# The Impact of Disparities and Social Determinants of Health (SDH) on the Health Outcomes of the Population

Sedgwick County Division of Health

316-660-7300 www.sedgwickcounty.org

In spite of improvements in health care delivery systems and local and state public health infrastructures, the public health care system continues to face challenges in improving the health of citizens. Kansas continues to rank in the middle of the nation's overall health status, and racial and ethnic disparities exist across multiple indicators of health outcomes. This issue brief will provide definitions for disparities, equity, equality and the SDH, examine various types of SDHs and discuss the relationships between SDH and their impact on the health status across populations. People in our communities have different health outcomes that are influenced by factors such as healthcare access, income, race or ethnicity, housing and neighborhoods.



#### Definitions

Disparities - differences in health status of different groups of people. 1 Disparities can be manifested in race, sex or gender, ethnicity, immigrant status, disability, sexual orientation, geography or income of sub groups within the population. They are inequitable and directly related to the historical and current unequal distribution of social, political, economic and environmental resources.

Social Determinants of Health (SDH) - are the conditions, in which people are born, grow, work, live, and age and the

wider set of forces and systems shaping the conditions of daily life. These forces and systems include economic policies and systems, development agendas, social norms, social policies and political systems.2

Equity - The quality of being fair and impartial

Equality - the state of being equal, especially in status, rights and opportunities

#### Social Determinants of Health<sup>3</sup>

The range of personal, social, economic and environmental factors that influence health status are known as determinants of health. Health outcomes are influenced by many factors such as environment, genetics, socio-economic status (SES), equal and equitable distribution of resources/services and access to health care. Figure 1 illustrates how individual and population health are influenced by social determinants of health. The degree to which individuals and populations have positive and/or negative interactions with various SDHs, cumulatively throughout their lives, can determine whether their health outcomes are positive or negative.

PHYSICAL/SOCIAL

POLICYMAKING

Individual/Population Health

LIFESTYLE/BEHAVIOR Drug/Alcohol/Tobacco use

**ECONOMIC ENVIRONMENT** Income/Wealth

Figure 1

### Determinants can fall under several broad categories, some of which are expanded upon in the following listing:



**Policymaking** - Policies set at the local, state and federal level affect individual and population health.



Physical/Social factors - Social determinants of health reflect the social elements and physical conditions of the environment in which people are born, live, learn, play, work and grow up. Also known as physical and social determinants of health, they can impact a wide range of health and wellness factors and a person's ability to function or contribute to society.



Health Services Access - Both access to health services and the quality of health services can impact health. Lack of access, or limited access, to health services has a great impact on an individual's health.

Barriers to accessing health services include but are not limited to:

- 1. Lack of availability
- 2. High cost/Lack of insurance coverage
- 3. Limited language access
- 4. Limited understanding of health care instructions

These barriers to accessing health services can lead to:

- 1. Unmet health needs (Delays in receiving appropriate care)
- 2. Inability to access preventive services
- 3. Preventable hospitalization
- Uneven/unequal rates of disease and mortality (i.e., disparate rates of diabetes and cardiovascular disease)



Lifestyle/Individual behavior - Personal lifestyle choices and individual behavior also play a role in health outcomes. Many public health and health care interventions focus on changing individual behaviors such as substance abuse, diet, sexual activity and exercise.



**Economic Environment** - Ones economic environment is strongly connected to levels of education attainment, employment status and inherited wealth. This determinant has far-reaching impacts in many other areas; such as the ability to move out of less-than desirable living conditions, selection of better foods, accessing health care and many other factors that impact health outcomes.



Biology and genetics - Biological and genetic factors affect some populations more than others. Sickle cell disease is an example of a genetic determinant of health. Examples of biological and genetic social determinants of health include, but are not limited to:

- 1. Age, Gender
- 2. HIV status
- 3. Inherited conditions, (i.e., hemophilia and cystic fibrosis)
- Carrying a gene which increases risk for breast and ovarian cancer
- Familial history of certain diseases (i.e., Alzheimer's or heart disease)

It is the interrelationships among these factors that determine individual and ultimately population health. Interventions target multiple determinants of health will most likely be effective. Determinants of health reach beyond the boundaries of traditional health care and public health sectors and sectors such as education, housing, transportation, agriculture and environment can be important allies in improving population health.

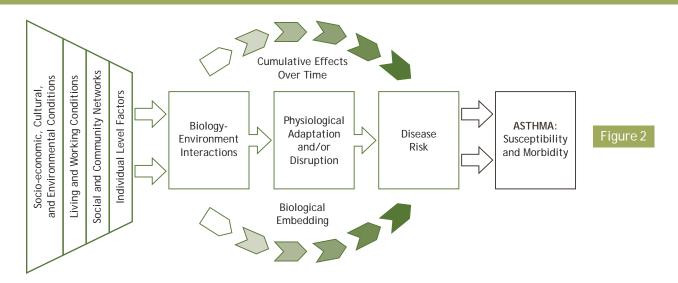
Disparities can be the result of unequal and inequitable distribution of social determinants, such as *poverty,* environmental threats, inadequate access to health care, individual/behavioral factors and education.

#### SDH's Cumulative Impact on Individual and Population Health Outcomes

As demonstrated in the Figure 2, a disease, like asthma, can be negatively or positively impacted by social determinants of health. According to the *Life Course Health Development Model*, "health is a consequence of multiple determinants operating in nested genetic,

biological, behavioral, social, and economic contexts that change as a person develops" and chaos (defined as crowding, unpredictability, etc.) of the surrounding environment leads to deleterious health effects."4

The impact of cumulative societal advantages/disadvantages on other disease/illness would follow this same pattern.



## SDH's Effect on Individual and Population Health Outcomes in Sedgwick County, KS

Sedgwick County's Overall Health Outcomes ranking is 69th out of 105 counties in the state of Kansas. An article in the Wichita Eagle reported Sedgwick County being in the bottom third of Kansas Health rankings. Pezzino, of the Kansas Health Institute, is quoted as saying, "Sedgwick County's rank for social and economic factors...ranks 12th worst in the state for those factors."

Lack of access to health care, low socio-economic status and disparate infant mortality rates are all social determinants of health factors and are negatively impacting the health of Sedgwick County residents. Approximately 85,000 (17 percent) Sedgwick County residents are uninsured, which could make it difficult to obtain a primary physician/dentist. Thirteen percent of adults reported not seeing a doctor due to costs. When illnesses become too much to manage or control, residents will use emergency department services. Pockets exist in some zip codes where the African American infant mortality (IM) rate is much higher (17.2) than that of the general population (7.7).6 Although many social factors may contribute to this disparate IM rate; not having access to affordable health care for prenatal care can be a great contributor to this situation.





# Resources to Help Practitioners Put Social Determinants of Health Knowledge into Action

It is important for practitioners to understand what and how determinants impact the health of the population. Doing so helps to build better patient/doctor relationships. Reviewing diverse data and tools pertaining to Social Determinants of Health helps practitioners recognize root causes that affect population health and provides a starting place for taking appropriate action. A list of resources, include but are not limited to:

- 1. Data Set Directory of SDH at the Local Level (https://www.cdc.gov/dhdsp/data\_set\_directory.htm)
- 2. Social Determinants of Health: Know What Affects Health web portal (<a href="https://www.cdc.gov/socialdeterminants/">https://www.cdc.gov/socialdeterminants/</a>)
- 3. Essentials for Childhood; Steps to Create Safe, Stable, Nurturing Relations and Environments for all Children (https://www.cdc.gov/violenceprevention/childmaltreatment/essentials.html)
- 4. Community Approaches to Advance Health Equity (CDCTRAIN online course)

(https://cdc.train.org/DesktopModules/eLearning/CourseDe-tails/CourseDetailsForm.aspx?tabid=62&courseid=1053476&backURL=LORIc2t0b3BTaGVsbC5hc3B4P3RhYkIkPTYyJmdvdG89YnJvd3NIJmJyb3dzZT1rZXI3b3JkJmtleXdvcmQ9aGVhbHRoK2VxdWI0eSZrZXIvcHRpb249Qm90aCZjbGluaWNhbD1Cb3RoJmxvY2FsPUFsbCZCeUNvc3Q9MA)

5. A Practitioner's Guide to Advancing Health Equity
(http://r.search.yahoo.com/\_ylt=A0LEVv6bsY9YCwIA8RonnIIQ;\_ylu=X3oDMTBy0HZyb21tBGNvbG8DYmYxBHBvcwMxBHZ0aWQDBHNIYwN
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For more information, contact the Sedgwick County Division of Health