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Increasing US health plan coverage for exercise programming in community mental health settings for people with serious mental illness: a position statement from the Society of Behavior Medicine and the American College of Sports Medicine

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Abstract

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Adults with serious mental illness die more than 10 years earlier than the average American. Premature mortality is due to the high prevalence of preventable diseases including cardiovascular disease and diabetes. Poor lifestyle behaviors including lack of exercise and physical inactivity contribute to the epidemic levels of obesity, diabetes, and cardiovascular disease observed among adults with serious mental illness. Not surprisingly, people with serious mental illness are among the most costly consumers of health services due to increased visits for poorly managed mental and physical health. Recent studies have demonstrated that exercise interventions based on community mental health settings can significantly improve physical and mental health in people with serious mental illness. However, current funding regulations limit the ability of community mental health settings to offer exercise programming services to people with serious mental illness. Policy efforts are needed to improve the dissemination and sustainability of exercise programs for people with serious mental illness.

Keywords

Exercise, Physical activity, Serious mental illness, Bipolar disorder, Schizophrenia, Health policy

INTRODUCTION

The Society of Behavioral Medicine and the American College of Sports Medicine encourages legislation and policies that require Medicare, Medicaid, and private insurers to reimburse exercise programming for people with serious mental illness treated in community mental health settings.

Exercise improves both mental and physical health while reducing health care costs [1]. Even the most

Implications

Practice: Exercise is a first-line treatment to prevent and manage many chronic physical and mental health conditions and yet this treatment option is largely inaccessible to people with serious mental illness receiving services in community mental health settings due to current funding and policy limitations.

Policy: New legislation is needed to enable Medicare, Medicaid, and private insurers to reimburse evidence-based exercise programs for people with serious mental illness treated in community mental health settings in order to foster improved mental and physical health outcomes and to reduce healthcare costs for this vulnerable population.

Research: Further research is needed to identify and evaluate the most cost-effective treatment models to engage and sustain exercise in people seeking recovery-oriented psychiatric rehabilitation in community mental health settings.

sedentary individuals in the highest obesity classes benefit from both exercise as well as dietary restriction [2]. However, these benefits often do not reach adult consumers of community mental health programs who need them most. Specifically, consumers with serious mental illness have lower fitness and physical activity levels than the general US population [3, 4]. Reduction in health risks are the greatest for those who move from a sedentary to modestly active lifestyle [5]. Thus, policy changes are needed to support wellness services offered in community mental health to include exercise programs for people with serious mental illness.

THE HEALTH INEQUITIES OF SERIOUS MENTAL ILLNESS IN THE USA

Serious mental illnesses like bipolar disorder and schizophrenia affect one in twenty Americans [6]. Broader definitions of serious mental illness also include major depressive, anxiety, and personality disorders. Notably, people with serious mental illness die at least 10 years earlier than the average American [7, 8]. This disparity in premature death is largely due to the disproportionately high prevalence of preventable diseases such as cardiovascular disease and diabetes [7]. Furthermore, psychiatric medications prescribed for serious mental illness contribute to epidemic levels of obesity which occurs in more than 50 % of adults with these disorders [7, 9]. Despite these physical risk factors, many people with chronic and debilitating serious mental illnesses receive most of their care in community mental health settings where preventive and medical care services are lacking.

A complex interaction of factors contributes to poor physical health in this vulnerable population including side effects from pharmacologic therapies, poor health behaviors, and low socioeconomic status. People with serious mental illness often struggle with persistent psychiatric symptoms as well as impairments in memory, executive functioning, and motor coordination that make it difficult to adopt and sustain positive health behaviors without professional support [10]. Fewer than 20 % of adults with serious mental illness engage in regular physical activity that is sufficient to provide health benefits [11].

EXERCISE IN COMMUNITY MENTAL HEALTH PROGRAMS TO IMPROVE HEALTH

Studies conducted in community mental health settings show that supported exercise programming can significantly reduce health risks in people with serious mental illness [11–14] by helping people achieve a healthy weight and better manage chronic disease risk factors [10, 15–17]. Regular exercise also increases cardiovascular fitness and helps prevent costly, disease-related disability [11, 12, 14]. Furthermore, exercise reduces psychiatric symptoms, supports brain health, and provides a healthy lifestyle alternative for people with cooccurring nicotine and substance use disorders [13, 18]. Finally, exercise can enhance social reintegration as part of a psychosocial rehabilitation program [10, 11].

EXERCISE CAN REDUCE THE PUBLIC HEALTH BURDEN OF SERIOUS MENTAL ILLNESS ON SOCIETY

Exercise is a key preventive strategy to reduce the public health burden of medical conditions of individuals who are treated primarily in community mental health settings. People with serious mental illness are among the most costly consumers of health services in the USA across health settings [19]. Exercise helps manage psychiatric symptoms that contribute to unhealthy behaviors and reduce compliance with mental health and medical treatments [20]. Inadequate preventive and medical care for people with serious mental illness, results in higher healthcare costs [21, 22].

CURRENT BARRIERS TO OFFERING EXERCISE SERVICES

Despite the availability of evidence-based programs to improve physical health and wellness behaviors among people with serious mental illness [11, 12], there are multiple policies and funding barriers that make it difficult for community mental health programs to offer these programs to consumers [21, 23]. Health care policies typically "carve out" mental health funds from physical health funds, denying community mental health programs the financial ability to offer exercise programming [21, 23]. Few funds are set aside for community mental health programs to train staff to deliver preventive health services like exercise programs [21, 22]. Finally, billing rules set by the Centers for Medicare and Medicaid Services (CMS) and private insurers prohibit most allied health professionals from receiving reimbursement for providing exercise programming [23-26] in mental health settings.

Although funding for preventive services in general, including exercise programming, lags behind reimbursement for disease care [27], this is particularly true for people with serious mental illness. Increasingly, private insurance companies, recognizing the cost savings to be accrued from increased engagement in regular exercise [28-30], offer their members a variety of incentives to engage in exercise, such as reimbursement for gym memberships, cash rebates for selecting healthy food at the grocery store, and reduced premiums for people who engage in regular exercise [31, 32]. The top 10 health insurance companies as ranked by US News and World Report all offer their members incentives for engagement in exercise [33]. Large corporations also offer incentives for engagement in exercise, such as on-site fitness equipment [31].

Lack of funding is often the greatest challenge to broad dissemination of services for people with serious mental illness, even practices that have been widely researched and have an extensive evidence base. Supported employment is one of the best examples of this. In spite of an impressive volume of research supporting its effectiveness, supported employment is only available to 1.7 % of adults receiving services in public mental health settings in the USA [34] due to the limited reimbursement options for financing this intervention [35, 36]. Evidence-based exercise programs designed for people with serious mental illness are similarly challenged by lack of funding mechanisms.

POLICY RECOMMENDATIONS

The Society of Behavioral Medicine and the American College of Sports Medicine offer the following policy recommendations to support the use of exercise programming in conjunction with community mental health services as a first-line medical treatment to improve health outcomes and reduce healthcare costs.

- 1) Promote evidenced-based exercise programming for people with serious mental illness by
 - *including* evidence-based lifestyle programs designed for people with serious mental illness that are eligible for reimbursement by regional and national health care providers in the Substance Abuse and Mental Health Services Administration's National Registry of Evidence-based Programs and Practices (NREPP) and
 - *ensuring* that treatment settings maximize effectiveness by providing programs that are of sufficient duration (>4 months) with adequate frequency of face-to-face contact and support from fitness professionals.
- 2) Expand health care services for people with serious mental illness to specify exercise programming as a reimbursable service through mechanisms in the Affordable Care Act for health promotion including the Medicaid 1915i State Plan and Community Based Services Program and adaptations of the Specialty Health Home Program.
- Clearly specify standards of professional accreditation or competency to deliver exercise programming to people with serious mental illness by
 - *establishing* minimum training competencies for the health professionals who deliver exercise programming for people with serious mental illness and
 - allocating funding to support training health professionals to deliver exercise programming in community mental health settings.
- 4) Increase the range of disciplines of licensed/ certified allied and mental health professionals who are eligible for reimbursement to deliver exercise programming in mental health settings.

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Compliance with ethical standards

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- Lobelo F, Stoutenberg M, Hutber A. The exercise is medicine global health initiative: a 2014 update. Br J Sports Med. 2014; 48: 1627-1633.
- Goodpaster BH, Delany JP, Otto AD, et al. Effects of diet and physical activity interventions on weight loss and cardiometabolic risk factors in severely obese adults: a randomized trial. JAMA. 2010; 304: 1795-1802.
- Daumit GL, Goldberg RW, Anthony C, et al. Physical activity patterns in adults with severe mental illness. J Nerv Ment Dis. 2005; 193: 641-646.
- Jerome GJ, Young DR, Dalcin A, et al. Physical activity levels of persons with mental illness attending psychiatric rehabilitation programs. *Schizophr Res.* 2009; 108: 252-257.
- Blair SN, Kohl HW 3rd, Barlow CE, Paffenbarger RS Jr, Gibbons LW, Macera CA. Changes in physical fitness and all-cause mortality. A prospective study of healthy and unhealthy men. *JAMA*. 1995; 273: 1093-1098.
- Kessler RC, Berglund P, Demler O, Jln R, Merikangas KR, Walters EE. Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. Arch Gen Psychiatry. 2005; 62: 593-602.
- Allison DB, Newconer JW, Dunn AL. Obesity among those with mental disorders: a National Institute of Mental Health meeting report. *Am J Prev Med.* 2009; 36: 341-350.
- 8. Saha S, Chant D, McGrath J. A systematic review of mortality in schizophrenia: is the differential mortality gap worsening over time? *Arch Gen Psychiatry.* 2007; 64: 1123-1131.
- 9. Radke AQ, Parks J, Ruter TJ. A call for improved prevention and reduction of obesity among persons with serious mental illness. *Psychiatr Serv.* 2010; 61: 617-619.
- Daumit GL, Dickerson FB, Wnag NY, et al. A behavioral weight-loss intervention in persons with serious mental illness. N Engl J Med. 2013; 368: 1594-1602.
- Bartels S, Desilets R. Health Promotion Programs for People with Serious Mental Illness (Prepared by the Dartmouth Health Promotion Research Team). Washington: SAMHSA-HRSA Center for Integrated Health Solutions; 2012.
- Gierisch JM, Nieuwsma JA, Bradford DW, et al. Pharmacologic and behavioral interventions to improve cardiovascular risk factors in adults with serious mental illness: a systematic review and metaanalysis. J Clin Psychiatry. 2014; 75: e424-e440.
- Rosenbaum S, Tiedemann A, Sherrington C, Curtis J, Ward PB. Physical activity interventions for people with mental illness: a systematic review and meta-analysis. *J Clin Psychiatry*. 2014; 75: 964-974.
- Vancampfort D, Rosenbaum S, Probst M. Promotion of cardiorespiratory fitness in schizophrenia: a clinical overview and meta-analysis. Acta Psychiatr Scand. 2015; 132: 131-143.
- Bartels SJ, Pratt SJ, Aschbrenner KA, et al. Pragmatic replication trial of health promotion coaching for obesity in serious mental illness and maintenance of outcomes. Am J Psychiatry. 2015; 172: 344-352.
- Bartels SJ, Pratt SI, Aschbrenner KA, et al. Clinically significant improved fitness and weight loss among overweight persons with serious mental illness. *Psychiatr Serv.* 2013; 64: 729-736.
- Green CA, Yarborough BJ, Leo MC, et al. The STRIDE weight loss and lifestyle intervention for individuals taking antipsychotic medications: a randomized trial. Am J Psychiatry. 2015; 172: 71-81.
- Wang D, Wang Y, Wang Y, Li R, Shou C. Impact of physical exercise on substance use disorders: a meta-analysis. *PLoS One*. 2014; 9, e110728.
- 19. Maust DT, Oslin DW, Marcus SC. Mental health care in the accountable care organization. *Psychiatr Serv.* 2013; 64: 908-910.
- Goldstein BJ, Kemp DE, Soczynska JK, McIntyre RS. Inflammation and the phenomenology, pathophysiology, comorbidity, and treatment of bipolar disorder: a systematic review of the literature. J Clin Psychiatry. 2009; 70: 1078-1090.
- Chwastiak L. Making evidence-based lifestyle modification programs available in community mental health centers: why so slow? *J Clin Psychiatry*. 2015; 76: e519-e520.
- Stumbo SP, Yarborough BJ, Yarborough MT, et al. Costs of implementing a behavioral weight-loss and lifestyle-change program for individuals with serious mental illnesses in community settings. *Transl Behav Med.* 2015; 5: 269-276.
- 23. O'Donnell AN, Williams M, Kilbourne AM. Overcoming roadblocks: current and emerging reimbursement strategies for integrated

mental health services in primary care. *J Gen Intern Med.* 2013; 28: 1667-1672.

- 24. O'Donnell AN, Williams BC, Eisenberg D, Kilbourne AM. Mental health in ACOs: missed opportunities and low-hanging fruit. *Am J Manag Care*. 2013; 19: 180-184.
- Pronk NP, Remington PL. Combined diet and physical activity promotion programs for prevention of diabetes: community preventive services task force recommendation statement. *Ann Intern Med.* 2015; 163: 465-468.
- Prost SG, Ai AL, Ainsworth SE, Ayers J. Mental health professionals and behavioral interventions for obesity: a systematic literature review. J Evid Inf Soc Work. 2015: 1–26.
- 27. Ades PA. A lifestyle program of exercise and weight loss is effective in preventing and treating type 2 diabetes mellitus: why are programs not more available? *Prev Med.* 2015; 80: 50-52.
- Ackermann RT, Williams B, Nguyen H, Berke EM, Maciejewski ML, LoGerfo JP. Healthcare cost differences with participation in a community-based group physical activity benefit for Medicare managed care health plan members. *JAGS*. 2008; 56: 1459-1465.
- 29. Nguyen HQ, Ackermann RT, Maciejewski ML, et al. Managedmedicare health club benefit and reduced health care costs among

older adults. *Prev Chronic Dis.* 2008; 5. http://www.cdc.gov/pcd/issues/2008/jan/07_0148.htm. Accessed 03/23/16.

- Nguyen HQ, Maciejewski ML, Gao S, Lin E, Williams B, LoGerfo JP. Health care use and costs associated with use of a health club membership benefit in older adults with diabetes. *Diabetes Care*. 2008; 31: 1562-1567.
- Beals, R. K. Employees get paid to exercise, while some pay to sit out. US News and World Report. Feb. 14, 2012.
- Mitchell MS, Goodman JM, Alter DA, et al. Financial incentives for exercise adherence in adults. Am J Prev Med. 2013; 45: 658-667.
- Frean ME. What is the optimal subsidy for exercise? Informing health insurance companies' fitness reimbursement programs. Honors Projects. Paper 43. 2012. http://digitalcommons.macalester.edu/ economics_honors_projects/43.
- Substance Abuse and Mental Health Services Administration (SAMHSA): 2012 CMHS uniform reporting system output tables. http://www.samhsa.gov/dataoutcomes/urs/urs2012.aspx.
- 35. Drake RE, Skinner JS, Bond GR, Goldman HH. Social Security and mental illness: reducing disability with supported employment. *Health Aff.* 2009; 28: 761-770.
- Druss BG. Supported employment over the long term: from effectiveness to sustainability. Am J Psychiatry. 2014; 171: 11.