background Information

According to the SIREN website, "SIREN projects are focused on:

- Catalyzing high quality research to fill evidence gaps through an innovation grants program and support for researchers in this field;
- · Collecting, summarizing, and disseminating research resources and findings to researchers and other industry stakeholders via an interactive website and evidence library, reports, and meetings and presentations;
- Increasing capacity to evaluate SDoH interventions by providing evaluation, research, and analytics consultation services to safetynet and mission-aligned health systems."
- SIREN is supported by Kaiser Permanente and the Robert Wood Johnson Foundation and housed at the Center for Health and Community at the University of California, San Francisco."

Facilitation Technique

Depending on time, explore this website with learners.

Useful Resource

University of California, San Francisco. Social Intervention Research and Evaluation Network (SIREN) website. https://sirenetwork.ucsf.edu Accessed June 4, 2019



SLIDE 60

As stated on the CMS website and circled in red on the slide, "The Accountable Health Communities Model addresses a critical gap between clinical care and community services in the current health care delivery system by testing whether systematically identifying and addressing the health-related social needs of Medicare and Medicaid beneficiaries' through screening, referral, and community navigation services will impact health care costs and reduce health care utilization. There are currently 31 organizations participating in the Accountable Health Communities Model"

Background Information

According to the CMS website, "This model will promote clinicalcommunity collaboration through:

- · Screening of community-dwelling beneficiaries to identify certain unmet health-related social needs
- Referral of community-dwelling beneficiaries to increase awareness of community services
- · Provision of navigation services to assist high-risk communitydwelling beneficiaries with accessing community services
- Encouragement of alignment between clinical and community services to ensure that community services are available and responsive to the needs of community-dwelling beneficiaries"

"Over a five year period, the model will provide support to community bridge organizations to test promising service delivery approaches aimed at linking beneficiaries with community services that may address their health-related social needs."

Useful Resource

Accountable Health Communities Model. Centers for Medicare and Medicaid Services website. https://innovation.cms.gov/initiatives/ ahcm/ Updated April 30, 2019. Accessed June 4, 2019



SLIDE 61

Details on the graphic shown on the slide are as follows:

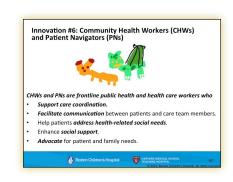
- · "The Maternal, Infant, and Early Childhood Home Visiting Program (MIECHV) gives pregnant women and families, particularly those considered at-risk, necessary resources and skills to raise children who are physically, socially, and emotionally healthy and ready to
- "In FY (fiscal year) 2017 the MIECHV Program served over 156,000 parents and children and provided more than 942,000 home visits."
- "The MIECHV Program funds states, territories, and tribal entities to develop and implement evidence-based, voluntary programs that best meet the needs of their communities."
- · "Benchmarks
 - ~ Improved maternal and newborn health
 - ~ Improved school readiness and achievement
 - ~ Improved family economic self-sufficiency
 - ~ Reduced child injuries, abuse, and neglect
 - ~ Reduced crime or domestic violence
 - ~ Improved coordination and referrals for community services"

Facilitator Technique

Ask learners about their experiences with home visiting services for newborns and how they contribute to addressing SDoH.

Useful Resource

Home Visiting. Maternal and Child Health Bureau, Health Resources and Services Administration website. https://mchb.hrsa.gov/maternal-child-healthinitiatives/home-visiting-overview Accessed June 4, 2019



SLIDE 62

CHWs and PNs underscore the importance of human connection (ie, relationships) in addressing SDoH.

Background Information

The American Public Health Association defines CHWs as

- · "...a trusted member of and/or has an unusually close understanding of the community served. This trusting relationship enables the worker to serve as a liaison/link/intermediary between health/social services and the community to facilitate access to services and improve the quality and cultural competence of service delivery."
- · "...(a CHW) builds individual and community capacity by increasing health knowledge and self-sufficiency through a range of activities such as outreach, community education, informal counseling, social support and advocacy."

Patient navigators facilitate patient movement through the health care system by removing barriers, such as unmet health-related social needs, and providing support through one-on-one relationships. An increasing number of studies demonstrate the benefit of patient navigation at reducing barriers to care. The first patient navigation program was launched in 1990 and was led by Dr. Harold P. Freeman, a surgical oncologist working at Harlem Hospital in New York. Since then, the concept of patient navigation has grown and spread throughout health care.

A note on terminology—CHW vs. PN: CHW is an umbrella term that encompasses numerous job descriptions and is often understood to include PNs, along with community health representatives who serve tribal nations, *promotores de salud* who serve Latino communities, and many others. There is a combination of nuanced, historical, and legitimate distinctions that can be discussed about the general roles and skills of CHWs compared to PNs, primarily related to the fact that PNs typically work in health care practice settings, whereas CHWs work in health settings and, importantly, also in home and communitybased settings.

Facilitator Technique

Ask learners about their experiences with CHWs and/or PNs and how they contribute to addressing SDoH.

Useful Resource

- The Community Health Worker Core Consensus (C3) Project: 2016 Recommendations on CHW Roles, Skills, and Qualities. https://sph.uth.edu/ dotAsset/55d79410-46d3-4988-a0c2-94876dale08d.pdf Accessed June 4, 2019
- Freeman HP, Rodriguez RL. History and principles of patient navigation. Cancer. 2011;117(15 Suppl):3539-3542. doi: 10.1002/cncr.26262 https://www. ncbi.nlm.nih.gov/pmc/articles/PMC4557777/
- Healthy Homes II Asthma Project. King County, WA. https://www.kingcounty. gov/depts/health/chronic-diseases/asthma/health-care-providers/ past-programs/healthy-homes-2.aspx



SLIDE 63

"Attorneys in general—and poverty lawyers in particular—have an in-depth understanding of relevant policies, laws, and systems, and seek out solutions at the individual and policy levels to a range of health-related social and legal needs. When embedded as specialists in a health care setting, lawyers can directly resolve specific problems for individual patients, while also helping clinical and non-clinical staff navigate system and policy barriers and transform institutional practices. Using legal expertise and services, the health care system can disrupt the cycle of returning people to the unhealthy conditions that would otherwise bring them right back to the clinic or hospital." (Source: medical-legalpartnership.org)

Facilitation Technique

Ask learners about their experiences with medical-legal partnerships.

Useful Resource

National Center for Medical-Legal Partnership website. https://medical-legalpartnership.org/ Accessed June 4, 2019

SLIDE 64



Summary slide. Encourage learners to explain the information in their own words.

HART TEAC

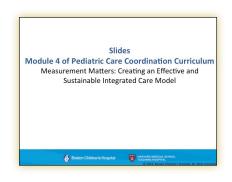
SLIDE 65

THE END

Thanks for attending.

Questions or feedback: clement.bottino@childrens.harvard.edu Illustration acknowledgment: Antonia Bottino

continued



SLIDE 66

These are the primary sources for the slide deck, also listed above.

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Slide 25: Gupta A; Institute for Healthcare Improvement. How does implicit bias affect health care? [video]. http://www.ihi.org/education/IHIOpenSchool/resources/Pages/AudioandVideo/Anurag-Gupta-How-Does-Implicit-Bias-Affect-Health-Care.aspx Accessed June 3, 2019

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Slide 40: Toxic Stress. Center on the Developing Child at Harvard University website. https://developingchild.harvard.edu/science/key-concepts/toxic-stress/Accessed June 3, 2019

Slide 41: About the CDC-Kaiser ACE Study. https://www.cdc.gov/violenceprevention/ childabuseandneglect/acestudy/about.html https://www.cdc.gov/violenceprevention/ childabuseandneglect

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Slide 45: Billioux A, Verlander K, Anthony S, Alley D. Standardized screening for health-related social needs in clinical settings: the accountable health communities screening tool. National Academy of Medicine. 2017. https://nam.edu/wp-content/uploads/2017/05/Standardized-Screening-for-Health-Related-Social-Needs-in-Clinical-Settings.pdf Accessed June 4, 2019

Slide 51: The Screening Technical Assistance & Resource (STAR) Center. https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/Screening/

Slide 52: 211. http://www.211.org/ Accessed June 4, 2019

Slide 56: Affordable Care Act (ACA). https://www.healthcare.gov/glossary/affordable-care-act/ Accessed June 4, 2019

Slide 57: About the Initiative. https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/Screening/Pages/About-the-Initiative.aspx Accessed June 4, 2019

Slide 58: Where to Start. https://screeningtime.org Accessed June 4, 2019

Slide 59: University of California, San Francisco. Social Intervention Research and Evaluation Network (SIREN) website. https://sirenetwork.ucsf.edu Accessed June 4, 2019

Slide 60: Accountable Health Communities Model. Centers for Medicare and Medicaid Services website. https://innovation.cms.gov/initiatives/ahcm/ Updated April 30, 2019. Accessed June 4, 2019

Slide 61: Home Visiting. Maternal and Child Health Bureau, Health Resources and Services Administration website. https://mchb.hrsa.gov/maternal-child-health-initiatives/home-visiting-overview Accessed June 4, 2019

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Case-Based Learning

Social determinants of health are the conditions in which people are born, live, learn, play, work, and age. These conditions can explain big differences in health between individuals as well as groups of individuals (populations).

Below are 3 case vignettes that highlight how social conditions can influence health, health care, and care coordination. The goals of these cases are to stimulate discussion and further inquiry. There are no single solutions or best answers, so think creatively and collaboratively.

At the end of this sheet are some useful resources. For a complete list of sources and resources used in Module 3, please see the Facilitator Guide.

CASE STUDY #1

A 5-week-old infant girl was a no-show at her 2-week and 4-week appointments. The assessment and plan in the newborn visit note reads, "Healthy infant. Mother asking about return to work; provided reassurance." The social history reads, "Lives with mother, 2-year-old brother, and maternal grandmother. Mother works as a barista at a local coffee chain. Father involved; not currently employed." There is also a note from an emergency department visit that reads, "Chief complaint: fussiness; arrived by ambulance." According to an assessment and plan note from that visit, "Fussiness is likely due to gas. Sibling also here for mild upper respiratory infection. Discharge with supportive care." A communications note in her chart reads, "Nursing called and spoke with mother who reported no concerns about the baby. Baby is feeding well, breast and bottle. Mother had questions about transitioning to full formula because she needs to return to work. Reported missing her 4-week appointment because her ride fell through. Plans to reschedule."

Question 1. Do you have any concerns related to care coordination? If so, what are they and why?

Question 2. What social stressors might this family be experiencing? Try to explain them using a socio-ecological framework and in terms of health disparities.

Question 3. How might these stressors be affecting this family's health? Try to explain these effects in terms of *chronic* or *toxic stress*.

Question 4. What additional pieces of information would be helpful to have and why? How could the care team gather this information in a way that emphasizes family strengths and assets?

Question 5. What biases, conscious or unconscious, might be present? How might they be addressed?

Question 6. What are some *innovative strategies* and *initiatives* that might help this family achieve health equity? Try to identify some specific referral options.

Case-Based Learning

CASE STUDY #2

You receive a faxed discharge summary from a local hospital. A 7-year-old boy, who is a patient in your practice, was admitted overnight for acute asthma exacerbation after presenting to the emergency department (ED). His last routine visit was for well-child care (WCC) 10 months ago, although he has had 3 urgent care visits and an ED visit in the last 6 months. The social history in the WCC note reads, "Mother is home with kids; father works as a truck driver and is often away. Father smokes but only outside." There is also a communication note that the mother called the office requesting a doctor's letter to help prevent the electricity from being shut off. There is a social work note from 2 years ago that reads, "Referred for history of domestic violence. No current safety concerns; mother reports this issue is resolved. Only reported stress is making ends meet. Provided contact information and \$20 in grocery cards; further follow-up as needed."

Question 1. Do you have any concerns related to care coordination? If so, what are they and why?

Question 2. What social stressors might this family be experiencing? Try to explain them using a socio-ecological framework and in terms of health disparities.

Question 3. How might these stressors be affecting this family's health? Try to explain these effects in terms of chronic or toxic stress.

Question 4. What additional pieces of information would be helpful to have and why? How could the care team gather this information in a way that emphasizes family strengths and assets?

Question 5. What biases, conscious or unconscious, might be present? How might they be addressed?

Question 6. What are some *innovative strategies* and *initiatives* that might help this family achieve health equity? Try to identify some specific referral options.

Case-Based Learning

CASE STUDY #3

A 10-year-old girl has been referred to a clinical nutritionist for concerns about elevated body mass index. The notes from her recent health supervision visit show a positive screen for inattentive symptoms although she does not have a diagnosis of ADHD. The nutrition portion of the notes reads, "Working on healthy eating. Sometimes does takeout because mother works nights." The sleep portion reads, "Stays up late watching YouTube videos and playing Fortnite (an online video game)." The assessment and plan reads, "Will refer to clinical nutrition. Had previously been referred to weight management group visit program, but family was unable to attend." There is an emergency department note from 6 months ago that reads, "Chief complaint: homelessness. Family is being evicted from their apartment. Social work consulted; plan is to apply for temporary shelter placement." There is no mention of housing status or concerns at the recent health supervision visit. A review of past appointments shows a 45% no-show rate. On closer review, most of these missed appointments were for non-health supervision follow-up visits labeled "growth follow-up" or "nutrition follow-up."

Question 1. Do you have any concerns related to care coordination? If so, what are they and why?

Question 2. What social stressors might this family be experiencing? Try to explain them using a socio-ecological framework and in terms of health disparities.

Question 3. How might these stressors be affecting this family's health? Try to explain these effects in terms of chronic or toxic stress.

Question 4. What additional pieces of information would be helpful to have and why? How could the care team gather this information in a way that emphasizes family strengths and assets?

Question 5. What biases, conscious or unconscious, might be present? How might they be addressed?

Question 6. What are some *innovative strategies* and *initiatives* that might help this family achieve health equity? Try to identify some specific referral options.

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