The Social Determinants of Health and Hospital Readmissions
Social Determinants of Health

From the CDC (2018):

Conditions in the places where people live, learn, work, and play that affect a wide range of health risks and outcomes.

https://www.cdc.gov/socialdeterminants/index.htm
What is Public Health?

“The activities that ensure conditions in which people can be healthy. These activities include community wide efforts to identify, prevent, and combat threats to the health of the public.”

-- Institute of Medicine
Public Health System

Source: CDC, Center for State, Tribal Local, and Territorial Support, 2018
Estimated Deaths Attributable to Social Factors in the US (2011)

Authors suggest that approximately 245,000 deaths in the US in 2000 were attributable to low education.

- 176,000 to racial segregation
- 162,000 to low social support
- 133,000 to individual level poverty
- 119,000 to income inequality,
- 39,000 to area-level poverty.

Compared with 192,898 deaths caused by acute myocardial infarction, which was the leading cause of death in the US in 2000.

- Cerebrovascular disease: 167,661
- Lung cancer: 155,521
Neighborhood Life Expectancy


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Health Equity
Health Disparity/Inequity

Observable and factual differences in health outcomes between groups.

These differences can be measured– they aren’t values-based.
Defining Health Equity for Different Audiences

A 30-second definition for general audiences: Health equity means that everyone has a fair and just opportunity to be as healthy as possible. This requires removing obstacles to health such as poverty, discrimination, and their consequences, including powerlessness and lack of access to good jobs with fair pay, quality education and housing, safe environments, and health care.

A 15-second definition for technical audiences: For the purposes of measurement, health equity means reducing and ultimately eliminating disparities in health and its determinants that adversely affect excluded or marginalized groups.

A 20-second definition for audiences who ask about the difference between equity and disparities: Health equity is the ethical and human rights principle that motivates us to eliminate health disparities; health disparities—worse health in excluded or marginalized groups—are how we measure progress toward health equity.

An 8-second version for general audiences (health equity as a goal or outcome): Health equity means that everyone has a fair and just opportunity to be as healthy as possible.

Another 8-second version for general audiences (health equity as a process): Health equity means removing economic and social obstacles to health such as poverty and discrimination.
What do we do? First, talk about it.

• The concept resonates, but the wording doesn’t

• Help people make the connections that they already know to be true—for example, availability of quality health care

• SDoH affect all Americans, not just one specific subpopulation of people

• Personal responsibility shared with social responsibility
Then, make sure it gets considered.

From the National Association of City and County Health Officials (NACCHO):

1: How is our organization contributing to or exacerbating health inequities?

2: How can our organization play a greater role in addressing the various factors that are contributing to poor health outcomes such as housing, transportation, or education?

Are you reviewing an internal policy or procedure any time soon? Consider taking a look with a health equity lens.
SDoH and Hospital Readmissions
Individual-level SDoH

Studies have found the following individual-level SDoH are associated with increased risk of readmission:

- Sex
- Race
- Ethnicity
- Primary language
- Marital status
- Insurance type
Community-level SDoH associated with increased risk of readmission include:

- Median income
- Unemployment rate
- % with high school or equivalent diploma
- % foreign born
- Insurance status of population
- Felony rate
- Walkability score
- Household composition and disability score
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Impact of SDoH on potentially avoidable 30-day readmission or death

June 2020, PLOS ONE, [10.1371/journal.pone.0235064](10.1371/journal.pone.0235064)

- Predictive models could identify patients at higher risk of readmission or death and target interventions. This study focused on Medicaid patients, patients aged 65 years or older, and patients living with obesity.
- Used the Simplified HOSPITAL predictive score.
- Higher proportion of patients in the three groups got assigned a higher predicted risk correctly when adding SDoH.
SDoH and Hospital Readmission in Pediatric Cases


• Studies show children in poverty who experience housing insecurity, food insecurity, and low rates of parental education have higher rates of readmission.

• Race and/or ethnicity and household income are predictors of pediatric readmissions.

• AAP recommends systematically screening for SDoH.
  • Education for providers on screening and addressing SDoH
  • Prompts in EMR
  • Resource lists that can be printed from EMR and given to patients
Evidence-based SDoH Screeners

August 2017, Journal of Pediatric Nursing, 10.1016/j.pedn.2017.08.022

Study reviewed 13 pediatric SDoH screening tools using the Healthy People 2020 SDoH framework of 5 categories, each with sub-components.

• Most had at least one question for each of the four Economic Security sub-components (poverty, employment, food insecurity, and housing stability).

• 10 of 13 assessed Social and Community Context, but only by asking about intimate partner violence and/or incarceration.

• 9 of 13 assessed Health and Health Care, but none included health literacy.

• 7 assessed Education of either the child or parent, but not both.

• 6 assessed Neighborhood and Built Environment, but only asked one question on either crime and violence or housing quality.

• None of the tools including a question about each of the 5 SDoH domains.
State Health Improvement Planning
Montana State Health Assessment
2017
A Report on the Health of Montanans

Montana State Health Improvement Plan
2019–2023
Healthy Living...Healthy Futures for Montana

Find them online at dphhs.mt.gov/ahealthiermontana
State Health Assessment (SHA)

- First SHA completed in 2012
- SHA repeated in 2017
- Detailed information on access to health care, causes of death, chronic diseases, communicable diseases, maternal and child health, unintentional injury, mental health substance abuse, environmental health, and social determinants of health
What do Montana Communities care about?

Community Health Concerns

What was identified in the Community Health Assessments & Community Health Needs Assessments?

1. Substance Use Disorder  92%
2. Overweight & Obesity  60%
3. Mental Health  44%
4. Cancer  38%
State Health Improvement Plan (SHIP)

• Developed by the State Health Improvement Coalition

• **Mission**: to protect and improve the health of every Montanan through evidence-based action and community engagement

• Used the information available in the SHA to identify five health priorities to focus on as a state over the next five years

• Designed to be a collectively owned and living document to improve collaboration amongst statewide partners
Using the SHIP

• Review the contents. Ask yourself, is your community or organization addressing any of these issues? How can work in your community be coordinated around these health issues?

• Work with local or tribal health departments to participate in the planning process at the community level.

• Encourage your organization and other groups in your community to align their plans and policies with the strategies in the SHIP.
Why does the state health department care about local community health planning?

• Used as a secondary data source for state-level planning
• Align and improve collaboration on key health issues
• Increase capacity of local and tribal public health departments to provide essential services
• Strengthen the public health system as a whole
Terminology

Step 1: Do an assessment
CH A
CHA

Step 2: Make a plan
CH A
CHNA

CHIP
IP
What is the value of partnering?

• Share costs and resources
• Maximize resources
• Brings more credibility in the community
• Brings more stakeholders to the table and more buy-in
• Able to extend population/demographic reach
• Results inform state-level planning activities
Examples of Successful Collaborations

- Daniels County
  - Collaboration led to MHCF grant to help implement the CHIP

- Valley County
  - Collaboration led to successful PHSD grant to implement the CHIP

- Richland County
  - Collaboration led to yearly county conference

- Yellowstone County
  - Successful collaborations between public health and two major health care organizations
Thank you!

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