HEALTH CARE OF HOMELESS PERSONS – 2014

Center on Homelessness, Health, and Employment Law & Policy

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Executive Summary

In 2014, an estimated 1.49 million people used a shelter program at some point during the year and on a given night 30 percent of homeless people were without shelter. During the same year, 1.15 million homeless people were seen at Federally Qualified Health Centers for medical care, dental care, and other health care, including 813,331 at Health Care for the Homeless Program Grantee Health Centers.

Health Centers serve a critical role in providing health care for homeless individuals and other low-income individuals. Nationwide, half or nearly half of homeless patients seen at Federally Qualified Health Centers and Health Care for the Homeless Program Grantee Health Centers did not have health insurance in 2014. In states that had not expanded Medicaid at the beginning of 2014, the percent of homeless patients seen at Health Care for the Homeless Program Grantee Health Centers without insurance was an astounding 82%. Health Centers must provide certain basic health services, including health services related to family medicine, internal medicine, and pediatrics, diagnostic laboratory and radiologic services, preventive health services such as prenatal services, appropriate cancer screening, well-child services, immunizations, screenings for communicable diseases and cholesterol, pediatric eye, ear, and dental screenings, preventive dental services, and emergency medical services.

These services are important for homeless patients because many of them have chronic conditions and other life-threatening or serious conditions that require prompt and consistent care and, in some cases, are disproportionately at risk of contracting severe and deadly diseases and illnesses.

Because of the life-endangering nature of so many illnesses and health conditions, it is crucial to assess whether homeless patients are receiving prompt and life-saving diagnosis and treatment. This report discusses twelve of these chronic and other life-threatening or serious conditions based on the current known state of diagnosis and treatment of homeless patients:

- **HIV/AIDS Diagnosis and Treatment**: Although being diagnosed as HIV-positive and being seen for follow-up care within 90 days of initial HIV diagnosis reduces the probability of HIV-related complications and transmission of disease, some homeless patients are likely not being diagnosed and are not being linked to such care.
- **Cancer Diagnosis and Treatment**: Although the risk of death and other adverse outcomes from breast cancer, cervical cancer, and colorectal cancer can be reduced with early detection from mammography screening, Pap tests, and colorectal cancer screening and early treatment, homeless people are not being screened for breast cancer, cervical cancer, and colorectal cancer at recommended or overall Health Center average levels.

- **Chronic Liver Disease Diagnosis and Treatment**: Although screening of individuals increases the percentage of individuals who are diagnosed early with hepatitis and may allow them to start life-saving treatment and medication and a linkage-to-care coordinator and linkage services improves care, some homeless individuals are not being diagnosed and some are not receiving treatment.
- **Cardiovascular Disease Diagnosis and Treatment**: Although blood pressure control, heart attack/stroke treatment, and cholesterol treatment can reduce the likelihood of heart attacks, other vascular events, and coronary artery disease events, some homeless patients have uncontrolled blood pressure, are not receiving aspirin or another anti-thrombotic drug for heart attack/stroke treatment, and/or lipid-lowering therapy for cholesterol treatment at recommended or overall Health Center average levels.
- **Diabetes Diagnosis and Treatment**: Although controlled diabetes is critical because there will be fewer long-term complications, such as organ failure, amputations, and blindness, some homeless patients may not be diagnosed with diabetes and others do not have controlled diabetes at recommended or overall Health Center average levels.
- **Asthma Diagnosis and Treatment**: Although asthma pharmacologic therapy is important because if patients with persistent asthma are provided with appropriate pharmacological therapy, then they will be less likely to have asthma attacks and less likely to develop asthma-related complications including death, some homeless patients with persistent asthma are not receiving asthma pharmacologic therapy at overall Health Center average levels.
- **Chronic Obstructive Pulmonary Disease (COPD) Diagnosis and Treatment**: Although diagnosis and treatment of chronic lower respiratory diseases like chronic bronchitis and emphysema is important to prevent breathing-related difficulties and even death, some homeless patients may not be diagnosed at Health Centers and may not be able to receive treatment.
- **Tuberculosis Diagnosis and Treatment**: Although diagnosis and treatment of active or latent tuberculosis can prevent transmission and the development of symptoms and save lives, some homeless patients with tuberculosis have not been diagnosed, have not received adequate care, and have lost their lives.
- **Sexually Transmitted Diseases Diagnosis and Treatment**: Although diagnosis and treatment of sexually transmitted diseases can prevent chronic pelvic pain, life-threatening ectopic pregnancy, infertility, blindness, paralysis, organ damage, and death, homeless individuals without symptoms may not be diagnosed and may not be able to receive treatment.

- **Heat-related Illness and Hypothermia Diagnosis and Treatment**: Although prevention, early diagnosis, and treatment of heat-related and cold-related illness can prevent heat exhaustion, heat stroke, frostbite, and hypothermia and their concomitant effects, such as fainting, amputations, coma, and death, some homeless individuals are not being diagnosed or treated.
- **Dental Problems**: Although prevention, early diagnosis, and treatment of tooth decay, periodontal disease, and other dental problems can prevent unnecessary pain, abscesses, and death, many homeless individuals are unable to obtain preventive and diagnostic dental services such as prophylaxis and oral exams and some homeless individuals may be unable to obtain treatment.
- **Eye Diseases**: Although diagnosis and treatment of vision problems related to age, diabetes, high blood pressure, and other risk factors can prevent irreversible vision impairment and blindness and death, many homeless individuals may be unable to receive comprehensive and intermediate eye exams and other diagnostic and treatment services for vision problems.

With the information obtained in this report, the following recommendations are proposed so that all homeless patients with life-threatening chronic and other conditions and illnesses can be promptly diagnosed and receive life-saving treatment.

- **HIV/AIDS:** When diagnosis and receiving follow-up care within 90 days of initial HIV diagnosis reduces the probability of HIV-related complications and transmission of disease, routine testing of all patients should occur at Health Centers and all homeless patients with HIV/AIDS should receive follow-up care regardless of the Health Center or their health insurance status.
- **Cancer**: When the risk of death and other adverse outcomes from breast cancer, cervical cancer, and colorectal cancer is or may be reduced by mammography screening, Pap Test screening, and colorectal cancer screening, regardless of the Health Center or their health insurance status, all patients should be screened according to the U.S. Preventive Services Task Force Guidelines and Health Centers should provide linkage to care for patients with cancer and should report cancer treatment linkage to care to the Health Resources and Services Administration.
- **Chronic Liver Disease**: As many homeless patients are unaware of their infection and diagnosed patients can start life-saving treatment that can cure the disease and prevent cirrhosis, liver cancer, and liver failure, regardless of the Health Center or their health insurance status, Health Centers should screen all homeless persons for Hepatitis B and C and Health Centers should provide linkage of care for all patients with Hepatitis B and C and should

report Hepatitis B and C treatment linkage of care to the Health Resources and Services Administration.

- **Cardiovascular Disease**: As blood pressure control, heart attack/stroke treatment, and cholesterol treatment can reduce the likelihood of heart attacks, other vascular events, and coronary artery disease events, regardless of the Health Center or their health insurance status, all homeless patients with hypertension should have their blood pressure controlled through medication or other means, all homeless patients age 40 to 79 should be screened for coronary heart disease and all homeless patients with ischemic vascular disease should receive aspirin or another anti-thrombotic drug to prevent heart attacks and other vascular events if the heart attack or stroke benefit outweighs the risk of gastrointestinal bleeding, and all homeless patients age 20 to 35 should be screened for high cholesterol if they are at increased risk for coronary heart disease, all patients age 35 and older should be screened for high cholesterol, and all homeless patients with high cholesterol should be able to receive lipid-lowering medication.
- **Diabetes**: As having controlled diabetes reduces the likelihood of complications, such as organ failure, amputations, blindness, and death, universal application of routine screening should be available so that all homeless patients with diabetes and pre-diabetes can be diagnosed and all homeless patients with diabetes should have access to diabetes medications to control diabetes regardless of the Health Center or their health insurance status.
- **Asthma**: As patients with persistent asthma who are provided with appropriate pharmacological therapy are less likely to have asthma attacks and less likely to die and develop other asthma-related complications, all homeless patients with persistent asthma should have access to prescribed inhaled corticosteroids or an approved alternative pharmacologic therapy regardless of the Health Center or their health insurance status.
- **Chronic Obstructive Pulmonary Disease (COPD)**: As diagnosis and treatment of chronic lower respiratory diseases such as chronic bronchitis and emphysema is important to prevent death and other breathing-related difficulties, regardless of the Health Center or their health insurance status, all homeless patients should at least be screened with questions to assess chronic respiratory symptoms and for other risk factors, such as history of asthma, history of childhood respiratory infections, alpha-1 antitrypsin deficiency, smoking history and occupational environment, and all homeless patients with chronic respiratory symptoms or other risk factors should be diagnosed with spirometry testing. All homeless patients diagnosed with chronic bronchitis or emphysema should be linked to care and Health Centers should report chronic bronchitis and emphysema treatment linkage of care to the Health Resources and Services Administration.

- **Tuberculosis**: As diagnosis and treatment of tuberculosis is important to prevent death and other complications, regardless of the Health Center or their health insurance status, all homeless patients should be routinely tested for tuberculosis and all homeless patients with active tuberculosis should receive treatment.
- **Sexually Transmitted Diseases**: As diagnosis and treatment of sexually transmitted diseases is critical to prevent chronic pelvic pain, life-threatening ectopic pregnancy, infertility, blindness, paralysis, organ damage, and death, regardless of the Health Center or health insurance status, all homeless patients should be counseled on the risk factors for sexually transmitted diseases and have access to screening and all homeless patients with a sexually transmitted disease should have access to treatment.
- **Heat-related Illness and Hypothermia**: As prevention, early diagnosis, and prompt treatment of heat-related and cold-related illness can prevent heat exhaustion, heat stroke, frostbite, and hypothermia and their concomitant effects, such as fainting, amputations, coma, and death, all homeless individuals should have access to temperature-controlled environments and prompt diagnosis, treatment, and follow-up care for heat-related and cold-related illnesses.
- **Dental Problems**: As prevention, early diagnosis, and treatment of tooth decay, periodontal disease, and other dental problems can prevent unnecessary pain, abscesses, and death, all homeless individuals should have access to preventive and diagnostic dental services such as prophylaxis and oral exams and emergency dental services regardless of the Health Center or their insurance status.
- **Eye Diseases**: As diagnosis and treatment of eye diseases can prevent irreversible vision impairment and blindness and death, all homeless individuals with risk factors for age-related macular degeneration, cataracts, diabetic retinopathy, and glaucoma, such as age, diabetes, family history, high blood pressure, increased intraocular pressure, high cholesterol, smoking, and prolonged exposure to sunlight, should have access to diagnostic and assessment eye exams and other diagnostic and treatment services regardless of the Health Center or their health insurance status.

Introduction

In 2014, an estimated 1.49 million people used a shelter program at some point during the year and on a given night 30 percent of homeless people were without shelter.[1] During the same year, 1.15 million people were seen at Federally Qualified Health Centers ("Health Centers"), including 813,331 at Health Care for the Homeless Program Grantee Health Centers ("HCH Health Centers").[2]

Health Centers serve as an important source of care for homeless individuals. At HCH Health Centers, 43% of the 853,382 patients were uninsured while at the Health Centers whose patients were all homeless, 50% of the 208,011 patients were uninsured.[3] As required by statute, Health Centers must provide certain basic health services, including health services related to family medicine, internal medicine, and pediatrics, diagnostic laboratory and radiologic services, preventive health services such as prenatal services, appropriate cancer screening, well-child services, immunizations, screenings for communicable diseases and cholesterol, pediatric eye, ear, and dental screenings, preventive dental services, and emergency medical services.[4]

In this report, we discuss the health care of homeless individuals at Health Centers and at HCH Health Centers. The report provides information on the health care access to diagnosis and treatment for homeless individuals at health centers in 2014. It focuses on chronic conditions and other serious and life-threatening conditions where prompt and early diagnosis and consistent access to treatment are critical to prevent death and other serious health consequences. This report expands upon our earlier report, titled "Health Care of Homeless Individuals" that described

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[1] U.S. Dep't of Hous. & Urban Dev., The 2014 Annual Homeless Assessment Report (AHAR) to Congress, Part 2: Estimates of Homelessness in the United States (Nov. 2015), *available at* https://www.hudexchange.info/resource/4828/2014-ahar-part-2-estimates-of-homelessness/.

[2] Health Res. & Serv. Admin., 2014 Health Center Data, Full 2014 National Report, *available at* http://bphc.hrsa.gov/uds/datacenter.aspx?q=tall&year=2014&state= (last visited Dec. 9, 2015) [hereinafter Health Center Data 2014]; HRSA, 2014 Health Center Data: National Health Care for the Homeless Program Grantees, Full 2014 National Report, *available at* http://bphc.hrsa.gov/uds/datacenter.aspx?q=tall&year=2014&state=&fd=ho (last visited Dec. 9, 2015) [hereinafter HCH Data 2014]. Of the 853,382 total patients seen at Health Care for the Homeless Program Grantee Health Centers in 2014, 813,331 were homeless. *Id.* The remaining patients were veterans, public housing patients, migratory/seasonal agricultural workers or dependents, and school-based health center patients. *Id.*

[3] Health Center Data 2014, *supra* note 2; HCH Data 2014, *supra* note 2. Health Centers likely serve an even greater role in states not yet expanding Medicaid. At the Federally Qualified Health Centers whose patients were all homeless, 33% of patients at health centers in Medicaid-expansion states were uninsured while 82% of patients at health centers in non-Medicaid-expansion states (i.e., states that had not expanded Medicaid at the beginning of 2014) were uninsured. Analysis of data at HRSA, 2014 Health Center Profile: Health Center Program Grantee Profiles, *available at* http://bphc.hrsa.gov/uds/datacenter.aspx?q=d&year=2014 (last visited Nov. 6, 2015).

[4] 42 U.S.C. § 254b(b) (2013).

the health conditions in detail and provided information on health care for homeless individuals at health centers in 2013.

Chronic Conditions

In 2014, federal health centers that served homeless patients recorded the diagnosis and treatment of several chronic conditions, including HIV/AIDS, cancer, chronic liver disease, cardiovascular disease, diabetes, asthma, and chronic lower respiratory diseases. The information reported show that although many homeless patients are diagnosed and able to receive treatment for these chronic conditions, many homeless patients are not receiving adequate treatment for these serious and life-threatening conditions. Although uninsured health center patients may be more likely to obtain needed medications than other uninsured people, limited funding is available for Health Centers and not all uninsured health center patients are able to receive needed care or obtain needed medications.[5] Expanding health insurance coverage and Health Center funding can allow all homeless patients to receive needed care.

HIV/AIDS

Homeless individuals are at high risk of being infected with HIV/AIDS and diagnosis and treatment are critical to saving lives. Homeless individuals are disproportionately infected with HIV because they are exposed to harsh environmental conditions, disease, sexual violence, malnutrition, and stress, and often trade sex for food and shelter.[6] In 2014, 12,811 patients (1.8% of the medical patients) at HCH Health Centers and 1% of the medical homeless patients at the twenty-nine Health Centers where 100% of the patients were homeless were diagnosed with HIV or AIDS.[7]

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[5] *See supra* Appendix; Nat'l Ass'n of Cmty. Health Ctrs., *Health Centers and the Uninsured: Improving Access to Care and Health Outcomes, Factsheet* (May 2014), *available at* http://www.nachc.com/research-factsheets.cfm; Nat'l Ass'n of Cmty. Health Ctrs., *Health Centers and the 340B Drug Discount Pricing Program: Increasing Access to Essential Medications and Services to Communities in Need, Factsheet* (June 2014), *available at* http://www.nachc.com/research-factsheets.cfm.

[6] *See* Health Care for the Homeless Clinicians' Network, *Health Care Delivery Strategies: Addressing Key Preventive Health Measures in Homeless Health Care Settings* (July 2011), http://www.nhchc.org/wp-content/uploads/2012/02/KeyPrevHealthMeas_FINAL.pdf.

[7] HCH Data 2014, *supra* note 2; HRSA, 2014 Health Center Profile: Health Center Program Grantee Profiles, Health Center Program Grantee Data, *available at* http://bphc.hrsa.gov/uds/datacenter.aspx?q=d (last visited Nov. 6, 2015).

Some homeless individuals are likely not receiving early diagnosis of HIV or AIDS. A larger percentage of medical patients were tested for HIV at HCH Health Centers (12%) than at Health Centers overall (6%). Yet, the percentage of medical patients tested for HIV at HCH Health Centers (12%) is less than the overall percent of U.S. residents with HIV who are unaware of their infection (16%).[8]

HIV/AIDS Diagnosis and Mortality

- **12%** of Patients were Tested and **12,811** Patients were Diagnosed with HIV/AIDS at HCH Health Centers in 2014
- **1%** of Homeless Patients were Diagnosed with HIV/AIDS at Health Centers Where All Patients were Homeless in 2014
- **16%** of U.S. Residents are Unaware of Their HIV/AIDS Infection
- **6,955** Americans died from HIV/AIDS in 2013

Studies of routine testing indicate Health Centers do have undiagnosed HIV patients and that routine testing can reduce the number of undiagnosed HIV-positive patients at Health Centers. Studies of Health Centers in New York showed that when HIV testing became routine and increased from eight percent (188 patients per month) to fifty-six percent (986 per month) of patients, the number of patients newly diagnosed as HIV-positive increased from 3 in 2010 to 40 during the period of January 2011 to September 2013.[9] Likewise, at a hospital in New Orleans, Louisiana, when HIV testing became routine and increased from 821 per month to 1,323 per month, the number of patients newly diagnosed increased from 54 in 2012 to 77 from March to December 2013.[10] Therefore, testing only twelve percent of the patients at HCH Health Centers may be missing diagnosing some HIV-positive homeless patients.

The Health Center data also may suggest that testing of more patients than occurs presently may be needed to diagnose patients who are unaware of their HIV-positive status. At the Health Centers where 100% of the patients were homeless, fewer homeless patients were diagnosed as HIV-positive in non-Medicaid

[8] Xia Lin et al., *Routine HIV Screening in Two Health-care Settings – New York City and New Orleans, 2011-2013*, 63 Morbidity & Mortality Wkly. 537 (2014), *available at* http://www.cdc.gov/mmwr/pdf/wk/mm6325.pdf.
[9] *Id.*
[10] *Id.*

expansion states (0.8%) than in Medicaid-expansion states (1.2%). The fewer diagnosed patients in the non-Medicaid expansion states could be because fewer patients were tested because fewer patients had health insurance.

Some homeless individuals with HIV or AIDS are not receiving prompt access to care upon diagnosis compared to the recommended or average levels. HIV Linkage to Care, which measures such access to care, occurs when a patient has a medical visit for HIV care within ninety days of their first-ever HIV diagnosis, including a medical visit with a health center provider who initiates treatment for HIV or a visit with (not referral to) a referral resource who initiates treatment for HIV.[11] This early access to care is important because if patients are seen for follow-up care within ninety days of initial HIV diagnosis, then the probability of HIV-related complications and transmission of disease are reduced.[12]

HIV/AIDS Treatment	
Recommended HIV Linkage of Care Goal	85.0%
Average HIV Linkage to Care at Health Centers Overall in 2014	77.3%
Average HIV Linkage to Care at Health Centers Where All Patients were Homeless in 2014 (Range in parentheses)	88.3% (22% - 100%)

Although the average HIV Linkage to Care at the twenty-nine Health Centers serving only homeless individuals was higher than the recommended level and the average HIV Linkage to Care for Health Centers in general, some of the Health Centers serving only homeless individuals have a lower HIV Linkage to Care than the recommended level and the average level. The recommended HIV Linkage to Care is 85.0%.[13] For HIV Linkage to Care, the overall 2014 Health Center average was 77.3%.[14] The average HIV Linkage to Care was 88.3% at nineteen of the twenty-nine Health Centers reporting this information with a range from 22% to 100%. The HIV Linkage to Care was less than 100% and the recommended level of 85% at seven of the nineteen Health Centers where 100% of the patients were homeless. Five of these seven Health Centers are located in Medicaid-expansion

[11] Bureau of Primary Health Care, Health Res. & Serv. Admin., Uniform Data System Calendar Year 2014 UDS Reporting Instructions for Health Centers, Dec. 31, 2014, *available at* http://bphc.hrsa.gov/datareporting/reporting/2014udsmanual.pdf [hereinafter UDS Manual]; Bureau of Primary Health Care, HRSA, Uniform Data System Calendar Year 2014 Introduction to UDS Clinical Measures, Powerpoint Presentation, Oct. 20, 2014, *available at* http://bphc.hrsa.gov/datareporting/reporting/2014udsclinicalmethods.pdf [hereinafter UDS Clinical Measures].
[12] UDS Manual, *supra* note 11.
[13] *See* Office of Nat'l AIDS Pol'y, White House Domestic Council, National HIV/AIDS Strategy for the United States: Updated to 2020, July 2015, *available at* https://www.aids.gov/federal-resources/national-hiv-aids-strategy/nhas-update.pdf.
[14] Health Center Data 2014, *supra* note 2.

states and two of these Health Centers are located in Florida and Utah, which had not expanded Medicaid at the beginning of 2014. The HIV Linkage to Care for the Florida Health Center was 56% and the percent of the uninsured homeless patients was 96%. The HIV Linkage to Care for the Utah Health Center was 22% and the percent of the uninsured homeless patients was 67%.

Not only is the HIV Linkage to Care at some Health Centers less for homeless patients than for the average Health Center patient, but the HIV Linkage to Care was lower for homeless patients in states that had not expanded Medicaid (75.6%) compared to homeless patients in states that had expanded Medicaid (92.8%). Therefore, access to health insurance may be impacting the ability to access care for HIV/AIDS.

When diagnosis and receiving follow-up care within ninety days of initial HIV diagnosis reduces the probability of HIV-related complications and transmission of disease, routine testing of all patients should occur at Health Centers and all patients with HIV/AIDS should receive follow-up care regardless of the Health Center or their health insurance status.

Cancer

Despite the importance of cancer screening and treatment, some homeless individuals are not receiving screening for breast, cervical, and colorectal cancer and may not have access to treatment. The risk of death from breast cancer can be reduced by regular mammography screening because breast cancer screening improves earlier discovery of the disease while it is more treatable and has not spread.[15] If women receive Pap tests for cervical cancer screening as recommended, then early detection and treatment of abnormalities can occur and women will be less likely to suffer adverse outcomes from HPV infection and cervical cancer.[16] If

[15] HRSA, U.S. Department of Health & Human Services, Breast Cancer Screening, *available at* http://www.hrsa.gov/quality/toolbox/measures/breastcancer/index.html (last visited Dec. 9, 2015).
[16] UDS Manual, *supra* note 11.

patients 50 to 75 years old receive appropriate colorectal cancer screening, then early intervention is possible and premature death can be avoided.[17]

Cancer Diagnosis and Mortality

- **Breast Cancer – 16,733** Patients Received a Mammogram and **3,336** Patients were Diagnosed with Abnormal Breast Findings at HCH Health Centers in 2014
- **Cervical Cancer – 44,653** Patients were Screened for cervical cancer and **5,049** were Diagnosed with abnormal cervical findings at HCH Health Centers in 2014
- **Deaths – 41,325** Americans died from breast cancer, **4,217** Americans died from cervical cancer, and **52,252** Americans died from colorectal cancer in 2013

Homeless women may not be receiving breast cancer screening as recommended. The U.S. Preventive Services Task Force recommends that all women ages 50 to 75 have a mammography every two years and that some women between the ages of 40 to 50 should also have a mammography every two years.[18] The Healthy People 2020 goal is that 81.1% of women ages 50 to 74 receive a mammogram within the past two years.[19] Only 16,733 patients had mammogram screening at HCH Health Centers.

Homeless women appear not to be receiving cervical cancer screening at recommended levels or even at similar levels as Health Center patients in general. For cervical cancer screening, the 2014 Health Center average was 56.3%[20] and the Healthy People 2020 goal is 93.0%.[21]

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[17] UDS Manual, *supra* note 11.
[18] U.S. Preventive Serv. Task Force, *Screening for Breast Cancer: U.S. Preventive Services Task Force Recommendation Statement*, 151 Annals Internal Med. 716 (2009), *available at* http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/breast-cancer-screening.
[19] Office of Disease Prevention & Health Promotion, HHS, Healthy People 2020, 2020 Topics & Objectives, Cancer, http://www.healthypeople.gov/2020/topics-objectives/topic/cancer/objectives (last updated Dec. 11, 2015) [hereinafter Cancer Objectives].
[20] Health Center Data 2014, *supra* note 2.
[21] UDS Clinical Measures, *supra* note 11. The Healthy People 2020 goal is measured as the percent of females aged 21 to 65 years who received a Pap Test in the past three years. *See* Cancer Objectives, *supra* note 19.

Fewer female patients received Pap Test screening at HCH Health Centers than at Health Centers in general. HCH Health Centers reported that only 44,653 of the female patients between the ages of 24 and 65 had Pap Test screening at the Health Center. Health Centers reported that 1,750,863 of the female patients between the ages of 24 and 65 had received a Pap Test at the Health Center. With a larger percentage of patients uninsured at HCH Health Centers (43%) compared to Health Centers overall (28%), a greater percentage of patients likely should have received a Pap Test at HCH Health Centers.

The level of cervical cancer screening was below the average or recommended levels, at the Health Centers where 100% of patients were homeless. At these Health Centers, the level of cervical cancer screening was only 41.7%.[22] The screening levels at these Health Centers ranged from 13% to 69%. The screening level was below the recommended level of 93.0% at all twenty-nine of these Health Centers and was below the average level of 56.3% at twenty-four of the twenty-nine Health Centers. Sixteen of the Health Centers where cervical cancer screening was less than the average and recommended levels were in Medicaid-expansion states and eight of the Health Centers were in Florida, Maine, New Mexico, Texas, Utah, and Wyoming, which had not expanded Medicaid at the beginning of 2014.

Cancer Screening			
	Breast Cancer	**Cervical Cancer**	**Colorectal Cancer**
Healthy People 2020 Screening Level Goal	81.1%	93.0%	70.5%
Average Screening Level at Health Centers Overall in 2014		56.3%	34.5%
Percent of Homeless Patients Screened for Cervical or Colorectal Cancer at Health Centers Where all Patients were Homeless in 2014		41.7%	22.8%
Number of Homeless Patients Screened for Breast or Cervical Cancer at HCH Health Centers in 2014	16,733	44,653	

Homeless individuals appear not to be receiving colorectal cancer screening at recommended levels or even at similar levels as Health Center patients in general. The level of colorectal cancer screening was below the average and recommended levels, at the Health Centers where 100% of patients were homeless. For colorectal

[22] Cervical cancer screening was measured by evaluating the percent of female patients between the ages of 24 and 65 who had at least one medical visit during the year and had been screened for cervical cancer at the Health Center or another location during the measurement year or prior two years or during the measurement year or the prior four years for patients 30 or older at the time of the test who received a Pap Test with an HPV test. UDS Manual, *supra* note 11; UDS Clinical Measures, *supra* note 11.

cancer screening, the Healthy People 2020 goal is 70.5%.[23] At Health Centers overall, the average level of colorectal cancer screening of patients between the ages of 51 and 74 who had at least one medical visit during the year was 34.5%.[24] At Health Centers where 100% of patients were homeless, the colorectal cancer screening level was only 22.8%. The screening levels at the twenty-eight reporting Health Centers where 100% of the patients were homeless ranged from 0.4% to 56%. The screening level was below the recommended level of 70.5% at all twenty-eight reporting Health Centers and was below the average level of 34.5% at twenty-two of the twenty-eight Health Centers. Thirteen of the Health Centers where colorectal cancer screening was less than the average and recommended levels were in Medicaid-expansion states and nine of the Health Centers were in Florida, Maine, New Mexico, Tennessee, Texas, Utah, and Wyoming, which had not expanded Medicaid at the beginning of 2014.

In addition, as with HIV Linkage to Care, homeless persons should have access to care for cancer. Tens of thousands of homeless people likely have cancer. Considering only two types of cancer, 3,336 female patients at HCH Health Centers were diagnosed with abnormal breasts findings and 5,049 patients were diagnosed with abnormal cervical findings.

When the risk of death and other adverse outcomes from breast cancer, cervical cancer, and colorectal cancer is or may be reduced by mammography screening, Pap Test screening, and colorectal cancer screening, all patients should be screened according to the U.S. Preventive Services Task Force Guidelines regardless of the Health Center or their health insurance status. Health Centers should provide linkage to care for patients with cancer and should report cancer treatment linkage to care to the Health Resources and Services Administration.

Chronic Liver Disease

Health Care for the Homeless Program Grantee Health Centers can provide an important role in diagnosing homeless patients with Hepatitis B and Hepatitis C and with linking them to treatment. The Healthy People 2020 goal for Hepatitis C screening and diagnosis is that 60.0% of people with chronic Hepatitis C are aware

[23] UDS Clinical Measures, *supra* note 11. The Healthy People 2020 goal is measured as the percent of adults aged 50 to 75 years received a colorectal cancer screening based on the most recent guidelines in 2008 (i.e., persons that have had a blood stool test in the past year, sigmoidoscopy in the past 5 years and blood stool test in the past 3 years, or a colonoscopy in the past 10 years). Cancer Objectives, *supra* note 19.

[24] Health Center Data 2014, *supra* note 2. Colorectal cancer screening was measured by evaluating the percent of patients between the ages of 51 and 74 who had at least one medical visit during the year with a documented colonoscopy conducted during the measurement year or the previous 9 years, a flexible sigmoidoscopy conducted during the measurement year or the previous 4 years, or a fecal occult blood test conducted during the measurement year. UDS Manual, *supra* note 11.

of their status.[25] In 2014, 29,438 patients were tested for and 1,739 patients were diagnosed with Hepatitis B and 38,724 patients were tested for and 26,285 patients were diagnosed with Hepatitis C at HCH Health Centers.

Liver Disease Diagnosis and Mortality

- **Hepatitis B – 29,438** Patients were Tested for Hepatitis B and **1,739** Patients were Diagnosed with Hepatitis B at HCH Health Centers in 2014
- **Hepatitis C – 38,724** Patients were Tested for and **26,285** Patients were Diagnosed with Hepatitis C at HCH Health Centers in 2014
- The recommended diagnosis/awareness level for chronic Hepatitis C is **60%**
- **Deaths – 36,427** Americans died from chronic liver disease and cirrhosis, **129** Americans died from chronic Hepatitis B, and **7,365** Americans died from chronic Hepatitis C in 2013

Many homeless individuals with hepatitis are not aware they are infected and screening of all individuals increases the percentage of individuals who are diagnosed with Hepatitis B and C and may be able to start the life-saving treatment.[26] The U.S. Preventive Services Task Force recommendations for Hepatitis B and C screening only cover certain persons at high risk instead of all homeless persons, who studies have found are at high risk.[27] For example,

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[25] Office of Disease Prevention & Health Promotion, HHS, Healthy People 2020, 2020 Topics & Objectives, Immunization and Infectious Diseases, http://www.healthypeople.gov/2020/topics-objectives/topic/immunization-and-infectious-diseases/objectives (last updated Dec. 11, 2015) [hereinafter Immunization and Infectious Diseases Recommendations].

[26] *See* Catelyn Coyle et al., *Identification and Linkage to Care of HCV-Infected Persons in Five Health Centers – Philadelphia, Pennsylvania, 2012 – 2014*, 64 Morbidity & Mortality Wkly. Rep. 459 (2015); John W. Ward et al., *Hepatitis C Virus Prevention, Care and Treatment: From Policy to Practice*, Clinical Infectious Diseases, July 15, 2012, at S58; Aaron J. Strehlow et al., *Hepatitis C Among Clients of Health Care for the Homeless Primary Care Clinics*, 23 J. Health Care for the Poor & Underserved 811 (2012); Lillian Gelberg et al., *Prevalence, Distribution, and Correlates of Hepatitis C Virus Infection Among Homeless Adults in Los Angeles*, 127 Pub. Health Rep. 407 (2012).

[27] *See* U.S. Preventive Serv. Task Force, Screening for Hepatitis C Virus Infection in Adults: U.S. Preventive Services Task Force Recommendation Statement, 159 Annals of Internal Med. 349 (2013); U.S. Preventive Serv. Task Force, Screening for Hepatitis B Virus Infection in Nonpregnant Adolescents and Adults: U.S. Preventive Services Task Force Recommendation Statement, 161 Annals of Internal Medicine 58 (2014); Strehlow et al., *supra* note 26; Gelberg et al., *supra* note 26.

screening at eight HCH Health Centers in geographically diverse urban areas found that 31 percent had Hepatitis C with half unaware of their status at the time of testing.[28] Similarly, screening at 41 homeless shelters and meal programs in Los Angeles found that 26.7% had Hepatitis C and that nearly half (46.1%) were unaware of their infection.[29] Also, screening at five Health Centers in Philadelphia of homeless persons and others with other risks for Hepatitis C infection found that 8.6% of those screened had chronic Hepatitis C and that with a linkage-to-care coordinator and linkage services such as reminders, transportation, and resolving barriers to attending appointments, 62% were able to access care with a specialist.[30]

Chronic Liver Disease Treatment	
Recommended Treatment Level for Persons with Chronic Hepatitis C who do not have short life expectancies (< 1 year) that cannot be remediated by treating Hepatitis C, transplantation, or other directed therapy	100%
Number of Patients Diagnosed with Hepatitis B at HCH Health Centers in 2014	1,739
Number of Patients Diagnosed with Hepatitis C at HCH Health Centers in 2014	26,285

Homeless individuals in all states should have access to health insurance because those without health insurance may not seek treatment or be able to afford the treatment necessary to cure Hepatitis B and Hepatitis C.[31] The Infectious Diseases Society of America and the American Association for the Study of Liver Diseases guidelines recommend that all patients with chronic hepatitis C receive treatment, unless they have short life expectancies that cannot be remediated by treating hepatitis C, transplantation, or other directed therapy.[32] The study of screening and treatment at five Health Centers in Philadelphia found that only 240 of 304 patients with chronic Hepatitis C referred to a specialist were actually seen by a specialist and the most successful linkage-to-care rates were at the Health Center that provided Hepatitis C treatment at the Health Center, but that Health Centers had to refer patients to an outside care provider when there were extenuating circumstances such as advanced liver disease or cirrhosis.[33] Similarly, data from the National Health and Nutrition Examination Survey show that only 50% of patients were previously aware of their Hepatitis C infection before the survey and 77% of patients testing positive for Hepatitis C had actually seen a clinician after the first

[28] Strehlow et al., *supra* note 26.
[29] Gelberg et al, *supra* note 26.
[30] Coyle et al.., *supra* note 26.
[31] *See* sources cited *supra* note 26.
[32] Infectious Diseases Soc'y of Am. & Am. Ass'n for the Study of Liver Diseases, Recommendations for Testing, Managing, and Treating Hepatitis C (Aug. 7, 2015), *available at* http://www.hcvguidelines.org/fullreport [hereinafter Hepatitis C Guidelines].
[33] Coyle et al.., *supra* note 26.

Hepatitis C test result.[34] Patients who were not previously aware of their Hepatitis C infection were statistically more likely to lack health insurance coverage.[35] Also, the patients who reported they had seen a clinician were statistically significantly more likely to have health insurance.[36] Fifty-two percent of the patients who had seen a clinician were told they had Hepatitis C and needed regular medical follow-up and only 47% of these patients had undergone a liver biopsy and only 52% were told their Hepatitis C should be treated with medication, such as interferon and ribavirin.[37] Of the patients who were told they should be treated, 62% reported treatment with these medications, translating to only 13% of the patients who tested positive for Hepatitis C with known information-about follow-up.[38] Lack of appropriate clinician assessment and delays in linkage to care can result in negative health outcomes and patients who do not receive follow-up fail to benefit from evolving evaluation and treatment options.[39]

As many homeless patients are unaware of their infection and diagnosed patients can start life-saving treatment that can cure the disease and prevent cirrhosis, liver cancer, and liver failure, regardless of the Health Center or their insurance status, Health Centers should screen all homeless persons for Hepatitis B and C and Health Centers should provide linkage to care for all patients with Hepatitis B and C and should report Hepatitis B and C treatment linkage to care to the Health Resources and Services Administration.

Cardiovascular Disease

Although some Health Centers are successfully diagnosing and treating homeless patients with cardiovascular disease, other Health Centers may not be diagnosing all homeless patients and are not sufficiently controlling major contributors to cardiovascular disease for all homeless patients. The Healthy People 2020 goal for blood pressure measurement is that 92.6% of adults will have their blood pressure measured within the preceding two years and can state whether their blood pressure is high or normal.[40] In 2014, 26,369 patients were diagnosed with heart disease and 157,026 were diagnosed with hypertension at HCH Health

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[34] Maxine M. Denniston et al., *Awareness of Infection, Knowledge of Hepatitis C, and Medical Follow-up Among Individuals Testing Positive for Hepatitis C: National Health and Nutrition Examination Survey 2001-2008*, 55 Hepatology 1652 (2012).
[35] *Id.*
[36] *Id.*
[37] *Id.*
[38] *Id.*
[39] *See* Denniston et al., *supra* note 34; Hepatitis C Guidelines, *supra* note 33.
[40] Office of Disease Prevention & Health Promotion, U.S. Department of Health & Human Services, Healthy People 2020, 2020 Topics & Objectives, Heart Disease and Stroke, http://www.healthypeople.gov/2020/topics-objectives/topic/heart-disease-and-stroke/objectives (last updated Dec. 23, 2015) [hereinafter Heart Disease and Stroke Recommendations].

Centers. Likewise, an average of 16.8% of the adult homeless patients between the ages of 18 and 85 were diagnosed with hypertension at the twenty-nine Health Centers where 100% of the patients were homeless. The Health Center Profiles do not include information on the number of patients diagnosed with ischemic vascular disease and high cholesterol. The Healthy People 2020 goal for adults who have had their blood cholesterol measured in the preceding five years is 82.1%.[41]

If patients are tested for ischemic vascular disease and high cholesterol solely on the basis of the U.S. Preventive Services Task Force guidelines, it is likely that not all homeless patients are being diagnosed with those two conditions. The U.S. Preventive Services Task Force recommendation on screening for coronary heart disease is that the current evidence is insufficient to assess the balance of benefits and harms of using nontraditional risk factors studied to screen asymptomatic men and women with no history of coronary heart disease to prevent coronary heart disease events.[42] Yet, 31% of men and 7% of women without coronary heart disease symptoms and without diabetes will fall into an intermediate-risk category whereby they have a ten percent to twenty percent risk of a myocardial infarction (heart attack) or death during the next ten years.[43] The U.S. Preventive Services Task Force recommends screening all men aged 35 and older for lipid disorders (and only men aged 20 to 35 if they are at increased risk for coronary heart disease); however, it only recommends screening women aged 20 and older and 45 and older if they are at increased risk for coronary heart disease, which leaves out women who may not have the specific risk factors but are still at risk for cardiovascular disease.[44] Astounding in light that the recommendations discriminate on the basis of gender, nearly half (395,808 of 796,494) of all deaths from cardiovascular disease in 2013

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[41] Heart Disease and Stroke Recommendations, *supra* note 40.

[42] U.S. Preventive Serv. Task Force, Nontraditional Risk Factors in Coronary Heart Disease Risk Assessment: U.S. Preventive Services Task Force Recommendation, 151 Annals of Internal Med. 474 (2009), *available at* http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/coronary-heart-disease-screening-using-non-traditional-risk-factors [USPSTF, Coronary Heart Disease Recommendations]. The U.S. Preventive Services Task Force also concluded that the current evidence is insufficient to assess the benefits and harms of screening with resting or exercise electrocardiography for the prediction of coronary heart disease events in asymptomatic adults at intermediate or high risk for coronary heart disease events and recommended against such screening in asymptomatic adults at low risk. U.S. Preventive Serv. Task Force, Coronary Heart Disease: Screening with Electrocardiography, July 2012: Recommendation Statement, *available at* http://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/coronary-heart-disease-screening-with-electrocardiography (last updated Oct. 2014).

[43] *See* USPTSF, Coronary Heart Disease Recommendations, *supra* note 42.

[44] *See* U.S. Preventive Serv. Task Force, Lipid Disorders in Adults (Cholesterol, Dyslipidemia: Screening, June 2008: Final Recommendation Statement, *available at* http://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/lipid-disorders-in-adults-cholesterol-dyslipidemia-screening#consider (last updated Dec. 2014) [hereinafter USPSTF, Lipid Screening Recommendations].

were women and nearly half (50,742 of 116,793) of all deaths from acute myocardial infarctions were women.[45] Furthermore, the U.S. Preventive Services Task Force noted that some studies showed women who did not have coronary heart disease symptoms who used lipid-lowering medication had a benefit.[46] Therefore, many homeless patients are likely not diagnosed with ischemic vascular disease or with high cholesterol and could benefit from such diagnosis.

Cardiovascular Disease Diagnosis and Mortality

- **Heart Disease – 26,369** Patients were Diagnosed with Heart Disease (selected) at HCH Health Centers in 2014
- **Hypertension –157,026** Patients were Diagnosed with Hypertension at HCH Health Centers in 2014
- The Healthy People 2020 goal for hypertension is that **92.6%** of adults have their blood pressure tested within the preceding two years and can state whether their blood pressure is high or normal
- The Healthy People 2020 goal for blood cholesterol is **82.1%** of adults will have their blood cholesterol tested in the preceding five years
- **Deaths – 796,494** Americans died from cardiovascular disease in 2013

Homeless patients appear not to have received blood pressure control at as high a level as the recommended level or at the average level of Health Center patients in general. For blood pressure control, the 2014 Health Center average was 63.7%[47] and the Healthy People 2020 Goal is 61.2%.[48] The percent of hypertensive homeless patients between the ages of 18 and 85 at the Health Centers where 100% of the patients were homeless with successful blood pressure control averaged 55.2% with a median of 55.6%, meaning the percent at half of the health centers is less than this amount, and a range from 24% to 82%.[49] The percent of patients with

[45] CDC, HHS, Deaths: Final Data for 2013, *available at* http://www.cdc.gov/nchs/data/nvsr/nvsr64/nvsr64_02.pdf (last visited Dec. 2, 2015).
[46] USPSTF, Lipid Screening Recommendations, *supra* note 44.
[47] Health Center Data 2014, *supra* note 2.
[48] UDS Clinical Measures, *supra* note 11; Heart Disease and Stroke Recommendations, *supra* note 40.
[49] Blood pressure control was measured as estimating the percent of patients with diagnosed hypertension between the ages of 18 and 85 with blood pressure readings of <140/90, regardless of

blood pressure control was less than the overall Health Center average level of 63.7% and the recommended level of 61% at twenty-three of the twenty-nine Health Centers. Fourteen of the Health Centers where blood pressure control was less than the average and recommended levels were in Medicaid-expansion states and eight of the Health Centers were in Maine, New Mexico, Tennessee, Texas, Utah, and Wyoming, which had not expanded Medicaid at the beginning of 2014.

Cardiovascular Disease Treatment			
	Blood Pressure Controlled	Heart attack/ Stroke Treatment	Cholesterol Treatment
Healthy People 2020 Treatment Level Goal	61.2%	52.1%	
Average Treatment Level at Health Centers Overall in 2014	63.7%	76.8%	78.4%
Percent of Homeless Patients with Blood Pressure Successfully Controlled (<140/90), Heart Attack/Stroke Treatment (Aspirin Therapy for Ischemic Vascular Disease Patients), or Cholesterol Treatment (Lipid Therapy for Coronary Artery Disease Patients) at Health Centers Where All Patients were Homeless in 2014	55.2%	76.3%	75.7%

Homeless patients appear not to have received heart attack/stroke treatment at as high a level as recommended or as Health Center patients in general. Heart attack/stroke treatment is important because if clinicians ensure that patients with established ischemic vascular disease use aspirin or another anti-thrombotic drug, then the likelihood of heart attacks and other vascular events can be reduced.[50] The U.S. Preventive Services Task Force guidelines only recommend the use of aspirin for men age 45 to 79 years to reduce myocardial infarctions and the use of aspirin for women age 55 to 79 years to reduce ischemic strokes when the benefits outweigh the potential harms of increased gastrointestinal hemorrhage.[51] This recommendation leaves out the use of aspirin therapy for women to reduce heart attacks (myocardial infarctions). The recommended level for use of aspirin or antiplatelet therapy in adults with a history of cardiovascular disease to prevent recurrent cardiovascular events is 52.1%. For heart attack/stroke treatment, the 2014 Health Center average was 76.8%.[52] The percent of homeless patients with heart attack/stroke treatment averaged 76.3% and ranged from 8% to 100% at the Health Centers where 100% of

whether they were specifically treated for hypertension and who have been seen for medical visits at least twice during the reporting year. UDS Manual, *supra* note 11.

[50] UDS Manual, *supra* note 11.

[51] US. Preventive Services Task Force, Prevention of Cardiovascular Disease: Preventive Medication, March 2009: Recommendation Statement, (2009), *available at* http://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/aspirin-for-the-prevention-of-cardiovascular-disease-preventive-medication.

[52] Health Center Data 2014, *supra* note 2.

the patients were homeless.[53] The percent of patients with heart attack/stroke treatment was less than the recommended level of 52.1% at two of the twenty-eight Health Centers reporting the information and less than the average level of 76.8% at nine of the twenty-eight Health Centers reporting the information. Four of the Health Centers where heart attack/stroke treatment is less than the average level are located in Medicaid-expansion states and five of the Health Centers are located in Florida, New Mexico, Texas, and Utah, which had not expanded Medicaid at the beginning of 2014. The two Health Centers where heart attack/stroke treatment was less than the recommended level are located in a Medicaid-expansion state (Massachusetts) and a non-Medicaid expansion state (Texas).

Not only is heart attack/stroke treatment at some Health Centers less for homeless patients than the average Health Center patient, but heart attack/stroke treatment was lower for homeless patients in states that had not expanded Medicaid (68.8%) compared to homeless patients in states that had expanded Medicaid (80.5%).[54] Therefore, access to health insurance may be impacting the ability to access care for heart attack/stroke treatment.

Homeless patients appear not to have received cholesterol treatment at as high a level as Health Center patients in general. Cholesterol treatment is important because if clinicians ensure that patients with established coronary artery disease and high lipid levels receive lipid lowering therapy, the likelihood of coronary artery disease related events will be reduced.[55] For cholesterol treatment, the 2014 Health Center average was 78.4%.[56] The percent of patients with cholesterol treatment at the Health Centers where 100% of the patients were homeless averaged 75.7% with a median of 77.8% and a range from 36% to 100%.[57] The percent of patients with lipid therapy was less than the average level of 78.4% at fourteen of the twenty-eight Health Centers reporting the information. Ten of the Health Centers where lipid therapy was less than the average level were in Medicaid-expansion states and four were in New Mexico, Texas, Utah, and Wyoming, which had not expanded Medicaid at the beginning of 2014.

As blood pressure control, heart attack/stroke treatment, and cholesterol treatment can reduce the likelihood of heart attacks, other vascular events, and

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[53] Heart attack/stroke treatment is measured as the percent of ischemic vascular disease patients prescribed, dispensed, or used aspirin or another anti-thrombotic medication. UDS Manual, *supra* note 11.

[54] Analysis of data in Appendix Tables 7 and 8 with an Independent t-Test found a probability of $p = 0.13$.

[55] UDS Manual, *supra* note 11.

[56] Health Center Data 2014, *supra* note 2.

[57] Cholesterol treatment was measured as estimating the percent of coronary artery disease patients aged 18 years and older with two or more medical visits (at least one during the current measurement year) who were prescribed, provided with, or were taking a lipid-lowering medication. UDS Manual, *supra* note 11; UDS Clinical Measures, *supra* note 11.

coronary artery disease events, regardless of the Health Center or their health insurance status, all homeless patients with hypertension should have their blood pressure controlled through medication or other means, all homeless patients age 40 to 79 should be screened for coronary heart disease and all homeless patients with ischemic vascular disease should receive aspirin or another anti-thrombotic drug to prevent heart attacks and other vascular events if the heart attack or stroke benefit outweighs the risk of gastrointestinal bleeding, and all homeless patients ages 20 to 35 should be screened for high cholesterol if they are at increased risk for coronary heart disease and all patients aged 35 and older should be screened for high cholesterol and all homeless patients with high cholesterol should be able to receive lipid-lowering medication.

Diabetes

While some Health Centers are successfully treating homeless patients with diabetes, other Health Centers may not be diagnosing and are not sufficiently controlling diabetes in homeless patients. In 2014, 78,374 patients between the ages of 18 and 75 were diagnosed with diabetes mellitus at HCH Health Centers and 8.8% of patients between the ages of 18 and 75 were diagnosed with diabetes mellitus at the twenty-nine Health Centers where 100% of the patients were homeless. Nationwide, about 9.3% of the U.S. population has diabetes and 27.8% of people with diabetes are undiagnosed.[58]

Further, a study of three Health Centers found when testing patients without known diabetes who had not previously received a diabetes screening test (i.e., HbA1c test) in the past twelve to eighteen months and who were ineligible for diabetes screening according to the American Diabetes Association Guidelines or the U.S. Preventive Services Task Force Guidelines that 2 individuals had hemoglobin A1c (HbA1c) levels in the diabetic range and 43 individuals had HbA1c levels in the pre-diabetes range.[59] The study found even more individuals with

[58] Div. of Diabetes Translation, Nat'l Ctr. for Chronic Disease Prevention & Health Promotion, CDC, National Diabetes Statistics Report, 2014, available at http://www.cdc.gov/diabetes/data/statistics/2014statisticsreport.html.

[59] Nancy Sohler et al., *Opportunistic Screening for Diabetes and Pre-diabetes Using Hemoglobin A1c in an Urban Primary Care Setting*, 22 Endocrine Practice (forthcoming 2016), *available at* http://journals.aace.com/doi/abs/10.4158/EP15866.OR; *see also* Ann M. Sheehy et al., *Analysis of Guidelines for Screening Diabetes Mellitus in an Ambulatory Population*, 85 Mayo Clinical Proceedings 27 (2010) (finding 869 patients eligible under U.S. Preventive Services Task Force Guidelines were diagnosed with diabetes and 1,329 patients eligible under the ADA Guidelines were diagnosed with diabetes and also finding that patients without insurance were less likely to be tested with any glucose screening measurement compared with insured patients). The number of patients with previously unknown diabetes who had not previously received a HbA1c test in the past 12 to 18 months who had an HbA1c in the diabetes range was 33 patients and who had an

HbA1c levels in the diabetes range and pre-diabetes range when considering the patients who were previously unknown diabetics and did not have the recent screening test who were eligible under the U.S. Preventive Services Task Force Guidelines (90 patients with a diabetic HbA1c and 524 with a pre-diabetic HbA1c) or both guidelines (121 patients and 733 patients, respectively). The study concluded that universal application of routine screening using HbA1c, which is more amenable to patients because it does not require fasting nor repeat testing, and risk stratification criteria could result in the detection of a large number of previously undiagnosed diabetes and pre-diabetes patients. The study suggests that although more patients eligible for testing under the guidelines may be diabetic or pre-diabetic, patients not eligible for testing may still be diabetic or pre-diabetic.

Diabetes Diagnosis and Mortality

- **78,374** Patients were Diagnosed with diabetes at HCH Health Centers in 2014
- **8.8%** of Homeless Patients were Diagnosed with diabetes at Health Centers Where All Patients were Homeless in 2014
- Nationwide, **9.3%** of the population have diabetes and **27.8%** of U.S. Residents with Diabetes are Undiagnosed
- **75,578** Americans died from diabetes in 2013

Although screening patients according to the current U.S. Preventive Services Task Force Guidelines may allow more patients to be diagnosed with diabetes, the Guidelines are still likely to miss many patients with undiagnosed diabetes.[60] Based on these studies, expanding health insurance so that insurance can

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HbA1c in the pre-diabetes range was 252 patients when they were ineligible for diabetes screening only according to the U.S. Preventive Services Task Force Guidelines. Sohler et al., *supra.*

[60] The current U.S. Preventive Services Task Force Guideline only recommends screening for abnormal blood glucose as part of cardiovascular risk assessment in adults aged 40 to 70 years who are overweight or obese. U.S. Preventive Serv. Task Force, *Screening for Abnormal Blood Glucose and Type 2 Diabetes Mellitus: U.S. Preventive Services Task Force Recommendation*, 163 Annals of Internal Med. 861 (2015). Yet, a previous study, not assessed by the U.S Preventive Services Task Force in its new guideline, found that 12 percent of patients with undiagnosed diabetes were neither overweight nor obese. *See* Sarah Stark Casagrande et al., *Utility of the U.S. Preventive Services Task Force Criteria for Diabetes Screening*, 45 Am. J. Preventive Medicine 167 (2014).

cover the cost of the diabetes screening test recommended under the Guidelines and/or providing the resources for Health Centers to test more uninsured patients and expanding testing beyond just the two Guidelines is likely to increase the number of homeless patients diagnosed with diabetes.

Homeless patients appear not to have diabetes control at recommended levels or even at similar levels as Health Center patients in general. Having controlled diabetes is critical because there will be fewer long-term complications, such as organ failure, amputations, and blindness.[61] For diabetes control, the 2014 Health Center average was 68.4%[62] and the Healthy People 2020 Goal is 84% with an HbA1c ≤ 9%.[63] The percent of homeless patients at the Health Centers where 100% of the patients were homeless with successful diabetes control averaged 65.9% with a median of 65.7%, meaning the percent at half of the health centers is less than this amount, and a range from 33% to 90%.[64] The diabetes control level was below the recommended level of 84% at twenty-five of the twenty-nine Health Centers and was below the average level of 68.4% at sixteen of the twenty-nine Health Centers. Eleven of the health centers where diabetes control was less than the average level are located in Medicaid-expansion states and five of the health centers are located in New Mexico, Texas, and Utah, which had not expanded Medicaid at the beginning of 2014.

Diabetes Treatment (Diabetes Control with Diabetic Patients with HbA1c ≤ 9%)	
Healthy People 2020 Level Goal for Diabetes Control	84%
Average Level of Diabetes Control at Health Centers Overall in 2014	68.4%
Percent of Homeless Patients with Diabetes Control at Health Centers Where All Patients were Homeless in 2014	65.9%

As having controlled diabetes reduces the likelihood of complications, such as organ failure, amputations, blindness, and death, universal application of routine screening should be available so that all homeless patients with diabetes and pre-diabetes can be diagnosed and all homeless patients with diabetes should have

[61] UDS Manual, *supra* note 11.
[62] Health Center Data 2014, *supra* note 2.
[63] UDS Clinical Measures, *supra* note 11. The Healthy People 2020 goal is measured as the percent of adults aged 18 years and older with diagnosed diabetes who had an A1c value less than or equal to 9 percent. *See* Office of Disease Prevention & Health Promotion, U.S. Department of Health & Human Services, Healthy People 2020, 2020 Topics & Objectives, Diabetes, http://www.healthypeople.gov/2020/topics-objectives/topic/diabetes/objectives (last updated Dec. 28, 2015).
[64] Diabetes control was measured as estimating the percent of adult patients between the ages of 18 and 75 with a diagnosis of Type I or Type II diabetes who have been seen in the clinic for medical visits at least twice during the reporting year and whose most recent HbA1c during the measurement year was less than or equal to 9%. *See* UDS Manual, *supra* note 11.

access to diabetes medications to control diabetes regardless of the Health Center or their health insurance status.

Asthma

Asthma treatment at Health Centers is critical to prevent death and other complications. In 2014, 47,590 patients were diagnosed with asthma at HCH Health Centers and 7.7% of patients were diagnosed with asthma at the twenty-nine Health Centers where 100% of the patients were homeless. Receiving asthma pharmacologic therapy is important because if patients with persistent asthma are provided with appropriate pharmacological therapy, then they will be less likely to have asthma attacks and less likely to develop asthma-related complications including death.[65]

Access to health insurance appears to be impacting asthma diagnosis. At the twenty-nine health centers where all of the patients were homeless, the percent of homeless patients with diagnosed asthma decreased statistically significantly as the percent of uninsured homeless patients increased.[66]

Asthma Diagnosis and Mortality

- **47,590** Patients were Diagnosed with asthma at HCH Health Centers in 2014
- **7.7%** of Homeless Patients were Diagnosed with asthma at Health Centers Where All Patients were Homeless in 2014
- **3,630** Americans died from asthma in 2013

Homeless patients at some Health Centers appear not to have asthma treatment at similar levels as Health Center patients in general. For asthma treatment, the 2014 Health Center average was 80.8%.[67] The percent of homeless patients with asthma at the Health Centers where 100% of the patients were homeless with an asthma treatment plan averaged 83.8% with a median of 87.5%, meaning the percent at half of the health centers is less than this amount, and a

[65] UDS Manual, *supra* note 11.
[66] Analysis of data in Appendix Tables 9 and 10 with simple linear regression on ranked data found the following: $F = 5.02$, $p = 0.0335$, $n = 29$, $r^2 = 0.13$, RankAsthmaDiagnosis = 20.627 – 0.1121*uninsured.
[67] Health Center Data 2014, *supra* note 2.

range from 49% to 100%.[68] The screening level was below the overall Health Center average level of 80.8% at ten of the twenty-nine Health Centers. Seven of the Health Centers where asthma treatment was less than the average level were in Medicaid-expansion states and three of the Health Centers were located in Florida, Texas, and Utah, which had not expanded Medicaid at the beginning of 2014.

Asthma Treatment (Patients with Persistent Asthma with Appropriate Pharmacological Therapy)	
Average Level of Asthma Treatment at Health Centers Overall in 2014	80.8%
Percent of Homeless Patients with Asthma Treatment at Health Centers Where 100% of Patients were Homeless in 2014	83.8%

As patients with persistent asthma who are provided with appropriate pharmacological therapy are less likely to have asthma attacks and less likely to die and develop other asthma-related complications, all homeless patients with persistent asthma should have access to prescribed inhaled corticosteroids or an approved alternative pharmacologic therapy regardless of the Health Center or their health insurance status.

Chronic Lower Respiratory Diseases

Homeless patients with chronic lower respiratory diseases such as chronic bronchitis and emphysema may not be diagnosed with chronic bronchitis or emphysema at Health Centers and may not be able to receive treatment. In 2014, only 14,031 patients were diagnosed with chronic bronchitis and emphysema at HCH Health Centers or only 3 percent to 9 percent of the medical patients between the ages of 40 and 79. This is similar to the 6.3% of adults who have been told by a doctor that they have COPD, but less than the 14 percent of U.S. adults ages 40 to 79 nationwide who have COPD and the 15 percent of homeless adults in a study who had COPD.[69] Further, a study suggested that both homeless adults with and without

[68] Asthma treatment was measured as estimating the percent of patients aged 5 through 40 with two or more visits (at least one medical) who had a diagnosis of persistent asthma who received or were prescribed inhaled corticosteroids or approved alternative pharmacologic therapy, specifically: inhaled steroid combinations, anti-asthmatic combinations, antibody inhibitor, leukotriene modifiers, mast cell stabilizers, or methylxanthines. *See* UDS Clinical Measures, *supra* note 11; UDS Manual, *supra* note 11.

[69] *See* CDC, HHS, Chronic Obstructive Pulmonary Disease Among Adults – United States, 2011, 61 Morbidity & Mortality Wkly. Report 938 (2012) [hereinafter COPD Article]; Laurie D. Snyder & Mark D. Eisner, *Obstructive Lung Disease Among the Urban Homeless*, 125 CHEST 1719 (2004); U.S. Preventive Services Task Force, Chronic Obstructive Pulmonary Disease: Screening: Draft Recommendation Statement (Aug. 2015), *available at* http://www.uspreventiveservicestaskforce.org/Page/Document/draft-recommendation-

respiratory symptoms had COPD but were previously undiagnosed. The study measured obstructive lung disease in homeless patients and found that more individuals had chronic bronchitis than were previously diagnosed and that less than half of the homeless patients with a physician diagnosis of asthma, chronic bronchitis, emphysema, or COPD had at least one ambulatory medical visit for wheezing or dyspnea during the past 12 months.[70] The study also found that only 30% of the homeless adults with obstructive lung disease as defined by spirometry had an outpatient medical visit for respiratory systems. Therefore, many homeless patients with chronic bronchitis or emphysema may remain undiagnosed if COPD screening focus screening efforts only on patients reporting respiratory symptoms, as the proposed U.S. Preventive Services Task Force recommendations appear to focus.[71] Diagnosis and treatment of chronic lower respiratory diseases like chronic bronchitis and emphysema is important to prevent breathing-related difficulties.[72]

Chronic Lower Respiratory Diseases Diagnosis and Mortality

- **14,031** Patients (**3% to 9%** of medical patients ages 40 to 79) were Diagnosed with chronic bronchitis and emphysema at HCH Health Centers in 2014
- **14%** of U.S. adults have chronic obstructive pulmonary disease (COPD)
- Only **6.3%** of U.S. adults have been diagnosed with COPD
- **149,205** Americans died from chronic lower respiratory diseases in 2013

Homeless patients may not be receiving treatment for chronic bronchitis and emphysema. The Healthy People 2020 goal for the level of adults with COPD aged 45 years and older experiencing activity limitations due to chronic lung and breathing problems is 18.7%.[73] Yet, in 2013, 33.3% of patients with family income

statement159/chronic-obstructive-pulmonary-disease-screening [hereinafter USPSTF, COPD Screening Recommendations].
[70] Snyder & Eisner, *supra* note 69.
[71] USPSTF, COPD Screening Recommendations, *supra* note 69.
[72] *See* Olga Wrezel, *Respiratory Infections in the Homeless*, U. W. Ont. Med. J., 2008, at 61.
[73] Office of Disease Prevention & Health Promotion, HHS, Healthy People 2020, 2020 Topics & Objectives, Respiratory Diseases, http://www.healthypeople.gov/2020/topics-

less than the poverty threshold experienced activity limitations due to chronic lung and breathing problems.[74] Also, in a nationwide survey, 64.2% of people with COPD reported that shortness of breath impaired their quality of life and 55.6% reported taking at least one daily medication for their COPD.[75] This survey reported even higher levels for people with annual household income less than $25,000: 68.8% reported that shortness of breath impaired their quality of life and 59.1% reported taking at least one daily medication for their COPD.[76] This suggests that low-income individuals with COPD are not receiving sufficient treatment nor more expensive treatment.

Chronic Lower Respiratory Disease Treatment	
Healthy People 2020 Goal for Adults with COPD aged 45 years experiencing activity limitations due to chronic lung and breathing problems	18.7%
Recommended Level of Deaths Due to COPD	0.1%
Number of Patients Diagnosed with Chronic Bronchitis and Emphysema at HCH Health Centers in 2014	14,031

As diagnosis and treatment of chronic lower respiratory diseases such as chronic bronchitis and emphysema is important to prevent death and other breathing-related difficulties, regardless of the Health Center or their health insurance status, all homeless patients should at least be screened with questions to assess chronic respiratory symptoms and for other risk factors, such as history of asthma or childhood respiratory infections, alpha-1 antitrypsin deficiency, smoking history and occupational environment, and all homeless patients with chronic respiratory symptoms or other risk factors should be diagnosed with spirometry testing. All homeless patients diagnosed with chronic bronchitis or emphysema should be linked to care and Health Centers should report chronic bronchitis and emphysema treatment linkage of care to the Health Resources and Services Administration.

objectives/topic/respiratory-diseases/objectives (last updated Dec. 23, 2015). The Healthy People 2020 goal for proportion of deaths due to COPD in adults aged 45 or older is 0.1%. *Id.*

[74] Office of Disease Prevention & Health Promotion, HHS, Healthy People 2020, Disparities Overview by Income, http://www.healthypeople.gov/2020/data/disparities/summary/Chart/5193/6.1 (last updated Dec. 23, 2015).

[75] COPD Article, *supra* note 69.

[76] COPD Article, *supra* note 69.

Other Life-Threatening or Serious Conditions or Illnesses

In addition to chronic conditions, federal health centers that served homeless patients recorded in 2014 the diagnosis of other life-threatening or serious conditions or illnesses, including tuberculosis, sexually transmitted diseases, exposure to heat and cold and dehydration, and dental problems. Although many homeless patients are diagnosed with and able to receive treatment for these other life-threatening or serious conditions or illnesses, some homeless patients are not diagnosed and/or receiving adequate treatment for tuberculosis, sexually transmitted diseases, heat-related illness, hypothermia, dental problems, and eye diseases and homeless patients without health insurance may not be able to receive necessary medication or treatment for these conditions.

Tuberculosis

Homeless patients with active or latent tuberculosis may not be diagnosed and some homeless patients with tuberculosis have not received sufficient care. Although there were 698,185 medical patients at HCH Health Centers in 2014, only 1,575 patients (0.2% of the medical patients) were diagnosed with Tuberculosis. The Centers for Disease Control reports that homeless patients comprised 5.7% of the tuberculosis cases in the United States in metropolitan statistical areas with a population greater than or equal to half a million people.[77] This suggests that tuberculosis is being under-diagnosed at Health Centers and in smaller localities. Homelessness is one of the greatest risk factors for contracting tuberculosis and screening of all homeless patients can result in early detection of active tuberculosis

[77] Div. of Tuberculosis Elimination, Nat'l Ctr. For HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, CDC, HHS, Reported Tuberculosis in the United States, 2014 (Sept. 2015), *available at* http://www.cdc.gov/tb/statistics/reports/2014/pdfs/tb-surveillance-2014-report.pdf.

allowing for early treatment and prevention of tuberculosis with the detection of latent tuberculosis.[78]

Tuberculosis Diagnosis and Mortality

- **1,575** Patients (**0.2%** of the medical patients) were Diagnosed with tuberculosis at HCH Health Centers in 2014
- **5.7%** of U.S. tuberculosis patients in metropolitan statistical areas with a population greater than or equal to half a million people are homeless
- **555** Americans and at least **12** homeless Americans died from tuberculosis in 2013

Early treatment may help save lives. Some homeless individuals who die from tuberculosis are never diagnosed and treated for tuberculosis.[79] Other homeless individuals die from tuberculosis after being re-diagnosed after completing treatment or being lost to supervision for more than 12 months. In 2013, 1 of 18 re-diagnosed homeless individuals died.[80] In 2013, twelve of 518 homeless patients with tuberculosis did not receive sufficient care and died from tuberculosis with eight deaths from pulmonary tuberculosis, one death from extrapulmonary tuberculosis, and three deaths from both types of tuberculosis.[81] Early detection and treatment are important also so that multi-drug resistant tuberculosis, which two homeless individuals had in 2013,[82] can be treated and prevented.

Tuberculosis Treatment	
Recommended Completion of Treatment Level for Confirmed (Active) Tuberculosis	93.0%
Number of Patients Diagnosed with Tuberculosis at HCH Health Centers in 2014	1,575

[78] *See* Po-Marn Kong et al., *Skin-Test Screening and Tuberculosis Transmission Among the Homeless*, 8 Emerging Infectious Diseases 1280 (2002).
[79] *See* Cynthia Lee, *School of Nursing Clinic Fights Spread of TB on Skid Row*, UCLA Today, June 6, 2013, *available at* http://newsroom.ucla.edu/stories/school-of-nursing-clinic-fights-246643.
[80] CDC, HHS, Online Tuberculosis Information System: National Tuberculosis Surveillance System, United States, 1993-2013, CDC WONDER On-line Database, April 2015, http://wonder.cdc.gov/tb.html [hereinafter OTIS].
[81] OTIS, *supra* note 80.
[82] OTIS, *supra* note 80.

The Centers for Disease Control and Prevention recommends that 93.0% of patients with confirmed (i.e., active) tuberculosis receive and complete treatment.[83] As diagnosis and treatment of tuberculosis is important to prevent death and other complications, regardless of the Health Center or health insurance status, all homeless patients should be routinely tested for tuberculosis and all homeless patients with active tuberculosis should receive treatment.

Sexually Transmitted Diseases (STDs)

Homeless individuals with sexually transmitted diseases may not be diagnosed and without diagnosis may not be able to receive treatment. In 2014, while seeing 698,185 medical patients overall, only 6,280 patients were diagnosed with syphilis and other sexually transmitted diseases at HCH Health Centers. Yet, homeless adults and youth have a great risk of contracting a sexually transmitted disease. Many homeless women and children have been exposed to multiple, ongoing, interpersonal traumatic events including community and domestic violence and physical, emotional, and sexual abuse.[84] Studies show that between 10 and 30 percent of homeless youth have been victims of sex trafficking or engaged in sex in exchange for food, shelter, clothing, or other things.[85] Empirically, studies have shown that 16% of homeless individuals tested had a sexually transmitted disease.[86] All of these individuals were asymptomatic and may not have sought screening or treatment unless asked.[87] The 6,280 patients diagnosed with a sexually transmitted disease comprises only 0.8% of the medical patients at HCH Health

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[83] Immunization and Infectious Diseases Recommendations, *supra* note 27.
[84] The Nat'l Child Traumatic Stress Network, *Complex Trauma: Facts for Shelter Staff Working with Homeless Children and Families* (June 2014), *available at* http://www.nctsn.org/products/complex-trauma-facts-shelter-staff-working-homeless-children-and-families.
[85] *See* Covenant House, *Homelessness, Survival Sex and Human Trafficking: As Experienced by the Youth of Covenant House New York* (May 2013), *available at* https://www.covenanthouse.org/homeless-youth-news/new-study-reveals-vulnerability-homeless-youth-trafficking; Nat'l Alliance to End Homelessness, *Homeless Youth and Sexual Exploitation: Research Findings and Practice Implications* (Oct. 30, 2009), *available at* http://www.endhomelessness.org/library/entry/homeless-youth-and-sexual-exploitation-research-findings-and-practice-impli; Nat'l Network for Youth, *Unaccompanied Youth: Fast Facts*, *available at* https://www.nn4youth.org/system/files/FactSheet_Unacompanied_Youth_0.pdf (last visited Dec. 8, 2015).
[86] *See* Diane M. Grimley et al., *Sexually Transmitted Infections Among Urban Shelter Clients*, 33 Sexually Transmitted Diseases 666 (2006).
[87] Grimley et al., *supra* note 86.

Centers. This information suggests that not all homeless patients at Health Centers with a sexually transmitted disease are being diagnosed.

STD Diagnosis and Mortality

- **6,280** Patients (**0.8%** of the medical patients) were Diagnosed with syphilis and other STDs at HCH Health Centers in 2014
- **16%** of homeless individuals tested in studies have a sexually transmitted disease
- **49** Americans died from syphilis and **129** Americans died from Pelvic Inflammatory Disease in 2013

All homeless patients with sexually transmitted diseases should receive treatment. The Centers for Disease Control and Prevention recommends that persons with any stage of syphilis or testing positive for chlamydia should be provided prompt treatment.[88] It also recommends that treatment for Pelvic Inflammatory Disease should be initiated in sexually active young women and other women at risk for sexually transmitted diseases if they are experiencing pelvic or lower abdominal pain and no other cause for the pain can be explained and if at least one of three reproductive tenderness criteria are met.[89]

Sexually Transmitted Disease Treatment	
The recommended treatment level for syphilis	100%
The recommended treatment level for individuals who test positive for chlamydia	100%
The recommended treatment level for PID in sexually active young women and other women at risk for sexually transmitted diseases if they are experiencing pelvic or lower abdominal pain and no other cause for the pain can be explained and if at least one of three reproductive tenderness criteria are met	100%
Number of Patients Diagnosed with Syphilis and Other Sexually Transmitted Diseases at HCH Health Centers	6,280

[88] Kimberly A. Workowski & Stuart Berman, Centers for Disease Control & Prevention, HHS, *Sexually Transmitted Diseases Treatment Guidelines, 2010*, 59(RR-12) Morbidity & Mortality Wkly. Report 1 (2010), *available at* http://www.cdc.gov/std/treatment/2010/STD-Treatment-2010-RR5912.pdf [hereinafter STD Treatment Guidelines].
[89] STD Treatment Guidelines, *supra* note 88.

As diagnosis and treatment of sexually transmitted diseases is critical to prevent chronic pelvic pain, life-threatening ectopic pregnancy, infertility, blindness, paralysis, organ damage, and death, regardless of the Health Center or health insurance status, all homeless patients should be counseled on the risk factors for sexually transmitted diseases and have access to screening and all homeless patients with a sexually transmitted disease should have access to treatment.

Heat-related and Cold-related Illness

Prevention, early diagnosis, and/or effective treatment of heat-related and cold-related illness is missing for many homeless individuals. In 2014, 1,662 patients were diagnosed with Exposure to Heat or Cold at HCH Health Centers. Despite efforts at Health Centers and other medical facilities, hundreds of people experiencing or at risk of homelessness are killed from heat-related illness or hypothermia annually in the United States.[90] Homeless people exposed to excessive cold may need to be treated at successive time periods and their health re-evaluated. In one study, homeless persons who had been seen by a Health Care for the Homeless Program for hypothermia, frostbite or immersion/trench foot had an eightfold increased risk of dying compared to others, with four individuals dying of hypothermia.[91]

[90] *See* Nat'l Coal. for the Homeless, *Winter Homeless Services: Bringing Our Neighbors in from the Cold* (Jan. 2010), *available at* http://www.nationalhomeless.org/publications/winter_weather/report.html; Cory Sanchez, Tricks of the Shade: Heat Related Coping Strategies of Urban Homeless Persons in Phoenix, Arizona (May 2011) (unpublished M.S. thesis, Arizona State University), *available at* http://repository.asu.edu/items/8986.

[91] *See* Stephen W. Hwang et al., *Risk Factors for Death in Homeless Adults in Boston*, 158 Archives Internal Med. 1454 (1998).

Heat-related and Cold-related Illness Diagnosis and Mortality

- **1,662** Patients (**0.2%** of the medical patients) were Diagnosed with exposure to heat or cold at HCH Health Centers in 2014
- **Hundreds** of homeless individuals and individuals at risk of homelessness are killed from heat-related illness or hypothermia each year
- **601** Americans died from exposure to excessive natural heat and **1,495** Americans died from exposure to excessive natural cold in 2013

All homeless individuals with heat exhaustion or heat stroke and hypothermia and frostbite, should have access to temperature-controlled environments and receive treatment. Physicians recommend that individuals with heat stroke should be stabilized in a cool area and transferred to a medical care facility. Also, they recommend that patients with heat exhaustion who are significantly dehydrated, who are hyponatremic, who have central nervous system irritability or mental status changes, or who have cardiac arrhythmia should be transferred to an appropriate medical facility.[92] Physicians advise that patients with mild hypothermia can be treated with re-warming and patients with moderate to severe hypothermia be treated in a hospital setting.[93]

Heat-related and Cold-related Illness Treatment	
The recommended level of treatment at a medical facility for patients who have heat stroke or who have heat exhaustion with significant dehydration, low sodium from overhydrating, mental status changes or central nervous system irritability , or cardiac arrhythmia	100%
The recommended level of treatment in a hospital setting for patients who have moderate to severe hypothermia	100%
Number of Patients Diagnosed with Exposure to Heat or Cold at HCH Health Centers	1,662
Number of Patients Diagnosed with Dehydration at HCH Health Centers	1,206

[92] James L. Glazer, Management of Heatstroke and Heat Exhaustion, 71 Am. Fam. Physician 2133 (2005); Randell K. Wexler, Evaluation and Treatment of Heat-related Illnesses, 65 Am. Fam. Physician 2307 (2002).
[93] *See* Andrew D. Weinberg, Hypothermia Special Situations, 22 Annals Emergency Med. 370 (1993), *available at* http://www.hypothermia.org/weinberg.htm.

As prevention, early diagnosis, and prompt treatment of heat-related and cold-related illness can prevent heat exhaustion, heat stroke, frostbite, and hypothermia and their concomitant effects, such as fainting, amputations, coma, and death, all homeless individuals should have access to temperature-controlled environments and prompt diagnosis, treatment, and follow-up care for heat-related and cold-related illnesses.

Dental Problems

Many homeless individuals are likely unable to obtain dental care to prevent and treat tooth decay, periodontal disease, and other dental problems. Many Health Centers do not provide dental care and a small percentage of homeless individuals receive preventive dental care at Health Centers. In 2012, only 76.5% of Health Centers had an oral health care program at all and the 2020 goal is for only 83.0% of the Health Centers to have one.[94] The Healthy People 2020 goal is that 49.0% of children, adolescents, and adults use the dental care system in the past year.[95] In 2012, the average level that children, adolescents, and adults used the dental care system in the past year was 42.1%.[96] In 2014, only 42,341 patients received prophylaxis and only 103,081 patients received oral exams at HCH Health Centers. Without these preventive and diagnostic actions, homeless individuals are more

[94] Office of Disease Prevention and Health Promotion, HHS, Healthy People 2020, Federally Qualified Health Centers with an Oral Health Care Program By Total, http://www.healthypeople.gov/2020/data/Chart/4996?category=1&by=Total&fips=-1 (last updated Dec. 28, 2015). An oral health care program is defined as a Health Center that has at least 0.5 full-time equivalent dentists and/or sees 500 patients or more a year. Office of Disease Prevention and Health Promotion, HHS, Healthy People 2020, Increase the Proportion of Federally Qualified Health Centers (FQHCs) that Have an Oral Health Care Program, *available at* http://www.healthypeople.gov/node/4996/data_details (last updated Dec. 28, 2015).
[95] Office of Disease Prevention and Health Promotion, HHS, Healthy People 2020, 2020 Topics & Objectives, Oral Health, http://www.healthypeople.gov/node/3511/objectives#5020 (last updated Dec. 28, 2015) [hereinafter Oral Health Objectives].
[96] Office of Disease Prevention and Health Promotion, HHS, Healthy People 2020, Oral Health: OH-7 Increase the Proportion of Children, Adolescents, and Adults Who Used the Oral Health Care System in the Past Year, http://www.healthypeople.gov/2020/data-search/Search-the-Data?nid=5028 (Dec. 28, 2015).

likely to develop dental problems and have dental problems go unnoticed until they are more severe and life-threatening.[97]

Dental Problems Prevention, Diagnosis, and Mortality

- **103,081** patients received oral exams and **42,341** patients received prophylaxis at HCH Health Centers in 2014
- **12,938** patients received emergency dental services, **37,913** patients received oral surgery (extractions and other surgical procedures), **33,789** patients received restorative services, and **25,710** patients received rehabilitative services (endo, perio, prostho, ortho) at HCH Health Centers in 2014
- **42.1%** of children, adolescents, and adults used the dental care system in the past year in 2012
- **51** Americans died from tooth decay, periodontal disease, and other dental problems in 2013

Many homeless individuals are likely unable to receive treatment for tooth decay, periodontal disease, and other dental problems. In 2012, 25% of adults aged 35 to 44 had untreated dental decay and 15% of adults aged 65 to 74 had untreated coronal caries.[98] The Healthy People 2020 goals for untreated dental decay in adults aged 35 to 44 and untreated coronal caries in adults aged 65 to 74 are 25.0% and 15.4%.[99] In 2012, 47% of adults aged 45 to 74 had moderate or severe periodontitis.[100] The Healthy People 2020 goal for adults aged 45 to 74 with moderate or severe

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[97] Health Care for the Homeless Clinicians' Network, *Dental and Vision Care for Homeless Patients*, Fall 2015, at 1, *available at* https://www.nhchc.org/wp-content/uploads/2015/10/healing-hands-fall-2015-web-ready-pdf.pdf.

[98] *See* Office of Disease Prevention and Health Promotion, HHS, Healthy People 2020, Oral Health: OH-3.1 Reduce the Proportion of Adults Aged 35 to 44 with Untreated Dental Decay, http://www.healthypeople.gov/2020/data-search/Search-the-Data?nid=5020 (Dec. 28, 2015); Office of Disease Prevention and Health Promotion, HHS, Healthy People 2020, Oral Health: OH-3.2 Reduce the Proportion of Adults Aged 65 to 74 with Untreated Coronal Caries, http://www.healthypeople.gov/2020/data-search/Search-the-Data?nid=5021 (Dec. 28, 2015).

[99] Oral Health Objectives, *supra* note 95.

[100] *See* Office of Disease Prevention and Health Promotion, HHS, Healthy People 2020, Oral Health: OH-5 Reduce the Proportion of Adults Aged 45 to 74 with Moderate or Severe Periodontitis, http://www.healthypeople.gov/2020/data-search/Search-the-Data?nid=5026 (Dec. 28, 2015).

periodontitis is only 11.5%.[101] In 2014, only 12,938 patients received emergency dental services, 37,913 patients received oral surgery (extractions and other surgical procedures), 33,789 patients received restorative services, and 25,710 patients received rehabilitative services (endo, perio, prostho, ortho) at HCH Health Centers. This suggests that some homeless individuals still may have untreated tooth decay and moderate or severe periodontitis.

Dental-related Treatment	
Healthy People 2020 goal for Untreated Dental Caries in Adults Aged 35 to 44	25.0%
Healthy People 2020 goal for Untreated Coronal Caries in Adults Aged 65 to 74	15.4%
Healthy People 2020 goal of Moderate to Severe Periodontitis in Adults Aged 45 to 74	11.5%
Number of Patients Who Received Emergency Dental Services at HCH Health Centers	12,938
Number of Patients Who Received Oral Surgery (extractions and other surgical procedures) at HCH Health Centers	37,193
Number of Patients Who Received Restorative Services at HCH Health Centers	33,789
Number of Patients Who Received Rehabilitative Services (Endo, Perio, Prostho, Ortho) at HCH Health Centers	25,710

As prevention, early diagnosis, and treatment of tooth decay, periodontal disease, and other dental problems can prevent unnecessary pain, abscesses, and death, all homeless individuals should have access to preventive and diagnostic dental services such as prophylaxis and oral exams and emergency dental services regardless of the Health Center or their insurance status.

Eye Diseases

Many homeless individuals may be unable to receive diagnostic and treatment services for vision problems. As a likely result of lack of access to diagnostic and treatment services, more low-income individuals have visual impairment due to eye diseases compared to individuals with higher incomes. For example, six times as many diabetic adults with family income less than the poverty threshold have visual impairment due to diabetic retinopathy as those with family income between 200% and 400% of the poverty threshold.[102] Also, two times as

[101] Oral Health Objectives, *supra* note 95.
[102] Office of Disease Prevention and Health Promotion, HHS, Healthy People 2020, Disparities Details by Income for 2008: V-5.2: Visual Impairment Due to Diabetic Retinopathy (Age Adjusted, Per 1,000 Population, 18+ Years with Diabetes),

many low-income adults aged 45 and older with family income less than the poverty threshold had visual impairment due to glaucoma as those with family income between 200% and 400% of the poverty threshold.[103] Likewise, 1.4 and 2 times as many low-income adults aged 45 years and older with family income less than the poverty threshold and 100% to 200% of the poverty threshold, respectively, had visual impairment due to age-related macular degeneration than individuals with family income between 400% and 600% of the poverty threshold.[104]

Eye Disease Diagnosis and Mortality

- **17,681** patients received vision services and **14,791** patients received comprehensive and intermediate eye exams at HCH Health Centers in 2014
- **60.5%** is the Healthy People 2020 Objective for the proportion of adults that has a comprehensive eye exam, including dilation, within the past two years
- **43** Americans died from diseases of the eye and adnexa in 2013

Relatively few homeless individuals receive vision services and comprehensive and intermediate eye exams. The Healthy People 2020 goal for adults to have a comprehensive eye exam, including dilation, within the past two years is 60.5%.[105] Only 17,681 patients received vision services and only 14,791 patients received comprehensive and intermediate eye exams at HCH Health Centers in 2014. Yet, homeless individuals may be disproportionately affected by vision threatening diseases at up to eighteen times higher than the general

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http://www.healthypeople.gov/2020/data/disparities/detail/Chart/5380/6.1/2008 (last updated Dec. 28, 2015).

[103] Office of Disease Prevention and Health Promotion, HHS, Healthy People 2020, Disparities Details by Income for 2008: V-5.3: Visual Impairment Due to Glaucoma (Age Adjusted, Per 1,000 Population, 45+ Years), http://www.healthypeople.gov/2020/data/disparities/detail/Chart/5381/6.1/2008 (last updated Dec. 28, 2015).

[104] Office of Disease Prevention and Health Promotion, HHS, Healthy People 2020, Disparities Details by Income for 2008: V-5.5: Visual Impairment Due to Age-related Macular Degeneration (Age Adjusted, Per 1,000 Population, 45+ Years), http://www.healthypeople.gov/2020/data/disparities/detail/Chart/5383/6.1/2008 (last updated Dec. 28, 2015).

[105] Office of Disease Prevention and Health Promotion, HHS, Healthy People 2020, 2020 Topics & Objectives, Vision, http://www.healthypeople.gov/2020/topics-objectives/topic/vision/objectives (last updated Dec. 28, 2015) [hereinafter Vision Objectives].

population.[106] At HCH Health Centers, there are only 572 ophthalmologists and optometrists.

Many more patients likely should be receiving comprehensive and intermediate eye exams and vision services at HCH Health Centers. Because early diagnosis of eye diseases can prevent irreversible vision loss, patients with any of the risk factors for an eye disease should have access to eye exams to detect eye diseases. These risk factors include age, diabetes, and high blood pressure. The American Academy of Ophthalmology recommends comprehensive eye exams every 1 to 2 years for persons 65 years of age or older who have no other risk factors and the U.S. Preventive Services Task Force concluded the data were inconclusive on whether individuals, based on age alone, should be assessed for impaired visual acuity associated with uncorrected vision, cataracts, and age-related macular degeneration.[107] At HCH Health Centers, 78,374 patients between the ages of 18 and 75 were diagnosed with diabetes mellitus and, therefore, at risk for at least two major eye diseases. At these health centers, 157,026 patients between the ages of 18 and 85 were diagnosed with high blood pressure and, therefore, at risk of major eye diseases. At these health centers, 277,644 patients age 50 and older were seen in 2014 and age is a risk factor for at least three major eye diseases. Therefore, upwards of 277,644 patients should be receiving comprehensive and intermediate eye exams and/or vision services at HCH Health Centers. Early diagnosis of eye diseases is critical to preventing irreversible blindness.

Many more homeless individuals likely should receive diagnosis through comprehensive and intermediate eye exams and treatment of the four major eye diseases to prevent vision impairment. The Healthy People 2020 goal for the proportion of adults with diabetes who have reduced visual impairment due to diabetic retinopathy is 3.1% and the Healthy People 2020 goal for the proportion of adults aged 65 and older who have a vision impairment due to cataracts is 9.9%.[108] With income disparities in vision impairment due to diabetic retinopathy and diabetes a risk factor for diabetic retinopathy, all of the 78,374 adults with diabetes at HCH Health Centers should be tested for diabetic retinopathy (and cataracts), for which they are at greater susceptibility. The Healthy People 2020 goal for the proportion of adults aged 45 and older who have a vision impairment due to

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[106] Nat'l Health Care for the Homeless Council, *Vision & Oral Health Among Individuals Experiencing Homelessness*, In Focus: A Quarterly Research Review, June 2015, at 1, *available at* https://www.nhchc.org/2015/06/new-issue-of-in-focus-vision-oral-health-among-individuals-experiencing-homelessness/.

[107] *See* U.S. Preventive Services Task Force, Screening for Impaired Visual Acuity in Older Adults: U.S. Preventive Services Task Force Recommendation Statement, 151 Annals of Internal Med. 37 (2009), *available at* http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/impaired-visual-acuity-in-older-adults-screening1.

[108] Vision Objectives, *supra* note 105.

glaucoma is 1.2%.[109] With income disparities in vision impairment due to diabetic retinopathy and glaucoma and high blood pressure a risk factor for these two eye diseases, all of the 157,026 adults at HCH Health Centers with high blood pressure should be tested for diabetic retinopathy and glaucoma, for which they are at greater susceptibility. The Healthy People 2020 goal for the proportion of adults aged 45 and older who have a vision impairment due to age-related macular degeneration is 1.4%.[110] With income disparities in vision impairment due to diabetic retinopathy, glaucoma, and age-related macular degeneration and age a risk factor for these three eye diseases (and cataracts), all of the 277,644 patients aged 50 and older at Health Care for the Homeless Program Grantee Health Centers should be tested for these four eye diseases.

Eye-related Treatment	
Healthy People 2020 Goal for Visual Impairment of Diabetic Adults Due to Diabetic Retinopathy	3.1%
Healthy People 2020 Goal for Visual Impairment of Adults Aged 45 and Older Due to Glaucoma	1.2%
Healthy People 2020 Goal for Visual Impairment of Adults Aged 45 and Older Due to Aged-related Macular Degeneration	1.4%
Healthy People 2020 Goal for Impairment of Adults Aged 65 and Older Due to Cataracts	9.9%
Number of Patients Who Received Vision Services at Health Care for the Homeless Program Grantees	17,681
Number of Patients Who Received Comprehensive and Intermediate Eye Exams at Health Care for the Homeless Program Grantees	14,791
Number of Ophthalmologists and Optometrists at Health Care for the Homeless Program Grantees	572

As diagnosis and treatment of eye diseases can prevent irreversible vision impairment and blindness and death, all homeless individuals with risk factors for age-related macular degeneration, cataracts, diabetic retinopathy, and glaucoma, such as age, diabetes, family history, high blood pressure, increased intraocular pressure, high cholesterol, prolonged exposure to sunlight, smoking, and thinness of cornea, should have access to diagnostic and assessment eye exams and other diagnostic and treatment services regardless of the Health Center or their health insurance status.

[109] Vision Objectives, *supra* note 105.
[110] Vision Objectives, *supra* note 105.

Conclusion

This report supports the finding that although many homeless patients are diagnosed and able to receive treatment for chronic conditions and other life-threatening and serious conditions, many homeless patients are not receiving adequate diagnosis and treatment for these life-threatening and serious conditions. Expanding health insurance coverage and Health Center funding can allow all homeless patients to receive needed health care.

Appendix

Patient Characteristics

Table A1. Patient Characteristics at Federally Qualified Health Centers Whose Patients are 100% Homeless in States That Expanded Medicaid as of January 2014.

Health Center	City	State	Total Patients Served (#)	Income at or Below 100% of poverty (%)	Uninsured (%)
Alameda County Health Care Services Agency	Oakland	CA	7,934	95.6%	54.4%
Children's Hospital & Research Center of Oakland	Oakland	CA	2,971	69.0%	4.2%
Contra Costa County Health Services Dept	Martinez	CA	21,397	76.0%	11.4%
County of Sacramento Department of Health & Human Services	Sacramento	CA	4,344	31.9%	31.7%
County of Solano	Fairfield	CA	9,508	87.5%	10.4%
San Francisco Community Clinic Consortium	San Francisco	CA	22,209	78.5%	45.6%
Ventura County Health Services Agency	Oxnard	CA	9,790	100.0%	16.0%
Health Care for the Homeless	Baltimore	MD	10,753	92.1%	17.5%
Boston Health Care for the Homeless, Inc.	Boston	MA	14,769	93.4%	11.6%
Community Healthlink, Inc.	Worcester	MA	2,340	96.8%	16.4%
Hennepin Co. Community Health Department	Minneapolis	MN	4,443	98.9%	24.8%
City of Manchester New Hampshire	Manchester	NH	1,356	88.8%	63.2%
Care for the Homeless	New York	NY	8,579	90.8%	31.8%
Project Renewal, Inc.	New York	NY	10,425	89.1%	40.3%
Unity Hospital of Rochester	Rochester	NY	1,893	98.0%	41.3%
Cincinnati Health Network, Inc.	Cincinnati	OH	9,207	96.4%	51.4%
Good Samaritan Hospital	Dayton	OH	2,228	95.4%	48.2%
White Bird Clinic	Eugene	OR	4,027	88.7%	88.4%
Seattle-King County Public Health Department	Seattle	WA	18,804	91.5%	26.8%
Medicaid-expansion States			166,977	87.3%	33.4%

Notes: Analysis of data at HRSA, 2014 Health Center Profile: Health Center Program Grantee Profiles, *available at* http://bphc.hrsa.gov/uds/datacenter.aspx?q=d&year=2014 (last visited Nov. 6, 2015).

Table A2. Patient Characteristics at Federally Qualified Health Centers Whose Patients are 100% Homeless in States That Had Not Expanded Medicaid as of January 2014.					
Health Center	**City**	**State**	**Total Patients Served (#)**	**Income at or Below 100% of poverty (%)**	**Uninsured (%)**
North Broward Hospital District	Fort Lauderdale	FL	3,295	99.5%	96.8%
Pinellas County Board of County Commissioners	Clearwater	FL	1,790	99.7%	97.7%
Portland Maine, City of	Portland	ME	519	99.6%	71.5%
Albuquerque Health Care For The Homeless	Albuquerque	NM	4,349	96.2%	65.4%
Chattanooga-Hamilton County Health Department	Chattanooga	TN	3,358	95.5%	74.4%
Dallas County Hospital District	Dallas	TX	8,599	90.6%	76.7%
Harris County Hospital District	Houston	TX	9,780	99.2%	91.7%
Healthcare for the Homeless—Houston	Houston	TX	4,193	99.1%	90.1%
Wasatch Homeless Health Care/4th St. Clinic	Salt Lake City	UT	4,700	97.6%	66.9%
Community Action Partnership of Natrona County	Casper	WY	451	74.5%	89.1%
Non-Medicaid-expansion States			41,034	95.2%	82.0%
Notes: Analysis of data at HRSA, 2014 Health Center Profile: Health Center Program Grantee Profiles, *available at* http://bphc.hrsa.gov/uds/datacenter.aspx?q=d&year=2014 (last visited Nov. 6, 2015).					

HIV/AIDS Diagnosis and Treatment

Table A3. HIV/AIDS Diagnosis and Treatment at Federally Qualified Health Centers Whose Patients are 100% Homeless in States That Expanded Medicaid as of January 2014.			
Health Center	State	HIV (%)	HIV Linkage to Care
Alameda County Health Care Services Agency	CA	1.3%	80.0%
Children's Hospital & Research Center of Oakland	CA	0.1%	
Contra Costa County Health Services Dept	CA	0.6%	94.4%
County of Sacramento Department of Health & Human Services	CA	0.2%	100.0%
County of Solano	CA	1.7%	75.0%
San Francisco Community Clinic Consortium	CA	3.5%	100.0%
Ventura County Health Services Agency	CA	0.1%	100.0%
Health Care for the Homeless	MD	2.4%	71.4%
Boston Health Care for the Homeless, Inc.	MA	3.3%	100.0%
Community Healthlink, Inc.	MA	1.9%	
Hennepin Co. Community Health Department	MN	0.5%	
City of Manchester New Hampshire	NH	0.2%	100.0%
Care for the Homeless	NY	1.8%	78.3%
Project Renewal, Inc.	NY	1.4%	100.0%
Unity Hospital of Rochester	NY	1.2%	
Cincinnati Health Network, Inc.	OH	0.9%	100.0%
Good Samaritan Hospital	OH	0.3%	100.0%
White Bird Clinic	OR	0.3%	
Seattle-King County Public Health Department	WA	0.3%	100.0%
Medicaid-expansion States		1.2%	92.8%

Notes: Analysis of data at HRSA, 2014 Health Center Profile: Health Center Program Grantee Profiles, *available at* http://bphc.hrsa.gov/uds/datacenter.aspx?q=d&year=2014 (last visited Nov. 6, 2015).

Table A4. HIV/AIDS Diagnosis and Treatment at Federally Qualified Health Centers Whose Patients are 100% Homeless in States That Had Not Expanded Medicaid as of January 2014.			
Health Center	State	**HIV (%)**	**HIV Linkage to Care**
North Broward Hospital District	FL	0.4%	56.0%
Pinellas County Board of County Commissioners	FL	0.6%	
Portland Maine, City of	ME	0.5%	
Albuquerque Health Care For The Homeless	NM	0.2%	
Chattanooga-Hamilton County Health Department	TN	0.5%	100.0%
Dallas County Hospital District	TX	1.2%	100.0%
Harris County Hospital District	TX	2.1%	100.0%
Healthcare for the Homeless—Houston	TX	1.1%	
Wasatch Homeless Health Care/4th St. Clinic	UT	0.5%	22.2%
Community Action Partnership of Natrona County	WY		
Non-Medicaid-expansion States		0.8%	75.6%
Notes: Analysis of data at HRSA, 2014 Health Center Profile: Health Center Program Grantee Profiles, *available at* http://bphc.hrsa.gov/uds/datacenter.aspx?q=d&year=2014 (last visited Nov. 6, 2015).			

Cancer Screening

Table A5. Cancer Screening at Federally Qualified Health Centers Whose Patients are 100% Homeless in States That Had Expanded Medicaid as of January 2014.			
Health Center	**State**	**Cervical Cancer Screening**	**Colorectal Cancer Screening**
Alameda County Health Care Services Agency	CA	58.60%	32.90%
Children's Hospital & Research Center of Oakland	CA	48.30%	
Contra Costa County Health Services Dept	CA	37.10%	41.40%
County of Sacramento Department of Health & Human Services	CA	41.40%	38.60%
County of Solano	CA	22.10%	11.00%
San Francisco Community Clinic Consortium	CA	35.70%	41.40%
Ventura County Health Services Agency	CA	30.00%	17.90%
Health Care for the Homeless	MD	31.70%	26.70%
Boston Health Care for the Homeless, Inc.	MA	51.40%	29.30%
Community Healthlink, Inc.	MA	44.20%	36.60%
Hennepin Co. Community Health Department	MN	31.40%	22.90%
City of Manchester New Hampshire	NH	33.10%	7.50%
Care for the Homeless	NY	34.30%	21.40%
Project Renewal, Inc.	NY	48.60%	22.90%
Unity Hospital of Rochester	NY	43.50%	12.60%
Cincinnati Health Network, Inc.	OH	64.20%	1.30%
Good Samaritan Hospital	OH	57.70%	8.40%
White Bird Clinic	OR	16.90%	15.80%
Seattle-King County Public Health Department	WA	40.00%	44.30%
Medicaid-expansion States		40.54%	24.05%
Notes: Analysis of data at HRSA, 2014 Health Center Profile: Health Center Program Grantee Profiles, *available at* http://bphc.hrsa.gov/uds/datacenter.aspx?q=d&year=2014 (last visited Nov. 6, 2015).			

Table A6. Cancer Screening at Federally Qualified Health Centers Whose Patients are 100% Homeless in States That Had Not Expanded Medicaid as of January 2014.			
Health Center	**State**	**Cervical Cancer Screening**	**Colorectal Cancer Screening**
North Broward Hospital District	FL	54.30%	55.70%
Pinellas County Board of County Commissioners	FL	47.10%	11.40%
Portland Maine, City of	ME	25.70%	17.10%
Albuquerque Health Care For The Homeless	NM	17.60%	0.40%
Chattanooga-Hamilton County Health Department	TN	68.60%	12.90%
Dallas County Hospital District	TX	12.60%	31.20%
Harris County Hospital District	TX	60.00%	30.00%
Healthcare for the Homeless--Houston	TX	50.00%	24.30%
Wasatch Homeless Health Care/4th St. Clinic	UT	56.10%	4.70%
Community Action Partnership of Natrona County	WY	47.10%	17.10%
Non-Medicaid-expansion States		43.91%	20.48%
Notes: Analysis of data at HRSA, 2014 Health Center Profile: Health Center Program Grantee Profiles, *available at* http://bphc.hrsa.gov/uds/datacenter.aspx?q=d&year=2014 (last visited Nov. 6, 2015).			

Cardiovascular Disease Diagnosis and Treatment

Table A7. Cardiovascular Disease Diagnosis and Treatment at Federally Qualified Health Centers Whose Patients are 100% Homeless in States That Expanded Medicaid as of January 2014.					
Health Center	**State**	**Hypertension (%)**	**Blood Pressure Control (%)**	**Heart Attack/ Stroke Treatment (%)**	**Cholesterol Treatment (%)**
Alameda County Health Care Services Agency	CA	11.7%	70.0%	72.0%	68.4%
Children's Hospital & Research Center of Oakland	CA	3.6%	81.8%		
Contra Costa County Health Services Dept	CA	24.0%	58.9%	87.1%	51.4%
County of Sacramento Department of Health & Human Services	CA	9.7%	48.6%	92.9%	58.8%
County of Solano	CA	25.8%	60.5%	57.6%	82.9%
San Francisco Community Clinic Consortium	CA	8.2%	51.4%	55.7%	52.9%
Ventura County Health Services Agency	CA	24.3%	55.6%	79.0%	88.0%
Health Care for the Homeless	MD	29.7%	54.9%	77.9%	67.8%
Boston Health Care for the Homeless, Inc.	MA	20.2%	57.0%	45.7%	74.8%
Community Healthlink, Inc.	MA	17.7%	50.8%	82.8%	80.8%
Hennepin Co. Community Health Department	MN	9.1%	35.2%	91.3%	60.0%
City of Manchester New Hampshire	NH	12.1%	58.0%	90.6%	65.0%
Care for the Homeless	NY	14.4%	71.4%	81.2%	77.1%
Project Renewal, Inc.	NY	11.0%	66.0%	88.7%	92.6%
Unity Hospital of Rochester	NY	10.3%	56.2%	78.9%	60.0%
Cincinnati Health Network, Inc.	OH	17.5%	60.0%	100.0%	93.1%
Good Samaritan Hospital	OH	31.4%	30.8%	96.3%	91.2%
White Bird Clinic	OR	10.9%	44.1%	94.1%	91.7%
Seattle-King County Public Health Department	WA	0.5%	45.7%	76.9%	83.3%
Medicaid-expansion States		15.4%	55.6%	80.5%	74.4%
Notes: Analysis of data at HRSA, 2014 Health Center Profile: Health Center Program Grantee Profiles, *available at* http://bphc.hrsa.gov/uds/datacenter.aspx?q=d&year=2014 (last visited Nov. 6, 2015).					

Table A8. Cardiovascular Disease Diagnosis and Treatment at Federally Qualified Health Centers Whose Patients are 100% Homeless in States That Had Not Expanded Medicaid as of January 2014.					
Health Center	**State**	**Hypertension (%)**	**Blood Pressure Control (%)**	**Heart Attack/ Stroke Treatment (%)**	**Cholesterol Treatment (%)**
North Broward Hospital District	FL	17.60%	74.30%	85.70%	92.90%
Pinellas County Board of County Commissioners	FL	13.20%	78.60%	66.70%	83.30%
Portland Maine, City of	ME	11.90%	46.90%	100.00%	100.00%
Albuquerque Health Care For The Homeless	NM	14.40%	58.30%	64.00%	36.10%
Chattanooga-Hamilton County Health Department	TN	40.10%	54.30%	93.90%	78.40%
Dallas County Hospital District	TX	26.10%	47.80%	8.10%	84.80%
Harris County Hospital District	TX	21.90%	56.90%	77.80%	89.40%
Healthcare for the Homeless—Houston	TX	24.60%	53.50%	63.00%	73.10%
Wasatch Homeless Health Care/4th St. Clinic	UT	18.40%	49.70%	68.50%	69.60%
Community Action Partnership of Natrona County	WY	7.60%	23.50%	60.00%	71.40%
Non-Medicaid-expansion States		19.58%	54.38%	68.77%	77.90%
Notes: Analysis of data at HRSA, 2014 Health Center Profile: Health Center Program Grantee Profiles, *available at* http://bphc.hrsa.gov/uds/datacenter.aspx?q=d&year=2014 (last visited Nov. 6, 2015).					

Diabetes Diagnosis and Treatment

Table A9. Diabetes Diagnosis and Treatment at Federally Qualified Health Centers Whose Patients are 100% Homeless in States That Expanded Medicaid as of January 2014.			
Health Center	**State**	**Diabetes (%)**	**Diabetes Control (%)**
Alameda County Health Care Services Agency	CA	11.9%	75.7%
Children's Hospital & Research Center of Oakland	CA	4.1%	52.0%
Contra Costa County Health Services Dept	CA	12.2%	66.6%
County of Sacramento Department of Health & Human Services	CA	8.2%	90.0%
County of Solano	CA	15.3%	72.0%
San Francisco Community Clinic Consortium	CA	3.9%	75.7%
Ventura County Health Services Agency	CA	14.7%	78.8%
Health Care for the Homeless	MD	13.3%	58.7%
Boston Health Care for the Homeless, Inc.	MA	10.9%	67.9%
Community Healthlink, Inc.	MA	5.0%	79.5%
Hennepin Co. Community Health Department	MN	6.5%	50.3%
City of Manchester New Hampshire	NH	6.8%	60.7%
Care for the Homeless	NY	7.4%	62.9%
Project Renewal, Inc.	NY	10.3%	45.9%
Unity Hospital of Rochester	NY	6.3%	33.3%
Cincinnati Health Network, Inc.	OH	6.4%	71.4%
Good Samaritan Hospital	OH	14.8%	65.0%
White Bird Clinic	OR	7.7%	62.5%
Seattle-King County Public Health Department	WA	0.5%	65.7%
Medicaid-expansion States		8.8%	65.0%
Notes: Analysis of data at HRSA, 2014 Health Center Profile: Health Center Program Grantee Profiles, *available at* http://bphc.hrsa.gov/uds/datacenter.aspx?q=d&year=2014 (last visited Nov. 6, 2015).			

Table A10. Diabetes Diagnosis and Treatment at Federally Qualified Health Centers Whose Patients are 100% Homeless in States That Had Not Expanded Medicaid as of January 2014.			
Health Center	**State**	**Diabetes (%)**	**Diabetes Control (%)**
North Broward Hospital District	FL	14.8%	90.0%
Pinellas County Board of County Commissioners	FL	7.4%	85.7%
Portland Maine, City of	ME	10.3%	88.1%
Albuquerque Health Care For The Homeless	NM	8.1%	47.5%
Chattanooga-Hamilton County Health Department	TN	15.2%	75.7%
Dallas County Hospital District	TX	7.2%	50.3%
Harris County Hospital District	TX	8.5%	62.8%
Healthcare for the Homeless—Houston	TX	3.5%	44.4%
Wasatch Homeless Health Care/4th St. Clinic	UT	8.3%	61.9%
Community Action Partnership of Natrona County	WY	7.0%	71.0%
Non-Medicaid-expansion States		9.0%	67.7%
Notes: Analysis of data at HRSA, 2014 Health Center Profile: Health Center Program Grantee Profiles, *available at* http://bphc.hrsa.gov/uds/datacenter.aspx?q=d&year=2014 (last visited Nov. 6, 2015).			

Asthma Diagnosis and Treatment

Table A11. Asthma Diagnosis and Treatment at Federally Qualified Health Centers Whose Patients are 100% Homeless in States That Expanded Medicaid as of January 2014.			
Health Center	**State**	**Asthma (%)**	**Asthma Treatment (%)**
Alameda County Health Care Services Agency	CA	3.5%	93.8%
Children's Hospital & Research Center of Oakland	CA	21.8%	100.0%
Contra Costa County Health Services Dept	CA	5.7%	81.4%
County of Sacramento Department of Health & Human Services	CA	5.0%	97.0%
County of Solano	CA	7.7%	77.5%
San Francisco Community Clinic Consortium	CA	2.1%	68.6%
Ventura County Health Services Agency	CA	5.9%	48.9%
Health Care for the Homeless	MD	7.9%	93.1%
Boston Health Care for the Homeless, Inc.	MA	7.1%	87.9%
Community Healthlink, Inc.	MA	9.8%	55.1%
Hennepin Co. Community Health Department	MN	7.5%	91.3%
City of Manchester New Hampshire	NH	7.1%	50.0%
Care for the Homeless	NY	20.0%	87.1%
Project Renewal, Inc.	NY	9.5%	84.9%
Unity Hospital of Rochester	NY	13.8%	100.0%
Cincinnati Health Network, Inc.	OH	7.3%	98.7%
Good Samaritan Hospital	OH	11.7%	78.6%
White Bird Clinic	OR	7.3%	87.5%
Seattle-King County Public Health Department	WA	2.5%	79.5%
Medicaid-expansion States		8.6%	82.2%
Notes: Analysis of data at HRSA, 2014 Health Center Profile: Health Center Program Grantee Profiles, *available at* http://bphc.hrsa.gov/uds/datacenter.aspx?q=d&year=2014 (last visited Nov. 6, 2015).			

Table A12. Asthma Diagnosis and Treatment at Federally Qualified Health Centers Whose Patients are 100% Homeless in States That Had Not Expanded Medicaid as of January 2014.			
Health Center	**State**	**Asthma (%)**	**Asthma Treatment (%)**
North Broward Hospital District	FL	1.7%	75.6%
Pinellas County Board of County Commissioners	FL	5.8%	100.0%
Portland Maine, City of	ME	5.1%	100.0%
Albuquerque Health Care For The Homeless	NM	6.4%	85.2%
Chattanooga-Hamilton County Health Department	TN	16.5%	90.0%
Dallas County Hospital District	TX	6.4%	91.2%
Harris County Hospital District	TX	5.0%	100.0%
Healthcare for the Homeless—Houston	TX	2.4%	64.3%
Wasatch Homeless Health Care/4th St. Clinic	UT	6.7%	63.2%
Community Action Partnership of Natrona County	WY	6.0%	100.0%
Non-Medicaid-expansion States		6.2%	87.0%
Notes: Analysis of data at HRSA, 2014 Health Center Profile: Health Center Program Grantee Profiles, *available at* http://bphc.hrsa.gov/uds/datacenter.aspx?q=d&year=2014 (last visited Nov. 6, 2015).			