# TDMHSAS BEST PRACTICE GUIDELINES

# *Children and Adolescents with Mental Health and Physical Disorders*

## Initial Discussions on Addressing Growing Concerns

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### *Introduction*

Persons with major mental disorders lose 25 to 30 years of potential life in comparison with the general population, primarily due to premature cardiovascular mortality (Bartels & Desilets, 2012). For instance, clients diagnosed with a serious mental illness (SMI) who are receiving services from public mental health agencies in eight US states were found to have lower life expectancies of 13 to more than 30 years compared to the general population (depending on the year and state) (Canada, 2010; Chang et al., 2011). Further it has been shown that persons with SMI who are in outpatient care are more likely to have comorbid medical conditions than persons in the general population. The odds of diabetes, lung diseases, and liver problems are particularly elevated (Colton & Manderscheid, 2006). Further complicating this decline in life expectancy is the finding that individuals with severe mental illness are also less likely to receive (or seek) medical care such as for cardiovascular issues (Davis et al., 2007). This is complicated by issues with their being able to manage chronic conditions, and access to appropriate care. This discrepancy in medical care exists despite literature that physical health risk assessments and assertive evidence-based intervention by primary and secondary medical services have been implemented and have resulted in improvements (De Hert et al., 2011). For instance, diabetes monitoring for individuals with schizophrenia may lead to proper treatment and control of blood sugar yet among patients with co-occurring schizophrenia and metabolic disorders, the non-treatment rate for diabetes is approximately 32 percent (Druss et al., 2002).

Health-related morbidity is not only impacting the adult mentally ill population, but is seen among individuals under 21 years of age, despite the fact that adolescence and early stage of adulthood may be very important developmental eras in which to intervene to change the trajectory and course of an individual's health status, especially if they are living with comorbid conditions (mental illness and chronic health problems). Adolescents face many healthcare challenges, especially if they are living with mental health issues. Families with teenage children may struggle with the youth's illness, which can be complicated by having a comorbid mental health diagnosis. Dealing with added stress brought on by mental illness may make management of the adolescent's physical more difficult. Even though, wellness visits are often important in order to maintain one's health and prevent health problems. The majority of this population does not seek care from their primary care physicians (PCPs) unless an acute

illness or injury has occurred. Extensive outreach and education (to both families and individuals) is necessary to encourage this age group to seek out health care. Establishing consistent quality healthcare during these earlier stages of life can make a difference. A particular focus needs to be upon helping individuals make the transition from the child/youth-serving healthcare systems (including behavioral health) to systems that serve adults (including the use of case management and care coordination, peer support, and psychoeducational programs focusing on wellness as well as mental health) (Khatri, Raynor, Bishop, & Saporito, 2011).

Physical health and mental health are inextricably linked (healthypeople.com, n.d.). For example, a young child who is overweight may be teased about his/her weight and, as a corollary, withdraw socially and become depressed and/or reluctant to play with others or exercise. These "withdrawal" behaviors then further contribute to the child's poorer physical health and mental health. Issues such as pointed out in this example have long-term implications on the ability of children and adolescents to fulfill their potential as well as consequences for the health, labor, education, and criminal justice systems of our society (APA, n.d.). Moreover, physical illness has been observed as one of the primary risk factors to predict onset and persistence of behavior and mental disorders in young people, based on a large, three-year follow-up study of child health in the United Kingdom (Merikangas, Nakamura, & Kessler, 2009).

As stated in a review article in 2007, "By routinely performing physical health monitoring, referrals, and/or treatment for patients with schizophrenia and other forms of severe mental illness, mental health care providers can take a lead role in transforming the current system of fragmented mental and physical health services into a system focused on early intervention, wellness, and recovery" (Sernyak, 2007, Abstract).

To accomplish this behavioral health professionals are encouraged to embrace physical health screening tools such as the monitoring for metabolic syndrome when a person is treated with a second generation antipsychotic (Kroenke, Spitzer, & Williams, 2001; 2003) and primary care providers are similarly needing to screen for mental health issues or substance abuse through the ongoing use of established instruments such as the PHQ-9 or the PHQ-2 (Nasrallah et al., 2006; Newcomer, 2007).

### *Obesity and Fitness*

While multiple health-related topics could be included in this review, it is felt that the most prevalent conditions impacting persons with serious mental illness (such as diabetes and increased risk of cardiac disease) could be best addressed through the implementation of an assertive program of fitness and improved nutrition.

Individuals with SMI have a higher incidence of obesity and thus are at higher risk factors for cardiovascular disease, diabetes, and reduced life expectancy. As a result, practitioners are encouraged to utilize evidence-based health promotion consisting of combined physical fitness and nutrition programs should be an integral component of mental health services seeking to provide overall wellness and recovery for persons with SMI. Curriculum-based and lengthier programs have been shown to be the most effective in reducing weight, improving physical fitness, and improving psychological symptoms and overall health. (See the SAMHSA-HRSA Center for Integrated Health Solutions overview by Health Promotion Programs for People with Serious Mental Illness prepared by the Dartmouth Health Promotion Research Team, January 2012.) One such program is the "Whole Health

Action Management" Program (WHAM) developed in 2012 by SAMHSA (www.integration.samhsa.gov).

As stated in their training materials, the WHAM program engages peer support to help people develop whole health self-management. The program design combines the powerful benefits of peer-based (recovery-oriented) support with an eight-week curriculum aimed at letting each participant establish and start to attain their own goals as they relate to coping with stress, improving their health, connecting with others for support, and health risk screening and decision making.

Poor nutrition and its contribution to obesity) is a growing issue among children and adolescents. The rate of obesity in the US is 27.1 percent overall, and 16.9 percent for youth. These rates are higher in TN with overall obesity being 32.8 percent of all individuals (the third worst state in the US) and 13 percent of youth in TN (CDC Behavioral Risk Factor Surveillance System "BRFSS" data 2009). There are significant implications to being overweight as a young person ages. It has been suggested that rapid infant weight gain will often lead to excessive weight gain by age four. Overweight toddlers are five times as likely to be overweight as adolescents. Overweight adolescents have a 70 percent risk of becoming overweight adults. 60 percent of overweight children aged 5-10 years already have one or more risk factors for heart disease and/or diabetes. (as reported by Rick Canada, the Director of Nutrition, Physical Activity, and Obesity for TN's Department of Health). Individuals are reported to be obese when they have a BMI of 30 or higher. Youth are defined as obese when their height and weight are above the 95 percent and as being overweight when their height and weight are above the 85 percent.

In addition to those obesity-related health consequences seen in adults, there are also significant psychosocial risks for children and adolescents who are obese, including poor self-esteem, negative self-concept, and negative mood (Sernyak, 2007).

It is has been demonstrated that behavioral counseling as a part of a multi-component pediatric weight management program results in significant reduction in weight status and adiposity in youth. Furthermore, family participation is believed to be more of an imperative for youth between the ages of six and 12 years, while more conditional with fair or limited results for older youth (Spear et al., 2007).

It has been recommended that treatment be along a step or staged approach for weight management (Sokal, 2004; Young & Foster, 2000). It should be noted, however, that there is more evidence supporting the components of stages rather than the staged-approach itself. The notion of stages is simply a means of conveying the importance of matching treatment with the presentation of patients and their families.

Stages typically include (See Khatri et al., 2011.):

***Stage I: Prevention***

This should be started once a child's BMI is greater than 85$^{th}$ percentile and once the child is at least two years of age. This step is not necessary if a child reaches 12 years of age and has a BMI greater than the 99$^{th}$ percentile. At that level a more intensive treatment stage should be started, depending upon the motivation of the patient and family. Treatment, including prevention, should be matched to the motivational level of the patient and family with their active involvement in setting goals. Targets should address:

- consumption of healthier foods and limits on high sugar content foods;
- provision of adequate physical activity (and limits on sedentary activities such as limiting screen time to two hours per day, no television in bedrooms, and no television viewing if the child is two years of age (consistent evidence);
- Family focused interventions such as not skipping breakfast, limiting eating out, and eating meals together as a family at least five or six times a week (all have mixed evidence).

Frequency of follow-up depends upon motivation toward change and the next stage of treatment should be considered if there is not significant improvement in three to six months.

***Stage II: Structured Weight Management***

This level of intervention centers on closer follow-up with patients and families, with more of a focus on behavioral monitoring and reinforcement of achieving treatment goals. There is also more attention given to developing a structured dietary plan. This plan should stress minimizing energy dense foods and the provision of more consistent, structured meals and snacks (three meals and two snacks per day) (evidence is suggestive). Attention should also be directed at reinforcing consistent and frequent activity while minimizing sedentary behavior. There could also be discussion/review of cues for eating and attitudes and beliefs in regards to eating behaviors with the intent of improving eating habits.

***Stage III: Comprehensive Multidisciplinary Intervention***

This stage of intervention centers on increasing the intensity of behavioral strategies with more focus on the family and the behaviorist working with a provider. There would certainly be more frequent contact with even more focus on structure and consistency with dietary and activity goals. This may even include calorie goals.

***Stage IV: Tertiary Care Intervention***

If it is determined that the patient continues to fail treatment and there are significant health concerns, they may benefit from a referral to a pediatric tertiary weight management center that has access to a multidisciplinary team with expertise in childhood obesity and that utilizes a designed protocol.

***Recommendations***

Future reviewers of evidence-based approaches to integrate behavioral health and physical health services are encouraged to address:

- Approaches that mental health professionals can adopt to enhance physical health monitoring and early intervention into prevalent disorders found among persons with severe mental illness. These might include addressing the concurrent medical and mental health needs of persons with diabetes, asthma, and cardiac disease ;

- Disorder-specific programming that both mental health professionals and medical providers can involve their patients in when it is found that they are impacted by concurrent psychiatric and medical illnesses. Specific areas of focus should include:

- Diabetes
- Cardiovascular disease (including myocardial infarction and stroke)
- Cancer
- Asthma

- Educational programs to enhance physical health services for those with mental illness (as well as similar programming for improving the mental health treatment of persons with concurrent medical issues).

***References***


American Psychological Association. (n.d.) Why is children's mental health important? Retrieved from http://www.apa.org/pi/families/children-mental-health.aspx.

Bartels, S. & Desilets, R. (2012). Health promotion programs for people with serious mental illness (Prepared by the Dartmouth Health Promotion Research Team). Washington, D.C. SAMHSA-HRSA Center for Integrated Health Solutions.

Canada, R. (2010). Nutrition, physical activity, and obesity.

Chang, C.K., Hayesm R.D., Perera, G., Broadbent, M.T.M., Fernandes, A.C., et al. (2011). Life expectancy at birth for people with serious mental illness and other major disorders from a secondary mental health care case register in London. *Public Library of Science Online* (PLoS ONE), *6*(5), e19590. doi:10.1371/journal.pone.0019590.

Colton, C.W. & Manderscheid, R.W. (2006). Congruencies in increased mortality rates, years of potential life lost, and causes of death among public mental health clients in eight states. *Preventing Chronic Disease*, *3*, A42.

Davis, M.M., Gance-Cleveland, B., Hassink, S., Johnson, R., Paradis, G., & Resnicow, K. (2007). Recommendations for prevention of childhood obesity. *Pediatrics*, *120* Suppl 4, S229-53.

De Hert, Mm, Vancampfort, D., Correll, C.U., Mercken, V., Peuskens, J., Sweers, K., van Winkel, R., & Mitchell, A.J. (2011). Guidelines for screening and monitoring of cardiometabolic risk in schizophrenia: Systematic evaluation. *British Journal of Psychiatry*, *199*(2), 99-105.

Druss, B.G., et. al. (2002). Quality of preventive medical care for patients with mental disorders. *Medical Care*, *40* (2), 129–136.

healthypeople.com. (n.d.). Mental health. Retrieved from http://www.healthypeople.gov/2020/LHI/mentalHealth.aspx.

Khatri, P., Raynor, H., Bishop, T., & Saporito, J. (2011, October 29). Changes for life: A primary care based multidisciplinary program for obesity in children and families. Presentation at the

Collaborative Family Healthcare Association 13th Annual Conference, Philadelphia, Pennsylvania.

Kroenke, K., Spitzer, R.L. & Williams, J.B. (2001). The PHQ-9: Validity of a brief depression severity measure. *Journal of General Internal Medicine, 16*(9), 606-613.

Kroenke, K., Spitzer, R.L. & Williams, J.B. (2003). The Patient Health Questionnaire-2: Validity of a two-item depression screener. *Medical Care*, *41*(11), 1284.

Merikangas, K.R., Nakamura, E.F., & Kessler, R.C. (2009 March). Epidemiology of mental disorders in children and adolescents. *Dialogues in Clinical Neuroscience*, *11*(1), 7–20. Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2807642/pdf/DialoguesClinNeurosci-11-7.pdf.

Nasrallah, H., et al. (2006). Low rates of treatment for hypertension, dyslipidemia and diabetes in schizophrenia: Data from the CATIE schizophrenia trial sample at baseline. *Schizophrenia Research*, *86*, 15–22.

Newcomer, J.W. (2007). Metabolic syndrome and mental illness. *American Journal of Managed Care*, 13(7 Suppl), S170-177.

Sernyak, M.J. (2007). Implementation of monitoring and management guidelines for second-generation antipsychotics. *Journal of Clinical Psychiatry, 68* Suppl 4, 14-18.

Spear, B.A., Barlow, S. E., Ervin, C., Ludwig, D. S., Saelens, B. E., Schetzina, K.E., & Taveras, E. M. (2007). Recommendations for treatment of child and adolescent overweight and obesity. *Pediatrics*, *120* Suppl 4, S254-88.

Sokal, J., Messias, E., Dickerson, F.B., Kreyenbuhl, J., Brown, C.H., Goldberg, R.W., & Dixon, L.B. (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.

Young, J.K. & Foster, D.A. (2000). Cardiovascular procedures in patients with mental disorders. *Journal of the American Medical Association*, *283*(24), 3198.

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