A PUBLICATION OF THE HCH CLINICIANS' NETWORK

HEALING HANDS

Vol. 13, No. 6 | December 2009

Caring for Clients with Comorbid Psychiatric & Medical Illnesses

The February 2009 issue of Healing Hands *addressed challenges of comorbid mental illness and substance-related disorders. Due to their prevalence, these co-occurring disorders present difficult treatment problems for Health Care for the Homeless providers. Clinicians across the United States responded that co-occurring medical issues also were integral to the care needs of their homeless clients. The following articles have been designed as a sequel to the February issue, and will review relevant information as well as discuss models for collaborative medical and mental health care recognizing that concurrent substance abuse often impacts the health of homeless individuals.*

The U.S. Substance Abuse and Mental Health Services Administration (SAMHSA) defines *severe mental illness* (SMI) as "a diagnosable mental, behavioral, or emotional disorder of sufficient duration to meet diagnostic criteria specified within the [DSM-IV], resulting in functional impairment which substantially interferes with or limits one or more major life activities. Such activities can include:[1]

- Basic skills of daily living (e.g., eating, maintaining personal hygiene)
- Instrumental living skills (e.g., managing money, negotiating transportation, taking medication as prescribed)
- Functioning in social, family, and vocational or educational contexts"

The definition, however, excludes substance-related disorders, developmental disorders, dementia, and mental disorders due to a general medical condition, unless they co-occur with another diagnosable SMI.

> "Understanding that the life span of a person with SMI is often 25 years shorter drives me to exercise compassion and vigilance with my patients and find better ways to care for them holistically. We must collaboratively develop and continually update comprehensive treatment plans to address all of their health care needs to help them secure a future in which they can be well."
>
> *—Regina Shasha, MS, APN, FNP, PsychNP, Chicago, Illinois*

LINKS BETWEEN MENTAL ILLNESS & SUBSTANCE USE

It has been noted that non-substance-related mental illnesses—including mood, anxiety, personality, and schizophrenia-spectrum disorders—are all associated with an increase in substance-related (i.e., substance use or substance-induced) disorders. Indeed, individuals with the most severe mental illnesses have the highest rates of co-occurring substance-related disorders.[2]

Comparisons of lifetime prevalence rates of alcohol and drug use disorders are striking: the general population (approximately 17 percent); people with bipolar disorder (50 percent to 56 percent); people with schizophrenia (47 percent to 50 percent); people with other mood or anxiety disorders (30 percent); and people with posttraumatic stress disorder (24 percent to 27 percent).[3,4] Predictive characteristics for the co-occurring disorders (COD) of mental illness and substance abuse include family history of substance use, male gender, young adult age, single marital status, lower level of education, multidrug use, homelessness, incarceration, and limited access to treatment. Nationwide, 75 percent of homeless people with a drug disorder in the past year had a comorbid non-substance-related mental illness.[4]

PREVALENCE OF COMORBID MEDICAL ILLNESS Previous discussions of health care for the homeless (HCH) treatment models have documented the complexity of caring for homeless people encountering a variety of comorbid medical needs. Diabetes, traumatic brain injury, and liver disease are found to co-occur with mental illness and substance-related disorders in the homeless population.

Diabetes, a progressive disease, may proceed unchecked and further compromise clients due to the stress of COD and living conditions that deter behavioral change.[5]

Traumatic brain injury from head trauma such as being hit on the head, falling, exposure to an explosion, or as a result of a vehicle accident may often precede homelessness.[6]

Liver disorders related to abscess, trauma, tumors, or hepatitis can cripple the body's workhorse organ. This damage may prevent the liver's ability to change food into energy; cleanse toxins, old blood cells, and alcohol; excrete, secrete, regulate, and synthesize; and block blood flow resulting in portal hypertension.[7]

People with mental illness tend to be in poorer physical health than those without mental illness.[8,9] Investigators have found that adults with mental illness have a higher risk for medical disorders including: obesity, diabetes, hypertension, heart disease, asthma, diseases of the esophagus, stomach, duodenum, and liver, skin infections, malignancies, and dental

problems.[10–14] They also are more likely to have multiple physical illnesses as well as the presence of concurrent substance-related disorders, which contribute to the prevalence of gastrointestinal, cardiovascular, metabolic, neurologic, and pulmonary conditions.[8,12]

Factors related to poorer health conditions of people with SMI compared with those in the general population encompass:[10,12,13,15–17]

- Psychotropic antipsychotic medications associated with metabolic syndrome (weight gain, diabetes, and hypertension)
- Psychiatric disorders that independently predispose individuals to glucose intolerance
- Tobacco abuse contributing to asthma, acute respiratory disease, heart disease, and lung cancer
- Reduced physical activity and limited motivation to attend to personal health and hygiene contributing to hypertension, heart disease, skin infections, and poor dental care
- Low socioeconomic status and level of education that limit access to housing and medical care resources and affect lifestyle choices

Realizing the documented impact of such factors on individuals with SMI, Schanzer and colleagues investigated the effect of being newly homeless on first-time homeless people in New York City. The city's comprehensive shelter system provides uncommon and significant residential stability by ensuring that people placed in a particular shelter have the opportunity to stay there until leaving the system. It also offers access to on-site primary care and mental health services. What they found was notable. Although the prevalence of illness was quite high in this group when they became homeless, "struggling under the combined burdens of residential instability, poor social networks, and significant levels of physical and mental health disease," they did not get sicker and, in some cases, even improved. With the help of case managers, many became insured.[9]

TREATMENT The care of homeless individuals with multiple conditions encompassing physical, mental, and comorbid substance-related disorders poses special challenges for clinicians. Creative and flexible treatment options influenced by client input and reflecting their extremely diverse care needs are indispensable. Research posits that integrated treatment models in which evidence-based collaborative care, including case management, disease management, and consultation between primary care providers and mental health specialists, can do much to establish best practices for co-occurring disease.[2,3,12–14,18,19]

While medical director of Heartland Health Outreach, **Bechara Choucair, MD**, the newly appointed commissioner of the Chicago Department of Public Health, worked with Northwestern University designing a study to better understand the impact of housing and other socioeconomic factors on diabetes care. This work was based on an appreciation of the connection between diabetes and SMI among poor, homeless, and underserved individuals. Disparities for patient retention and for HbA1c testing were found to exist across variables including housing status, race and ethnicity, and location of service. Homeless patients were more than twice as likely to drop out of care after one visit.

Establishing these disparities was an important first step in identifying how best to help this group get needed care. The first phase of the study found that when a patient received at least two HbA1c tests, three months apart, there was no disparity in outcomes by race and ethnicity, housing status, or location of service. Combining results from qualitative patient interviews with the finding that the ability to follow a client influences retention was key to researchers determining next steps and leading to the study's second phase. Now researchers are investigating the effect of monitoring clients in the field, instead of in the clinic setting, by using portable devices for HbA1c and lipid panel testing.[17]

As evidenced in Chicago's patient interviews, empowerment is an important component of care for clients with COD. Focus groups about self-care at Yale University School of Medicine also have substantiated the need to help clients give voice to their care. Although participants articulated their desire to learn more about health promotion, they expressed a sense of personal futility and powerlessness over improving their health.[20]

Psychotropic medications can be essential to the quality of life for patients with SMI, and clinicians who prescribe them must understand the importance of monitoring cardiometabolic risk using baseline and serial indictors on an ongoing basis during treatment.[11,16,21,22] Since coronary heart disease is the leading cause of death in individuals with SMI, practitioners must choose carefully among psychotropic agents with similar efficacy because some are associated with fewer metabolic side effects, and continue to screen and monitor carefully for adverse reactions.[23]

In 2004, the American Diabetes Association, American Psychiatric Association, American Association of Clinical Endocrinologists, and North American Association for the Study of Obesity developed a consensus document on antipsychotic drugs and obesity and diabetes that offers clinical guidance in the use of second-generation antipsychotics and stresses the importance of a commitment to baseline screening and follow-up monitoring for cardiometabolic disease.[24] ■

Collaborative Models of Care

Clinicians who work in health care for the homeless projects may have an advantage when caring for people with co-occurring medical and mental illness and substance-related disorders. They already understand the value of integrated and collaborative treatment, especially when collocated. They understand the importance of building trusting relationships and what it takes to engage individuals with severe mental illness into care. They know that harm reduction treatment models work; that housing truly is health care; and that including consumers in the development and operation of health care facilities helps promote successful client-centered care.

HEALTH RESOURCE CENTER—CINCINNATI HRC, a nurse-managed model of care, engages clients based on their expressed needs and provides comprehensive integrated care to the whole person. During 14 years, the agency has grown to meet expanded client demand while serving homeless and at-risk people who need psychiatric, medical, and social services regardless of their ability to pay.

"We are a certified outpatient mental health clinic that works flexibly with our clients—

much like an urgent care clinic," says **Violette Selzer, PMH, CNS BC, CARN**, director of mental health services. "We may begin with a telephone assessment to triage clients, and if they score as high as 11, we can see them immediately; for others, there is a waiting list. The intake assessment is much more involved and provides a more complete picture of the individual's health care needs. We've begun to follow all clients for weight gain, and blood pressure and blood sugar changes—not just those taking atypical antipsychotics—and discovered several cases of diabetes and high blood pressure."

In addition to mental health services, HRC provides primary care to homeless clients, and medical clients are screened for depression and can be linked to mental health care. Executive Director **Mary Elizabeth "Libby" Earle, MSN, RN, CNS**, provided client statistics for 2008. Out of 512 total clients seen, 253 have mental illnesses such as anxiety (12 percent), bipolar disorder (31 percent), depression (21 percent), PTSD (10 percent), and schizophrenia (7 percent). Fourteen percent of those with mental illness have co-occurring chronic medical illness (11 percent, hypertension; 3 percent, diabetes; 2 percent, asthma; and 2 percent, both hypertension and diabetes). HRC's 259 medical clients reflect similar health needs (12 percent, primary diagnosis of hypertension; 3.5 percent, diabetes; and 2 percent, asthma).

HOUSING AND URBAN HEALTH CLINIC—SAN FRANCISCO "People with SMI are extremely vulnerable socially and medically," says **Pamela Swedlow, MD**, director of behavioral medicine at HUHC. "They get diseases at younger ages than their non-SMI peers and have trouble getting care—it takes persistence to get appointments and then negotiate being there. Those who are also substance abusers, and many are, have increased vulnerability to HIV, hepatitis C, alcohol-related liver damage, and lung damage from anything inhaled whether tobacco or crack."

"I feel very fortunate to work in a primary care clinic with a strong staff of mental health providers. We share back and forth, easily consulting about a mentally ill client who has developed hypertension or a patient with diabetes who is not quite ready to see a mental health provider for a behavioral problem," Swedlow adds. "It's really powerful! And it's important for the clients, too, because they need to learn to trust a variety of people. When they need hospitalization, for example, that learning process may be key to helping them remain in the hospital and get needed care. Empathy with our patients is a tenet of our care and helps in understanding their multiple needs; many are uninsured, underinsured, or indigent."

HEARTLAND HEALTH OUTREACH — CHICAGO A subsidiary of Heartland Alliance for Human Needs and Human Rights, HHO has worked to provide care to Chicagoans in need for 25 years. "When I began managing the HCH project several years ago, we went to 70 outreach sites a month together with our four subcontractors. Now we provide health outreach to nearly 170 different sites, including emergency shelters, transitional housing, permanent supportive housing, on the street, under bridges, and anywhere that people experiencing homelessness may congregate," says **Kathleen Kelleghan**, associate director of Health Outreach Services, one of five departments that comprise HHO.

"Using HCH funding, we subcontract with four Federally Qualified Health Centers, which enables us to extend our reach into the city of Chicago's far West and South Sides, and south suburban Cook, northwest DuPage, and northern Lake counties. In addition to the increasing tragedy of homelessness associated with the economic downturn," Kelleghan continues, "the program's growth is attributable to our using a multidisciplinary outreach team that includes benefits and entitlement specialists, case managers, medical assistants, and nurse practitioners, whose remarkable dedication over the years must also be credited. Inclusive of our subcontractors, HHO expects to provide health care to 15,000 unique clients in the year 2010."

Kelleghan's colleagues include a variety of providers with enormous experience, concern, and drive. **Sarah Lau, FNP,** says she started "back when we were Travelers & Immigrants Aid, some 20 years ago. I enjoy working my two days in the clinic with its constant flow of patients and stable resources as well as my three days doing outreach in shelters where flexibility is so important. You always have to remember that homelessness is a health problem in and of itself."

RISK ASSESSMENT PROGRESS NOTES

- Develop a short form that can be used quickly in clinic or during outreach, and that can be copied or completed electronically when assessing clients
- Enter the names and contact information of client, primary care provider, and mental health care provider
- Follow the SOAP note format to facilitate communication among multiple providers over multiple visits:

  SUBJECTIVE content includes a history of the present illness, a past medical history, a family health history, and a social history

  OBJECTIVE content includes vital signs, pertinent findings, blood sugar, and HIV Rapid Screen

  ASSESSMENT content includes screenings and results for medical illness, mental illness, and substance-related disorders

  PLAN content includes a description of the health assessment, findings, educational support, follow-up, and instructions for discharge and medications

Source: Regina Shasha, MS, APN, FNP, PsychNP, Heartland Health Outreach. Download Heartland's risk assessment form at http://www.nhchc.org/Network/HealingHands/heartlandriskassess.pdf

"There are never enough social workers," Lau continues, "and our overall population has changed a lot during the 18-month economic downturn. Psychiatric services are stretched with fewer places to receive help for mental illness. SMI patients who are not taking their prescribed meds or are self-treating with substances are difficult to engage, and many have four or five health problems. It takes time to develop relationships, but even in untraditional settings when we are able to arrive at the same time and place every week, it builds consistency of care that becomes increasingly important in our clients."

Teresa Savino, MSN, FNP, is another 20-year HHO veteran. "You know," Savino begins, "it's what mental illness means in terms of treatment and management that is more important than the actual comorbidity issue. Behavioral disease, especially SMI, complicates managing medical conditions whether it's hypertension, asthma, or diabetes. Even general self-care can be a nightmare. So much depends

on the caregiver's approach. I use a gentle approach going slowly when able, keeping regimens simple, following stepwise protocols when possible. And supportive housing makes a huge difference—just having a place of your own to stay, perhaps with cooking facilities or even a microwave. It's a quieter environment."

About ten years ago, **Diane Judge, APN/CNP**, joined HHO and now splits her time between the clinic and outreach. "My perspective is based on the knowledge that the leading cause of death in homeless people—regardless of disease entity—is homelessness itself," Judge states. "So I establish a basic level of care for folks where they are at and build on it until I can get them into primary care and supportive housing. Using the risk assessment questionnaire that Regina Shasha developed is really helpful in outreach care—it allows me to move quickly through a preliminary assessment, determine various risk factors, record point-of-care test results, educate a little along the way, and explain to my patient what's happening and how primary care can make a difference in his or her life."

Tom Huggett, MD, is the mobile health team coordinator for Circle Family HealthCare Network, which has subcontracted with HHO for the last 20 years to bring health care and social service support to people who are homeless on the West Side of Chicago. "We serve 22 shelters, working as an integrated team on-site—somewhat like making house calls—especially at the smaller sites," Huggett says. "It is easier for patients in a transitional shelter to see us on-site rather than getting bundled up and trying to get to a health center."

"We structure our outreach so people see us first for the medical assessment that includes obtaining a medical history and performing a physical exam. We check blood pressure and take other relevant vital signs, see if the patient needs a TB test or any medications, and arrange for other testing such as blood glucose, cholesterol, Pap smears, and mammograms. We then refer our clients who have behavioral health needs to our therapist and case managers to provide the wraparound care that the person may need."

Back at Heartland Health Center—Uptown, **Rachel Breivald, MSN, APN/CNP**, manages the psychiatric aspects of her client's illness. "It's wonderful to work in a primary care clinic where we practice collaboratively and support one another and our patients," says Breivald. "We bridge the gap between physical and mental health care rather than approaching each as a separate spectrum. We treat people holistically and guide them hand-in-hand to achieve better outcomes. My personal focus is on psychiatric diagnosis and medication management, each a kind of puzzle that entails detective work to ensure the correct solution."

Michael Dempsey, MD, medical director of HHO's Mental Health and Addiction Services, has structured an "any door" harm reduction approach to care that allows an entry point for SMI patients whose experiences with trauma and mental health care have left them unable to easily engage. Many of these individuals also have co-occurring addictions to alcohol, cocaine, or heroin. They find a comfortable environment to hang out, shower, get a meal, and talk with caregivers. MHAS provides the equipment to do metabolic screens tracking medical therapy, a certified full-time medical assistant, and primary health care visits from the outreach team's nurse practitioner, Regina Shasha, who is dually-certified in both family and psychiatric family medicine.

"In response to metabolic syndrome associated with atypical antipsychotic drugs, we've developed a lab protocol for metabolic screens and vital signs that enables all staff to be aware of the range of results and action needed for optimum patient care," Dempsey says. "Whether it's glucose or lipid testing, blood pressure or pulse, we have a standard to guide appropriate treatment."

COPE COMMUNITY SERVICES, INC—TUCSON Community Health Director **Mary Specio-Boyer, MSW, LISAC**, says, "In Tucson, all agencies care for a percentage of homeless people, but COPE specializes in the homeless population while also working with the broader community. We are primarily a behavioral health agency, focused on creating hope and opportunity for recovery. With that outcome foremost, we help clients learn to use education, vision, empowerment, responsibility, and choice in their quest to establish successful lives."

COPE provides residential services to adults with serious mental illness, behavioral health, or substance abuse disorders; outpatient services to help those with SMI, general mental health, or substance use problems achieve their highest level of

Lab Protocol

Lab Test	Range	Action	Range	Action	Range	Action
Glucose Fasting	126–200	Refer to nurse practitioner within 7 days	200–300	Refer to nurse practitioner or to HHO Uptown within 24 hr	> 300	Refer to nurse practitioner or to HHO Uptown **before** end of day
Glucose Non-fasting	126–200	Repeat fasting blood sugar within 1 week and refer to nurse practitioner	200–400	Refer to nurse practitioner or to HHO Uptown within 24 hr	> 400	Refer to nurse practitioner or to HHO Uptown **before** end of day
Cholesterol Total Fasting	< 200	None	200–300	Refer to nurse practitioner or HHO Uptown within 1 mo	> 300	Refer to nurse practitioner or HHO Uptown within 1 wk

Source: Michael Dempsey, MD, Heartland Health Outreach Mental Health and Addiction Services. Download the complete lab protocol at http://www.nhchc.org/Network/HealingHands/heartlandLabProtocol.pdf

function; and health promotion and HIV services. "While we have worked on successful SAMHSA initiatives providing integrated health care and outreach for homeless individuals and have retained those processes in our approach to medical and behavioral case management," Specio-Boyer continues, "we currently refer our clients for medical care. We work with individuals and organizations to create stronger communities, and we especially value our collaborations with other agencies, including Tucson Planning Council for the Homeless, Community Partnership of Southern Arizona, and El Rio Community Health Center."

Specio-Boyer adds: "Our mobile community health outreach continues to provide behavioral health and medical assessment to individuals living in parks and desert washes, establishing therapeutic relationships, and taking them to clinics for acute care needs."

COLORADO COALITION FOR THE HOMELESS—DENVER "At the Stout Street Clinic, we use an integrated mental health and medical clinic model, and both groups have access to the on-site medical laboratory and pharmacy, which allows for improved care collaboration," **Lisa Thompson, DNP, PMHNP-BC**, says. "We also participate in monthly med-psych meetings to go over patients, care concerns, and clinical topics."

Thompson continues: "Both medical and mental health providers carry triage phones for immediate consults, so that even when we're out in the van or at shelters we can be in contact. Our outreach team can pick up clients and bring them to the clinic, which is particularly helpful with the most severe patients when they desperately need help but have not been engaged in care. In addition, if a mental health client needs a colonoscopy, our patient navigator helps make sure his or her needs are met."

At the 2009 National Health Care for the Homeless Conference and Policy Symposium in Washington, D.C., Thompson collaborated with **Elizabeth Cookson, MD, DFAPA**, also part of the Colorado Coalition, in a robust presentation about "Medical Considerations for Patients on Atypical Antipsychotics." Chock-full of solid content based on current research and patient care needs, the report offers insightful take-home messages:[16]

- Individuals with SMI have significant unidentified and unmet medical needs
- Atypical antipsychotic medications may worsen preexisting medical problems as well as lead to new ones
- Collaboration with our patients—to help them make informed choices and balance potential medical risks versus psychiatric care benefits—is key
- Primary care and mental health staff must work together to manage risks and minimize functional impairment ■

SOURCES & RESOURCES

1. Center for Substance Abuse Treatment. (2007). *Definitions and Terms Relating to Co-Occurring Disorders*. COCE Overview Paper 1. DHHS Publication No. (SMA) 07–4163. Rockville, MD: Substance Abuse and Mental Health Services Administration and Center for Mental Health Services.
2. Health Care for the Homeless Clinicians' Network. (2009). Meeting the challenges of comorbid mental illness & substance-related disorders. *Healing Hands, 13*(1), 1–6. Retrieved from www.nhchc.org/Network/HealingHands/2009/Feb09HealingHands.pdf
3. Drake, R. E., Mueser, K. T., & Brunette, M. F. (2007). Management of persons with co-occurring severe mental illness and substance use disorders: Program implications. *World Psychiatry, 6*(3), 131–136.
4. McGovern, M. P., Xie, H., Segal, S. R., Siembab, L., & Drake, R. E. (2006). Addiction treatment services and co-occurring disorders: Prevalence estimates, treatment practices, and barriers. *Journal of Substance Abuse Treatment, 31*, 267–275.
5. Health Care for the Homeless Clinicians' Network. (2007). Diabetes: Health care's burgeoning beast. *Healing Hands, 11*(4), 1–6. Retrieved from www.nhchc.org/Network/HealingHands/2007/Aug2007HealingHands.pdf
6. Health Care for the Homeless Clinicians' Network. (2008). Traumatic brain injury: Emerging tools for assessment and care. *Healing Hands, 12*(1), 1–6. Retrieved from www.nhchc.org/Network/HealingHands/2008/Feb2008HealingHands.pdf
7. Health Care for the Homeless Clinicians' Network. (2008). The specter of liver disease. *Healing Hands, 12*(6), 1–6. Retrieved from www.nhchc.org/Network/HealingHands/2008/Dec2008HealingHands.pdf
8. Jones, D. R., Macias, C., Barreira, P. J., Fisher, W. H., Hargreaves, W. A., & Harding, C. M. (2004). Prevalence, severity, and co-occurrence of chronic physical health problems of persons with serious mental illness. *Psychiatric Services, 55*(11), 1250–1257.
9. Schanzer, B., Dominguez, B., Shrout, P. E., & Caton, C. L. M. (2007). Homelessness, health status, and health care use. *American Journal of Public Health, 97*(3), 464–469.
10. McCary, J. M., & O'Connell, J. J. (2005). Health, housing, and the heart: Cardiovascular disparities in homeless people. *Circulation, 111*, 2555–2556.
11. Newcomer, J. W. (2007). Metabolic syndrome and mental illness. *American Journal of Managed Care, 13*, S170–S177. Retrieved from http://www.ajmc.com/supplement/managed-care/2007/2007-11-vol13-n7suppl/Nov07-2657pA170-A177
12. Dickey, B., Normand, S-L. T., Weiss, R. D., Drake, R. E., & Azeni, H. (2002). Medical morbidity, mental illness, and substance use disorders. *Psychiatric Services, 53*(7), 861–867.
13. Dickerson, F. B., Brown, C. H., Daumit, G. L., LiJuan, F., Goldberg, R. W., Wohlheiter, K., et al. (2006). Health status of individuals with serious mental illness. *Schizophrenia Bulletin, 32*(3), 584–589. Retrieved from http://schizophreniabulletin.oxfordjournals.org/cgi/content/full/3213/584
14. Sokal, J., Messias, E., Dickerson, F. B., Kreyenbuhl, J., Brown, C. H., Goldberg, R. W., et al. (2004). Comorbidity of medical illnesses among adults with serious mental illness who are receiving community psychiatric services. *Journal of Nervous and Mental Disease, 192*(6), 421–427.
15. Health Care for the Homeless Clinicians' Network. (2009). The relationship between housing and health care. *Healing Hands, 13*(4), 1–6. Retrieved from www.nhchc.org/Network/HealingHands/2009/AugHHands.pdf
16. Cookson, E., & Thompson, L. (2009, June). *Medical considerations for patients on atypical antipsychotics*. Paper presented at the National Health Care for the Homeless Conference and Policy Symposium, Washington, D.C. Retrieved from http://www.nhchc.org/2009conference/workshops/W107.html
17. Choucair, B. (2009, June). *The impact of housing and other socioeconomic factors on diabetes care*. Paper presented at the National Health Care for the Homeless Conference and Policy Symposium, Washington, D.C. Retrieved from http://www.nhchc.org/2009conference/workshops/W103.html
18. Unützer, J., Schoenbaum, M., Druss, B. G., & Katon, W. J. (2006). Transforming mental health care at the interface with general medicine: Report for the president's commission. *Psychiatric Services, 57*(1), 37–47. Retrieved from http://ps.psychiatryonline.org/cgi/content/full/57/1/37
19. Kilbourne, A. M., Irmiter, C., Capobianco, J., Reynolds, K., Milner, K., Barry, K., et al. (2008). Improving integrated general medical and mental health services in community-based practices. *Administration and Policy in Mental Health, 35*(5), 337–345.
20. Schmutte, T., Flanagan, E., Bedregal, L., Ridgway, P., Sells, D., Styron, T., et al. (2009). Self-efficacy and self-care: Missing ingredients in health and healthcare among adults with serious mental illnesses. *Psychiatric Quarterly*, 80(1), 1–8.
21. Lieberman, J. A., Stroup, T. S., McEvoy, J. P., Swartz, M. S., Rosenheck, R. A., Perkins, D. O., et al. for the Clinical Antipsychotic Trials of Intervention Effectiveness (CATIE) Investigators. (2005). Effectiveness of antipsychotic drugs in patients with chronic schizophrenia. *New England Journal of Medicine, 353*, 1209–1223.

22. Pirraglia, P. A., Biswas, K., Kilbourne, A. M., Fenn, H., & Bauer, M. S. (2009). A prospective study of the impact of comorbid medical disease on bipolar disorder outcomes. *Journal of Affective Disorders, 115*(3), 355–359.
23. Newcomer, J. W. (2009). Comparing the safety and efficacy of atypical antipsychotics in psychiatric patients with comorbid medical illnesses. *Journal of Clinical Psychiatry, 70*(Suppl 3), 30–36.
24. American Diabetes Association, American Psychiatric Association, American Association of Clinical Endocrinologists, & North American Association for the Study of Obesity. (2004). Consensus development conference on antipsychotic drugs and obesity and diabetes. *Diabetes Care, 27*(2), 596–601.

HCH 101 ONLINE

Jointly sponsored by the Vanderbilt School of Medicine and the National Health Care for the Homeless Council, Health Care for the Homeless 101 Online is a course that provides an introduction to health care for homeless people. This learning activity is designed for clinic and shelter staff, volunteers, health professions students, federal employees—anyone unfamiliar with the HCH model of care.

Participants may select from two program versions: one being self-paced and the other schedule-based. Preregistration is required for the schedule-based version, which follows a set schedule, includes a facilitator, and offers seven hours of CME/CEU credit.

To enroll in either version, login on the Council's Moodle page at http://learn.nhchc.org. To learn more about either version, contact the Council's Learning Director Heather Rippetoe at 615/226-2292 or hrippetoe@nhchc.org.

Help us continue offering this service free of charge by keeping your commitment to complete the course once you enroll.

The HCH Clinicians' Network develops and distributes *Healing Hands* with support from the Health Resources and Services Administration. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of HRSA/BPHC.