DISCUSSION GUIDE:

JUNE 2016

Enhancing chronic and infectious disease prevention and management in St. Louis

PURPOSE

This *Discussion Guide* focuses on the recommendation to "coordinate and expand chronic and infectious disease prevention and management." We encourage you to use the *Action Toolkit* that accompanies this *Discussion Guide* to identify ways to bring this conversation to your community and take steps to invest in chronic and infectious disease prevention and management for all in St. Louis. A digital version of both the *Discussion Guide* and the *Action Toolkit*, with additional resources, is available at http://forthesakeofall.org.

BACKGROUND

Chronic diseases are long-lasting conditions that impact an individual's health and well-being. Although these diseases generally cannot be cured, they can be prevented and managed.[1] The chances are good that you or someone you know is dealing with a chronic disease, such as heart disease, cancer, diabetes, or asthma. As of 2012, nearly half of all US adults had at least one chronic disease, and 25% had more than one.[2]

The impact of chronic disease goes beyond the individual to affect families, communities, and our nation, leading to decreased productivity and increased health care costs. In 2010, the U.S. spent $2.6 trillion on health care,[3] and 86% of that spending was for patients with one or more chronic disease.[4] The ultimate impact of chronic disease is shortened life spans, with heart disease and cancer alone accounting for nearly half of all deaths nationally.[5]

While chronic diseases have many causes, infectious diseases are caused by an organism, such as a bacteria or a virus. We've seen many improvements in prevention, care, and management over the last century, but infectious diseases like pneumonia are still a major cause of death and disability, and the incidence of some diseases like measles have shown increases despite the availability of safe and effective vaccines. In addition, some infectious diseases, such as HPV (human papilloma virus) and HIV (human immunodeficiency virus), can lead to more serious chronic diseases.

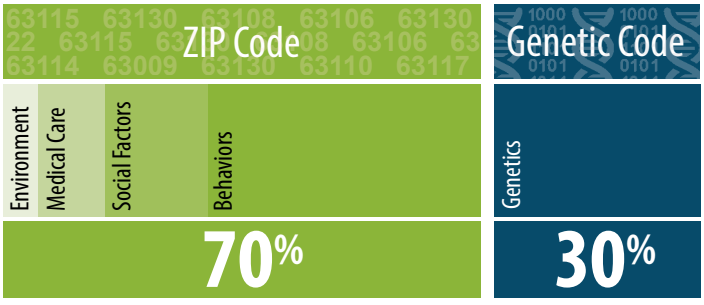
Health factors

Although genetics contribute to premature deaths (30%), factors related to environments account for the remaining 70%.[6] These non-genetic factors include individual behaviors like diet, exercise, and smoking (40%); social factors like poverty and education (15%); medical care (10%); and exposure to toxins, pollutants, and other hazards (5%).[6]

Behaviors are the largest contributor among these factors. As important as behaviors are to health, they happen within a social context. The choice between a healthy and unhealthy behavior is often heavily influenced by an individual's environment and the options available. Even in the best of circumstances, changing behavior is difficult, so it helps to understand the forces at work in an individual's life.[7]

With the growing awareness that the conditions in which people live, learn, work, and play have a significant impact on their health, we are learning that an individual's race and ZIP code may be a better determinant of their risk for disease than their genetic code.[8]

ZIP code can influence health even more than genetic code



Percent of factors influenced by ZIP code and genetic code that contribute to premature death[6]

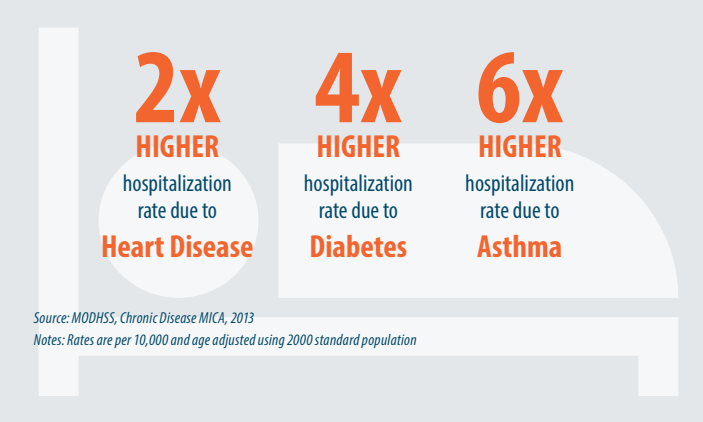
The state of chronic and infectious disease in the City of St. Louis and St. Louis County

While chronic and infectious diseases shape the overall health of our region, they do not affect everyone equally.

In the St. Louis area, African Americans have a higher rate of risk factors such as hypertension and obesity and are diagnosed more frequently with chronic diseases than whites.[9]

Among those dealing with chronic diseases, we also see a greater incidence of hospitalization and death for African Americans. In 2013, African Americans were hospitalized at nearly twice the rate of whites for heart disease, four times the rate for diabetes, and six times the rate for asthma.[10] African Americans also face a higher rate of death for many chronic diseases, including diabetes, heart disease, and several types of cancers.[11]

Compared with whites, African Americans in the City of St. Louis and St. Louis County have higher hospitalization rates due to chronic diseases and conditions



Unfortunately, these racial differences aren't limited to chronic diseases. African Americans also have higher rates of sexually transmitted diseases, including gonorrhea, chlamydia, HIV, and AIDS.[12] It is important to understand that these higher rates are not the result of differences in individual sexual behaviors but are more likely to be the result of social conditions that disproportionately affect minorities.[13] These higher rates are particularly concerning when you consider that African Americans are 17 times more likely to die from AIDS than whites.[11]

As with chronic diseases, African Americans are also hospitalized more frequently for a range of infections, from hepatitis to tuberculosis, and are more often treated in the emergency room for these conditions.[10,14]

For both chronic and infectious diseases, prevention and early diagnosis are important. But for many African Americans in St. Louis, challenges remain—both in access to health care and barriers to leading a healthy lifestyle.

Our ability to lead a healthy lifestyle and make healthy choices is affected by our environment. In a 2011 survey, only 38% of African Americans living in the City of St. Louis considered their neighborhood to be safe, compared with 66% of whites, which may explain the higher percentage of African Americans reporting no leisure time physical activity.[9] In addition, although eating recommended levels of fruits and vegetables is a problem for whites and African Americans, Africans Americans are less likely than whites to report that they have access to healthy food, which poses an additional barrier to maintaining a healthy diet.[9]

Access to quality and affordable health care is also key to preventing and managing disease. In 2014, African Americans in St. Louis were more than twice as likely as whites to be uninsured.[15] But access goes beyond insurance. For example, there are relatively few primary care physicians practicing in neighborhoods that are predominantly African American.[16] Without easy access to preventative and ongoing care, conditions go untreated, and ER visits increase. Research has shown that if we could reduce the disparity in chronic diseases like heart disease, cancer, and diabetes, St. Louis could save $65 million a year in inpatient hospital charges.

REDUCING THE DISPARITY IN CHRONIC DISEASES COULD SAVE ST. LOUIS

$65 MILLION

PER YEAR IN INPATIENT HOSPITAL CHARGES

STRATEGIES

Because of the many factors that impact health, preventing chronic and infectious disease is not easy. But there are things we as a region can do to improve the health of all in our community.

Address social and economic barriers to health in medical settings

Preventing and treating disease is about more than just medical care. It's important for health care professionals to recognize the social and economic factors that affect their patients' health. This starts with asking different questions and collecting data that paints a more complete picture of patient needs. The Institute of Medicine and American Academy of Pediatrics recently recommended that health care providers screen patients for factors such as education, financial resource strain, and stress.[17,18]

By collecting additional data, health care providers are able to screen and track patient needs and partner with the patient on treatment and disease management. For example, patient ability to understand and carry our treatment plans may be affected by education, language, literacy, and financial situation.[7]

In addition to addressing the social and economic factors that impact health, this data helps to bridge gaps in care. As an example, Accountable Health Communities (AHC) is an approach to health care that seeks to enhance the connections between clinical and community services, resulting in improved health outcomes and reduced costs. The approach specifies four elements of comprehensive interventions—screening, referral, navigation, and care delivery—with a focus on connecting these points across the continuum of care.[19]

As required by the Affordable Care Act, the Centers for Medicare and Medicaid established the Center for Medicare and Medicaid Innovation (CMMI). In January 2016, CMMI released a funding opportunity to test the AHC model over a five-year period and assess how identifying and addressing health-related social needs impacts health care costs and utilization.[19] A team that includes several major institutions in St. Louis has submitted an application to obtain this funding for our region.

Expand access to Community Health Workers

Community Health Workers (CHW) have an extensive history as health promoters in other countries, and they became popular in the United States in the 1960s.[20] CHWs have resurfaced at points since then as a response to social injustice and inequity.[20] As their name implies, CHWs work at the community level to promote health and help prevent disease.[21] CHWs are able to spend ample time with patients, assist them in making behavioral changes, and help to address barriers by providing education, counseling, social support, and advocacy as well as accessing community resources.[21]

Research has found that CHWs can have a positive impact on chronic and infectious disease, helping to reduce health disparities, expanding access to coverage and care, and improving health outcomes, such as increased immunization rates and tuberculosis cure rates.[22] Investing in CHWs shows positive returns. For example, a pilot study among children with asthma in Chicago found a 35% reduction in symptom frequency, a 75% reduction in utilization of urgent care, and a savings of $5.58 per dollar spent on the intervention.[23] Recent changes in the Centers for Medicare and Medicaid associated with the Affordable Care Act allow CHWs to be reimbursed through Medicaid, which could expand access further.[21]

Local examples include:

- People's Health Centers provide health care and social services to thousands of uninsured and underserved people at three locations in St. Louis. The centers also offer client-centered cluster visits, community health education, nursing, mobile van outreach, school-linked services, and preventive health services.
- Casa de Salud focuses on providing health services to new immigrants and refugees who encounter barriers to accessing other sources of care. Just as importantly, the organization helps patients navigate the health care system through its "Guides for Understanding, Information, and Access" (GUIA) program.

Support healthy behaviors

We can also support healthy behaviors within our communities by improving access to fresh fruit and vegetables, creating safe spaces for play and exercise, and providing smoking cessation programs to make it easier for residents to lead a healthy lifestyle.

Local examples include:

- The St. Louis Healthy Corner Store Project was established in 2011 to encourage store owners to add healthy food options at small corner stores and markets in the city.
- With support from Express Scripts, Beyond Housing's Passport 2 Health program provides residents in the Normandy School District with access to free health resources such as fitness classes and walking groups in the community.

SUMMARY OF KEY POINTS

- Chronic and infectious diseases affect not only individuals but our entire region, in the form of increased health care costs, reduced productivity and quality of life, and shortened life spans.
- When it comes to chronic and infectious diseases, ZIP code often is more important than genetic code. We must look beyond individual behaviors and risk factors and consider the broader social and economic factors affecting health.
- Strategies for improving health in our region should include addressing social and economic barriers, expanding access to community health workers, and supporting healthy behaviors.

DISCUSSION QUESTIONS

1. Do you know someone dealing with a chronic disease? If so, what challenges do they face? What could be done to reduce these challenges or improve their quality of life?
2. Think about the community in which you live. In what ways does it encourage (or discourage) healthy behavior?
3. What obstacles to leading a healthy lifestyle exist in the St. Louis region? How could we eliminate these obstacles?
4. Why are the rates of chronic disease diagnosis, hospitalization, and death different between African Americans and whites?
5. Do you feel there is a stigma around certain chronic or infectious diseases in our community? If so, how does it affect the care and management of these conditions?
6. What gaps do you see in our region in the prevention or care of chronic and/or infectious disease?
7. How should our region be address and prevent chronic and infectious disease among youth?
8. Do you know your personal risk factors for chronic disease? What could you do to reduce these risk factors or improve your overall health?
9. Who in the St. Louis community is currently working to address chronic and infectious disease? What could be done to support these efforts?
10. What would you be willing to do to help improve the prevention, care, and management of chronic and infectious disease?

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References

1. University of Michigan, Center for Managing Chronic Disease. About Chronic Disease. http://cmcd.sph.umich.edu/about/about-chronic-disease/. Accessed June 1, 2016.
2. Ward BW, Schiller JS, Goodman RA. Multiple chronic conditions among U.S. adults: a 2012 update. *Prev Chronic Dis*. 2014;11: 130389.
3. The Henry J. Kaiser Family Foundation. Health care costs: a primer. http://kff.org/report-section/health-care-costs-a-primer-2012-report/. Published May 1, 2012.
4. Gerteis J, Izrael D, Deitz D, LeRoy L, Ricciardi R, Miller T, Basu J. *Multiple chronic conditions chartbook*. Rockville, MD: Agency for Healthcare Research and Quality; 2014. AHRQ Publications No, Q14-0038
5. Centers for Disease Control and Prevention. Deaths and Mortality. http://www.cdc.gov/nchs/fastats/deaths.htm. Updated April 27, 2016.
6. Schroeder SA. We can do better—improving the health of the American people. *N Engl J Med*. 2007;357:1221-1228.
7. Woolf SH, Purnell JQ. The good life: working together to promote opportunity and improve population health and well-being. *JAMA*. 2016;315(16):1706-1708.
8. Braveman P, Egerter S, Williams DR. The social determinants of health: coming of age. *Annu Rev Public Health*. 2011;32:381-398.
9. Missouri Department of Health and Senior Services. Community Data Profiles. Health & Preventive Practices Profile. http://health.mo.gov/data/CommunityDataProfiles/index.html.
10. Missouri Department of Health and Senior Services. Missouri Information for Community Assessment. Inpatient Hospitalization MICA. http://health.mo.gov/data/mica/mica/hosp_new.php.
11. Missouri Department of Health and Senior Services. Missouri Information for Community Assessment. Death Rates MICA. http://health.mo.gov/data/mica/DeathMICA/.
12. Missouri Department of Health and Senior Services. 2014 Epidemiologic Profiles of HIV, STD, and Hepatitis in Missouri. St. Louis Region. http://health.mo.gov/data/hivstdaids/pdf/SLHIVSTD2014.pdf
13. Centers for Disease Control and Prevention. CDC health disparities and inequalities report—United States, 2013. MMWR 2013;61(Suppl 3):1-189.
14. Missouri Department of Health and Senior Services. Missouri Information for Community Assessment. Emergency Room MICA. http://health.mo.gov/data/mica/mica/er.php.
15. US Census Bureau. Social Explorer. 2014 American Community Survey 1-Year Estimates, Health Insurance Coverage Status. St. Louis County, Missouri & St. Louis City, Missouri. http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_14_1YR_S2701&prodType=table.
16. The City of St. Louis Department of Health. Understanding Our Needs. St. Louis, MO: 2012. https://www.stlouis-mo.gov/government/departments/health/documents/upload/Understanding%20Our%20Needs%202012%20Part%201.pdf.
17. Helsing K. Capturing social and behavioral domains and measures in electronic health records. November 2015. In 143rd APHA Annual Meeting and Exposition (October 31-November 4, 2015). American Public Health Association.
18. American Academy of Pediatrics. Poverty and child health in the United States. Policy Statement 2016. http://pediatrics.aappublications.org/content/pediatrics/early/2016/03/07/peds.2016-0339.full.pdf.
19. U.S. Department of Health and Human Services, Centers for Medicare & Medicaid Services, Center for Medicare & Medicaid Innovation. Affordable Care Act Funding Opportunity: Accountable Health Communities. FO#:CMS-1P1-17-001. 2016.
20. Pérez LM, Martinez J. Community health workers: social justice and policy advocates for community health and well-being. *Am J Public Health*. 2008;98(1):11-14.
21. Brownstein JN, Allen C. *Addressing chronic disease through community health workers: a policy and systems-level approach*. 2nd ed. Atlanta, GA: Centers for Disease Control and Prevention; 2015.
22. London K, Carey MM, Russell K. Tomorrow's health care system needs community health workers: a policy agenda for Connecticut. Hartford, CT: Connecticut Health Foundation; 2015.
23. Margellos-Anast H, Gutierrez MA, Whitman S. Improving asthma management among African-American children via a community health worker model: findings from a Chicago-based pilot intervention. *J Asthma*. 2012;49(4):380-389.