Meeker McLeod Sibley Healthy Communities
Health Equity Data Analysis

As part of the Statewide Health Improvement Partnership (SHIP), Meeker McLeod, Sibley (MMS) Healthy Communities helps make healthy choices possible for all. Yet some population groups experience worse health outcomes than other groups. MMS Healthy Communities aims to reduce health disparities between groups and thereby advance health equity. Health equity is a state where all persons, regardless of race, creed, income, sexual orientation, gender identification, age or gender have the opportunity to reach their full health potential. To achieve health equity, people need:

- Healthy living conditions and community space
- Equitable opportunities in education, jobs and economic development
- Reliable public services and safety
- Non-discriminatory practices in organizations

Throughout the fall of 2016, MMS staff conducted a Health Equity Data Analysis to document health inequities and their root causes as a first step towards addressing health inequity within the region. This multi-step process involved identifying and analyzing existing data and collecting new qualitative data from community members.

Step 1: Analyze Existing Data

In 2014, a survey was conducted of residents in the tri-county region. This survey was designed to be representative of the adult population in Meeker, McLeod and Sibley counties and will be repeated in five years. Results from this survey show inequities between income groups in most of the chronic diseases and associated risk factors included in the 2014 community health survey; adult residents with a household income of less than $35,000 are disproportionately affected compared to adult residents with an income greater than $35,000 (see Figure 1). According to the 2010-2014 American Community Survey five-year estimates, close to one-third of households in Meeker (31%), McLeod (29%) and Sibley (30%) counties have an income less than $35,000. Furthermore, people of color in tri-county region are more likely to be lower income; across all the three counties, 40% of non-white and/or Hispanic residents have an income of less than $35,000 while only 29% of white, non-Hispanic residents have an income of less than $35,000.

![Figure 1: Health outcomes among MMS adult residents by income group](source: 2014 Meeker McLeod Sibley Healthy Communities Survey)
**Selected outcomes:** We selected heart trouble or angina and diabetes mellitus as our two focus outcomes. We selected them because for both of these outcomes, according to our local community health survey, the rate was higher for adults living in Meeker, McLeod and Sibley counties (outside of the 95% confidence intervals) than the overall rate for the adult population of Minnesota reported in the 2014 Behavioral Risk Factor Surveillance System. Furthermore, both of these risk factors show disparities by income group. The prevalence of obesity and overweight, risk factors related to both of these health outcomes, is also higher in the tri-county region than for the state of Minnesota. While the data do not show an income disparity for this outcome, it is a risk factor affecting a large majority of our population (~75%). In addition, prevention and wellness and obesity prevention were selected as two of three priority areas from our last Community Health Assessment.

**Step 2: Collect New Qualitative Data**

To help understand and identify factors related to these differences, staff had 17 one on one conversations with community members who have lower incomes and professionals who work with them. Staff spoke with Women, Infants and Children (WIC) participants, family health nurses, a WIC dietician and Community Health Worker. Interviewees were asked about the living and working conditions that contribute to worse health outcomes such as heart disease and diabetes for residents with lower incomes and challenges this population faces that prevent them from being as healthy as they want to be. The following themes emerged from these conversations:

<table>
<thead>
<tr>
<th>Social and community networks</th>
<th>Material circumstances</th>
<th>Policies, governance, and environmental conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Stress caused by jobs, housing, unhealthy relationships, etc.</td>
<td>• Proximity to or affordability of physical activity options</td>
<td>• Less flexible work schedules and less sick time and paid family leave</td>
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<tr>
<td>• Competing priorities – health often is a lower priority than more immediate concerns such as housing, paying bills, having any food</td>
<td>• Accessibility and affordability of healthy food, especially compared to less healthy food</td>
<td>• Poor living situations – lack of inspections and maintenance in rental units</td>
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<tr>
<td>• Cultural norms around poverty and smoking</td>
<td>• Access to health care and routine/preventative medical care, including because of lack of insurance and transportation</td>
<td>• Need policy changes within housing developments, including smoke free policies</td>
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<td>• Lack of time</td>
<td>• Lack of education and knowledge on living and staying healthy</td>
<td>• More jobs needed</td>
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<tr>
<td>• Language barriers</td>
<td>• Lack of quality affordable housing</td>
<td>• Underrepresentation in decision making process</td>
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</tbody>
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Text colored coded as follows:

- **Blue**=themes from both WIC participants and professionals
- **Black**=themes from professionals only
- **Purple**=themes from WIC participants only
Specific comments included:

**When you grow up in a family of smokers, you are more likely to smoke.**

**Stress caused by housing, jobs, anything that goes with being low income.**

**We have a big need for policy changes within housing developments.**

**Physical activity classes and health clubs are out of range for people to afford.**

**Everyone knows healthy food is more expensive vs non-healthy food.**

**Cultural poverty – struggling families that are working in factories, etc. They ARE working but yet it is not enough so money has to go to priority places. What does a working wage at $9 per hour actually provide for a family?**

**We are not that included, but yet not searching it out either.**

**Harder to go to doctor because work places are not flexible.**

Essentially, these conversations indicate that barriers to health for low-income populations comprise of lack of access to healthy food, health care and routine medical care, but also go beyond factors we typically think of as impacting health, to include limited access to transportation and quality affordable housing. These barriers make it challenging for people with low income to focus on health. For example, in one conversation, participants discussed how being poor is expensive as getting behind on one bill leads to a penalty and inability to pay the next bill, and therefore a cycle that can be challenging to break. Additionally, one person shared how for low-income populations it is not an option for health to be a priority because they face other bigger issues.

These findings align with existing knowledge on the social determinants of health. Health is generated through the interaction of individual, social, economic, and environmental factors and in the systems, policies, and processes encountered in everyday life. These include job opportunities, wages, transportation options, the quality of housing and neighborhoods, the food supply, access to health care, the quality of public schools and opportunities for higher education, racism and discrimination, civic engagement, and the availability of networks of social support. The relative impacts of various factors on health are illustrated in the chart below.
Figure 2: Determinants of Health

Source: Frameworks developed by Tarlov, 1999 and Kindig, Asada and Booske, 2008

More specifically, research finds that people with higher incomes generally enjoy better health and live longer than people with lower incomes. For individuals, income is one of the strongest and most consistent predictors of health and disease in public health research literature. This relationship between health and income is not just about individual access to medical care, but how income affects a range of individual and community opportunities for health. In particular, individuals and communities with higher incomes are more likely to have safe homes and neighborhoods, full-service grocery stores with healthy foods, safe spaces for physical activity, and high-quality schools. As a result, those with higher incomes are more likely to live longer, healthier lives while those living in communities of poverty face conditions that lead to poor health including unsafe housing, lack of access to nutritious foods, less leisure time for physical activity, poorer education and more overall stress (Minnesota Department of Health, Center for Health Equity. “White Paper on Income and Health.” 2014.)

Next Steps

We plan to share these results with our local legislators, Commissioners and community members and professionals who participated in key informant interviews. This will include sharing of key findings through a poster or bulletin board in the WIC room. From there, we plan to create an infographic and presentation to we will share with our Community Health Board and kick off a discussion of health equity, the role of public health, and the use of emerging professions such as Community Health Workers to address some of the root causes of health and health equity. Additionally, we plan to dialogue further with professionals on how we can advance this work.

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