Addressing the Social Determinants of Health in Clinical Practice

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Objectives

• Review how the social determinants of health impact directly on people’s health and well-being

• Share strategies for eliciting and addressing the social determinants of health during clinical encounters

• Discuss why teamwork, community engagement, and multi-sector partnerships are important for improving community and population health
Addressing Social Determinants to Improve Patient Care and Promote Health Equity: An American College of Physicians Position Paper

Hilary Daniel, BS; Sue S. Bornstein, MD; and Gregory C. Kane, MD; for the Health and Public Policy Committee of the American College of Physicians*

Social determinants of health are nonmedical factors that can affect a person's overall health and health outcomes. Where a person is born and the social conditions they are born into can affect their risk factors for premature death and their life expectancy. In this position paper, the American College of Physicians acknowledges the role of social determinants in health, examines the complexities associated with them, and offers recommendations on better integration of social determinants into the health care system while highlighting the need to address systemic issues hindering health equity.

Annals.org

For author affiliations, see end of text.
Determinants of Health

- Health Care: 40%
- Genetic: 30%
- Behavior: 10%
- Environment: 20%

Adapted from McGinnis et al., Health Affairs 2002
The U.S. Spent $3,205.6 Billion on Health Care in 2015
Where Did It Go?*

- Hospital care: $1,036.1 Billion (32.3%)
- Physician services: $502.8 Billion (15.7%)
- Other personal health care: $476 Billion (14.8%)
- Clinical services: $132.1 Billion (4.1%)
- Prescription drugs: $324.6 Billion (10.1%)
- Nursing care facilities: $156.8 Billion (4.9%)
- Home health care: $88.8 Billion (2.8%)
- Government administration: $42.6 Billion (1.3%)
- Net cost of health insurance: $210.1 Billion (6.6%)
- Investment: $154.7 Billion (4.8%)

Healthy People 2020 Approach to Social Determinants of Health

A “place-based” organizing framework, reflecting five (5) key areas of social determinants of health (SDOH)

https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health
Social Determinants of Health Increase Cost-Related Nonadherence in Patients with Diabetes

Health and non-health-related burden items and cost-related non-adherence (CRN) with and without diabetes, National Health Interview Survey 2013.

Chi-square tests were used to examine differences between those with and without diabetes. *p<.05, **p<.01, ***p<.001

Health Workforce Needs

- Critical Thinking
- Systems Thinking/Public Health Approaches
- Team Skills
- Community Engagement
- Collective Action

CDC Foundation – Health and Wellbeing for All
https://www.youtube.com/watch?v=sFMvRPLompU&feature=youtu.be
Addressing the Social Determinants of Health During Clinical Encounters

Eliciting an Expanded Social History

The Importance of Creating Safety, Trust, and a Therapeutic Alliance
American Academy of Family Physicians

The EveryONE Project
Advancing health equity in every community

Social Determinants of Health
GUIDE TO SOCIAL NEEDS SCREENING TOOL AND RESOURCES

• Part 1: Screening Your Patients
• Part 2: Assessing Your Practice
• Social Needs Resources for Physicians

https://www.aafp.org/patient-care/social-determinants-of-health/everyone-project/tools.html#patients
THEESEUS – A Mnemonic for Addressing the Social Determinants of Health

T: Transportation (e.g., auto, bus, taxi)
H: Housing (e.g., home owner, renter, living arrangements, housing stock)
E: Eating (e.g., typical diet/nutrition, adequacy of food supplies, meals on wheels, food desert)
E: Education (e.g., educational attainment, literacy, numeracy, health literacy)
S: Safety (e.g., interpersonal, physical, community, environmental)
E: Economics (e.g., current and long-term financial assets, budget for food, clothing, medications)
U: Utilities (e.g., electricity, gas, water, heating, phone, internet)
S: Social Supports (e.g., family, friends, work, religious, recreational, community)

Developed by:
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The LOTUS: A Journey to Value-Based, Patient-Centered Care

Addressing the SDH in the ICU

LOTUS - Leadership, Ownership, Transformation, Unity and Sustainability

https://connect.springerpub.com/content/sgrcn%3A%3A%3A25%3A%3A%3A1%3A%3A%3A17.full.pdf?implicit-login=true&sigma-token=drt5R1zwBoEG7GlZXzYsWmMs5fbNaXKH9snL8d7KsOE

https://news.rutgers.edu/new-model-icu-care-developed-rutgers-discovers-causes-health-emergencies/20190315#.XKeY8Lsacx
Example of MICU Clinical Role Play, Debriefing, and Panel Discussion

**Patient:** You are a 57-yr-old patient with multiple medical problems with 3rd MICU admission for “very high sugars” (DKA/Diabetic ketoacidosis) - experiencing medication adherence challenges - dealing with multiple SDOH - pending transfer from MICU to regular floor in hospital

**Physician:** You and the MICU team are taking care of this patient with multiple hospital readmissions for DKA – you would like to better understand and address the issues that led to current MICU admission and try to prevent a 4th readmission – make use of THEESEUS clinical interviewing mnemonic to learn more about the SDOH affecting patient’s health status, life and functioning, and medication adherence
## PRAPARE Social Determinants of Health in the EHR

### List of Patient-Level Social Determinants of Health in Epic

<table>
<thead>
<tr>
<th>Current SDH Data Collected (PM)</th>
<th>New SDH Section in PM/EHR Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Demographics (address, age, gender, language, race, ethnicity, etc.)</td>
<td>• Education and learning</td>
</tr>
<tr>
<td>• Federal poverty level</td>
<td>• Financial resource strain</td>
</tr>
<tr>
<td>• Health Insurance status</td>
<td>• Intimate partner violence</td>
</tr>
<tr>
<td>• Homeless status</td>
<td>• Physical activity</td>
</tr>
<tr>
<td>Current SDH Data Recorded (EHR)</td>
<td>• Social connections &amp; social isolation</td>
</tr>
<tr>
<td>• Alcohol use</td>
<td>• Stress</td>
</tr>
<tr>
<td>• Tobacco use and exposure</td>
<td>• Sexual orientation/gender identity</td>
</tr>
<tr>
<td>• Depression</td>
<td>• Housing</td>
</tr>
<tr>
<td></td>
<td>• Food insecurity</td>
</tr>
</tbody>
</table>

### SDH Summary in Patient Chart

#### This Visit

<table>
<thead>
<tr>
<th>Social Determinants</th>
<th>Sign Visit</th>
<th>Last Visit with Me</th>
<th>Care Plan (Medical)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Current as of Thu 6/9 2:48 PM. Click to refresh:**
  - Hard to pay for: Utilities: No
  - Hard to pay for: Transportation: No
  - Hard to pay for: Medicine or medical care: No
  - Hard to pay for: Health insurance: Yes
  - Hard to pay for: Clothing: No
  - Hard to pay for: Rent/Mortgage payment: No
  - Hard to pay for: Child care: No
  - Hard to pay for: Child care: No
  - Hard to pay for: Other: No

#### Federal Poverty Level

No account selected for this visit

#### Housing Lack

<table>
<thead>
<tr>
<th>Housing</th>
<th>Latest Value Recorded</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the last month, have you slept outside, in a shelter, or in a place not meant for sleeping?</td>
<td>Yes</td>
<td>6/9/2016</td>
</tr>
<tr>
<td>In the last month, have you had concerns about the conditions and quality of your housing?</td>
<td>Yes</td>
<td>6/9/2016</td>
</tr>
<tr>
<td>In the last 12 months, how many times have you moved from one home to another?</td>
<td>5</td>
<td>6/9/2016</td>
</tr>
<tr>
<td>Housing Insecurity Score</td>
<td>3</td>
<td>6/9/2016</td>
</tr>
</tbody>
</table>

#### Food Insecurity

<table>
<thead>
<tr>
<th>USDA Household Food Security Module</th>
<th>Latest Value Recorded</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Security: &quot;I/we worried whether (my/our) food would run out before (I/we) got money to buy more. Was that often true, sometimes true, or never true for (you/your household) in the last 12 months?&quot;</td>
<td>Often true</td>
<td>6/9/2016</td>
</tr>
<tr>
<td>The food that (I/we) bought just didn’t last, and (I/we) didn’t have money to get more. Was that often, sometimes, or never true for (you/your household) in the last 12 months?</td>
<td>Never true</td>
<td>6/9/2016</td>
</tr>
<tr>
<td>(I/we) couldn’t afford to eat balanced meals. Was that often, sometimes, or never true for (you/your household) in the last 12 months?</td>
<td>Don’t know or Refused</td>
<td>6/9/2016</td>
</tr>
<tr>
<td>USDA 2Q Score</td>
<td>1</td>
<td>6/9/2016</td>
</tr>
</tbody>
</table>

#### Intimate Partner Violence

©2016 Epic Systems Corporation. Used with permission.
Ordering Referral to Community Services

©2016 Epic Systems Corporation. Used with permission.

AMA Backs UnitedHealth's Billing Codes For Social Determinants Of Health

April 2, 2019

https://www.forbes.com/sites/brucejapsen/2019/04/02/ama-backs-unitedhealths-billing-codes-for-social-determinants-of-health/#6b1b842e2204
ICD-10 Z Codes relating to Social Determinants of Health

Z55-Z65 – Persons with potential health hazards related to socioeconomic and psychosocial circumstances

Z55 – Problems related to education and literacy
Z56 – Problems related to employment and unemployment
Z57 – Occupational exposure to risk factors
Z59 – Problems related to housing and economic circumstances
Z60 – Problems related to social environment
Z62 – Problems related to upbringing
Z63 – Other problems related to primary support group, including family circumstances
Z64 – Problems related to certain psychosocial circumstances
Z65 – Problems related to other psychosocial circumstances

Each of these codes has sub-codes providing a more specific description of the problem. Some of these codes describe issues traditionally recognized as related to socioeconomic status:

Z59 – Problems related to housing and economic circumstances
Z59.0 – Homelessness
Z59.1 – Inadequate housing
Z59.4 – Lack of adequate food and safe drinking water
Z59.5 – Extreme poverty
Z59.6 – Low income
Z59.7 – Insufficient social insurance and welfare support

While others are not traditional measures of social factors:

Z60.2 – Problems related to living alone
Z60.3 – Acculturation difficulty
Z60.5 – Target of (perceived) adverse discrimination and persecution
Z63.1 – Problems in relationship with in-laws
Z62.1 – Parental overprotection

http://www.3mhisinsideangle.com/blog-post/icd-10-adds-more-detail-on-the-social-determinants-of-health/
How Collecting Z-Code Data on Social Determinants of Health Can Help Inform Population Health Initiatives

• Improving panel management
• Expanding the definition of quality improvement
• Staffing for team-based care
• Adjusting provider panel sizes

http://content.healthaffairs.org/content/35/11/2116.abstract
Avoiding the Unintended Consequences of Screening for Social Determinants of Health

“Screening for any condition in isolation without the capacity to ensure referral and linkage to appropriate treatment is ineffective and, arguably, unethical.”

Key Principles for Effectively Incorporating Screening for Social Determinants Into Clinical Practice

• Ensure Patient and Family-Centered Screening for Social Determinants of Health
• Integrate Screening with Referral and Linkage to Community-Based Resources
• Perform Screening Within the Context of a Comprehensive Systems Approach
• Use a Strength-Based Approach to Support Patients and Their Families
• Do Not Limit Screening Practices Based on Apparent Social Status

Accessing Community Resources

Aunt BERTHA.com
CONNECTING PEOPLE AND PROGRAMS

HEALTHIFY
Definitions

“Population health is defined as the health outcomes of a group of individuals, including the distribution of such outcomes within the group. These groups are often geographic populations such as nations or communities, but can also be other groups such as employees, ethnic groups, disabled persons, prisoners, or any other defined group.”

https://www.improvingpopulationhealth.org/blog/what-is-population-health.html

“Population health management is a set of interventions designed to maintain and improve people’s health across the full continuum of care—from low-risk, healthy individuals to high-risk individuals with one or more chronic conditions.”

https://journals.sagepub.com/doi/10.1177/2150131914536400
The Need for Teamwork, Community Engagement, & Multi-Sector Partnerships
Interprofessional Teamwork is Critical!

Social Workers

Community Health Workers
Medical-Legal Partnerships for Addressing the Social Determinants of Health

National Center for Medical Legal Partnership
http://medical-legalpartnership.org/

“Health care delivery organizations, policymakers, and patient advocates across the United States are increasingly aware that many factors outside the health clinic’s door affect the health of patients and communities. What is less commonly understood is how law functions as an important social determinant of health, and how lawyers can effectively collaborate with clinicians, case workers, patient navigators, and other members of the health care team to both prevent and remedy the many health-harming factors that have their roots in legal problems.”

Association of Academic Medical Colleges - “Accelerating Health Equity: Advancing through Discovery” (AHEAD)

Medical-Legal Partnership in Primary Care: Moving Upstream in the Clinic
http://journals.sagepub.com/doi/abs/10.1177/1559827617698417
# I-HELP Legal Assessment Framework

## Legal Needs That Affect Health

<table>
<thead>
<tr>
<th>Legal need</th>
<th>Examples of legal needs that affect health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income/insurance</td>
<td>Insurance access and benefits</td>
</tr>
<tr>
<td></td>
<td>Food stamps</td>
</tr>
<tr>
<td></td>
<td>Disability benefits</td>
</tr>
<tr>
<td></td>
<td>Social Security benefits</td>
</tr>
<tr>
<td>Housing</td>
<td>Shelter access</td>
</tr>
<tr>
<td></td>
<td>Access to housing subsidies (such as Section 8 program)</td>
</tr>
<tr>
<td></td>
<td>Sanitary housing conditions (such as mold or lead)</td>
</tr>
<tr>
<td></td>
<td>Foreclosure prevention</td>
</tr>
<tr>
<td></td>
<td>Americans with Disabilities Act compliance</td>
</tr>
<tr>
<td></td>
<td>Utility access</td>
</tr>
<tr>
<td>Education/employment</td>
<td>Americans with Disabilities Act compliance</td>
</tr>
<tr>
<td></td>
<td>Discrimination</td>
</tr>
<tr>
<td></td>
<td>Individuals with Disabilities in Education Act compliance</td>
</tr>
<tr>
<td>Legal status</td>
<td>Immigration (asylum, Violence Against Women Act)</td>
</tr>
<tr>
<td></td>
<td>Criminal record issues</td>
</tr>
<tr>
<td>Personal/family stability</td>
<td>Guardianship, custody, and divorce</td>
</tr>
<tr>
<td></td>
<td>Domestic violence</td>
</tr>
<tr>
<td></td>
<td>Child and elder abuse and neglect</td>
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<tr>
<td></td>
<td>Capacity/competency</td>
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<tr>
<td></td>
<td>Advance directives</td>
</tr>
<tr>
<td></td>
<td>Powers of attorney</td>
</tr>
<tr>
<td></td>
<td>Estate planning</td>
</tr>
</tbody>
</table>

**Source**: Adapted from Kenyon C, Sandel M, Silverstein M, Shakir A, Zuckerman B. Revisiting the social history for child health. Pediatrics. 2007;120:e734-38. These authors adapted the I-HELP assessment tool.

CMS Launches New Model to Test Social Determinants

“The Innovation Center at the Centers for Medicare and Medicaid Services (CMS) announced the creation of the Accountable Health Communities Model …. It is the first-ever CMS innovation model to focus on the **social determinants of health** …. The five-year program … will ‘**focus on the health-related social needs of Medicare and Medicaid beneficiaries, including building alignment between clinical and community-based services at the local level.**’ This model is expected to raise Medicaid and Medicare beneficiaries' awareness of community-based services, making it more likely they will access community services to receive assistance in times of need or crisis.”

http://www.modernhealthcare.com/article/20160908/BLOG/160909897
CMS Expands Medicare Advantage Coverage for Social Determinants of Health

“Medicare Advantage plans in 2019 will be able to provide coverage for a wider variety of non-medical benefits as CMS moves to provide better coverage for social determinants of health ….

Air conditioners for people with asthma, healthy groceries for people on medically-prescribed diets, home-delivered meals for people who are immunocompromised and rides to medical appointments for people without transportation all could fall under CMS’s new criteria. Coverage for services like smoking cessation could expand beyond counseling sessions to also cover over-the-counter products like nicotine patches or gum.”

The Importance of Developing Structural Competency

“The trained ability to discern how a host of issues defined clinically as symptoms, attitudes, or diseases (e.g., depression, hypertension, obesity, smoking medication ‘non-compliance,’ trauma, psychosis) also represent the downstream implications of a number of upstream decisions about such matters as health care and food delivery systems, zoning laws, urban and rural infrastructures, medicalization, or even about the very definitions of illness and health.”

Metzl J, Hansen H. Structural Competency: Theorizing a New Medical Engagement with Stigma and Inequality. Social Science and Medicine 2014; 103:126-133.

"Structural competency directs clinical training and healthcare systems to intervene at the level of social structures, institutions, and policies that must be altered to improve population health and promote health equity.”

Case Study: Sociosomatic Illness

A Man with Persistent Wrist Pain

“32-yr-old Mexican man working as a raker of wild blueberries for his eighth August harvest. Maine’s blueberry season is 4 weeks long, and farmworkers rake as much as 12 hours each day. Before coming to Maine, patient had picked highbush blueberries in New Jersey and worked in the North Carolina tomato harvest. He had noticed the onset of pain in his right wrist earlier in the Maine harvest; the pain increased with continued work until his wrist was red and noticeably swollen. Patient knew of a mobile clinic, staffed by a federally qualified health center, that rotated through various labor camps. On the evening when the clinic arrived at patient’s bunkhouse, he added his name to the list of workers to be seen.”

“Structural Differential Diagnosis”

“A structural differential delineates the social, political, and economic factors that may be influencing a patient’s health and health care and facilitates responses to the modifiable factors.”

Steps in Generating and Refining a Structural Differential

1. “Intentionally expand the scope of clinical inquiry to include structural factors.”
2. “Use tools such as the structural vulnerability checklist to frame and inform a broad list of hypotheses.”
3. “Gather perspectives from outside the exam room.”
4. “Learn about the historical context.”
5. “Partner with patients in their communities to clarify and prioritize relevant issues and actions.”

“Structural Differential”

- “Economic and agricultural policies that lead employers to promote a method of raking that prioritizes immediate productivity over long-term worker health”

- “Economic instability that leads to migrant workers’ being the sole wage earners for extended families living across national borders, which affects their decisions regarding potential lost wages”

- “Immigration policies, nativist rhetoric, or police actions that create conditions in which even employees with authorized immigration status may refrain from calling attention to workplace health concerns for fear of retaliation”

Social Medicine Intervention

- **Intervention**: “Clinic invited [patient] and other farmworkers, CHWs, and blueberry growers, as well as specialists in metalworking and ergonomics, to form a group to explore occupational injuries. That group met several times over the course of 3 years to research traditional and makeshift rake designs, to brainstorm about and evaluate them, and ultimately to create and promote a new two-handled model that was acceptable to all participants.”

What do you see? What factors are not visible in the picture?

http://www.cdcfoundation.org/health-in-a-box
CDC COMMUNITY HEALTH IMPROVEMENT NAVIGATOR

Invest in Your Community

https://www.cdc.gov/chinav/index.html
INVEST IN YOUR COMMUNITY

4 Considerations to Improve Health & Well-Being for All

WHAT
Know What Affects Health

WHERE
Focus on Areas of Greatest Need

WHO
Collaborate with Others to Maximize Efforts

HOW
Use a Balanced Portfolio of Interventions for Greatest Impact

- Action in one area may produce positive outcomes in another.
- Start by using interventions that work across all four action areas.
- Over time, increase investment in socioeconomic factors for the greatest impact on health and well-being for all.

VISIT www.cdc.gov/CHInav FOR TOOLS AND RESOURCES TO IMPROVE YOUR COMMUNITY’S HEALTH AND WELL-BEING

CDC
NATIONAL PREVENTION STRATEGY
Robert Wood Johnson Foundation

MARCH 2015
THE PRACTICAL PLAYBOOK

#PCPHintegration

https://www.practicalplaybook.org/
Meditations

“We need to comfort the afflicted and afflict the comfortable.”

Eleanor Roosevelt

“Pay attention to what makes you angry. That’s your issue choosing you.”

Dr. Lisa Chamberlain, Stanford School of Medicine