This is a re-recording of the Get Moving Physical Activity Webinar presented on July 7th, 2015. We had some technical difficulties with the recording of the audio, so this is not an exact replica of the presentation; however, the information is still the same.

My name is Gretchen Snethen and I'm the assistant director at the Temple University Collaborative on Community Inclusion of Individuals with Psychiatric Disabilities. This presentation focuses on the importance of physical activity for individuals who experience psychiatric disabilities and strategies one might use to either increase their own engagement in physical activity or support others to increase physical activity. A unique focus on the information presented here is the emphasis on using one's community to increase physical activity. Often, mental health agencies provide opportunities for physical activity. While all opportunities for physical activity are good, promoting physical activity within the community is consistent with the mission of the Temple University Collaborative and promotes behavior change that is more sustainable for the consumer.

Before we get started, there is some background information that really emphasizes why promoting physical activity is critically important for this population. The life expectancy of individuals diagnosed with mental health conditions is 13-30 years less than the general population. This is often due to the high incidence of physical health conditions that are medically unrelated to the mental health diagnosis. One way to summarize this is to look at the incidence of metabolic syndrome, which is two to three times greater among individuals with mental health conditions than the general population. These risk factors include a large waistline (or abdominal fat), high triglyceride levels, low HDL cholesterol, high blood pressure, and high fasting blood sugar. An individual must have at least three of these to be considered to have metabolic syndrome. Metabolic syndrome is of concern, because it contributes to one's risk of diabetes, heart disease, and other related health conditions.

While there are a number of factors that may contribute to the development of metabolic syndrome, physical inactivity is one modifiable behavioral risk factor, and is the focus of this webinar.

This webinar focuses on identifying the different types of physical activity and providing definitions of them; understanding the physical activity guidelines; identifying the benefits of physical activity; strategies to assess current physical activity participation; and information on setting and supporting physical activity goals.

At the end of the original webinar, questions were submitted via the chat function. We have pulled those questions and have a question and answer document to accompany this webinar. If you have other questions that are not addressed on this
Slide 4
Often, there are four categories of activity that are commonly identified. From least active to most active, these are sedentary, light, moderate and vigorous activity. The next few slides will define each of these and provide examples.

Slide 5
Before defining each of the activity levels, I wanted to provide some information about METs or the Metabolic Equivalency. Activities are often categorized by METs. I will refer to these when talking about the different levels of physical activity. MET stands for Metabolic Equivalency and is simply a unit of measure that identifies the amount of energy one would expend if they participated in that activity for one hour. For example, if you sit for one hour (perhaps during the course of this webinar), you will expend 1 MET.

Researchers have calculated the METs for a number of activities, which can be found in the compendium of physical activity. If you are interested, please follow the link to explore how much energy is expended during different types of activity. I recommend checking out the compendium, as you might be surprised by how much energy is expended during every day tasks. By having a better understanding of the levels of energy expenditure associated with different types of activities, you can better support individuals in diverse strategies to increase physical activity.

Slide 6
Sedentary activities are those that require little to no energy expenditure, or 1-1.5 MET. These are activities where your body is typically in a seated or reclined position. Activities that are often included in sedentary behavior are sleeping, reading, watching television, using the computer. One way to understand an individual's level of sedentary activities it to ask about their screen time activities. Screen time activities refer to anything done in front of a screen: typically watching television or using the computer. Often, we’re not able to provide a good estimate of sedentary behavior, because it’s not something we think about. But asking about specific activities, such as what shows do you watch and how often, or how much time do you spend on your computer can help in accurately identifying time spent in sedentary behavior.

Slide 7
So what's the big deal with sedentary behavior?
We should be worried about the amount time spent in sedentary activities, because there are a number of health risks independently associated with sedentary behavior. This include: decreased overall energy expenditure, increased obesity, and an increased risk of chronic diseases, such as diabetes, digestive diseases, and circulatory diseases) (Brown, Inskip, & Barraclough, 2000; Healy, Matthews, Dunstan, Winkler, & Owen, 2011; Genevieve N. Healy et al., 2008; Salmon, Owen,
Crawford, Bauman, & Sallis, 2003). Specifically, greater total time spent in sedentary behavior is significantly associated with increased triglycerides (N. Owen, Healy, Matthews, & Dunstan, 2010; Tremblay, Colley, Saunders, Healy, & Owen, 2010), higher rates of total cholesterol (Tremblay et al., 2010), larger waist circumference (N. Owen et al., 2010), decreased levels of muscle glucose transporter proteins, which affects the metabolism of carbohydrates (G. N. Healy et al., 2008; N. Owen et al., 2010), and C-reactive protein, which is “an inflammatory marker associated with increased risk of several major diseases, including coronary heart disease and vascular mortality” (p.4) (Healy et al., 2011). For all but the increased rates of triglycerides, these outcomes were evident when controlling for levels of moderate to vigorous physical activity, suggesting that even individuals who engage in a decent amount of higher energy activity but still spend a significant amount of time in sedentary behavior are at risk for poor health conditions (Healy et al., 2011).

Beyond the physical health implications, high levels of sedentary behavior are also associated with increased levels of depressive symptoms (Teychenne, Ball, & Salmon, 2010). Similarly, individuals who watch a significant amount of television, research suggests more than four hours per day, these individuals experience poorer mental health scores as well (Hamer, Stamatakis, & Mishra, 2010).

Slide 8

There’s no way to completely avoid sedentary behavior, but it is important to recognize that an overwhelming percentage of people with mental health conditions experience high levels of sedentary behavior and report lower levels of physical activity than the general population.

One study that focused on individuals with schizophrenia spectrum disorders found that individuals spent an average of 22 hours per day in sleep or sedentary activities.

In another study, it was found that 26% of individuals receiving outpatient mental health services reported zero leisure time physical activity in the previous month and 36% of reported physical activity levels that were significantly lower than the recommended amount.

While many people with mental health conditions may engage in some regular physical activity, most do not participate in enough physical activity to remain healthy. Other research indicates that only 4% of individuals with psychiatric disabilities engaged in the amount and length of physical activity recommended by the Surgeon General.

It has also been found that women are more likely than men and older individuals are more likely than younger individuals to report physical inactivity. Therefore, women and older individuals are especially at risk for the negative effects of sedentary behavior.
Light activities are those that require between 1.6 and 2.9 METs. Light activity may be purposefully acquired, for example walking for pleasure or incidental, or walking for transportation. Light activity accumulated across one’s day is significantly related to total energy expenditure (Pate et al., 2008).

Other activities that are considered light physical activity include washing the dishes, shopping, putting away groceries, or even playing pool or billiards. You’ll notice that most of these activities are not often considered exercise; however, these are the activities that often make up the majority of one’s day, more so than time spent in higher energy activities. Therefore these shouldn’t be ignored when discussing physical activity engagement.

Engagement in light activity levels has both physical (Ross & McGuire, 2011) and mental health (Sieverdes et al., 2012) benefits.

Walking is one of the easiest ways to engage in light activity. Individuals often walk for pleasure or simply to get from one place to another.

The mental health benefits of walking include reduced symptoms of depression, reduced anxiety, reduced stress, as well as an increase in positive emotions. For the physical health benefits, weight, BMI, and weight related disease can all be impacted. In fact, research indicates that small changes in behavior can have a significant impact on the previously identified health risk factors. Light activity (1.6-2.9 METs) accumulated across a day is significantly related to total energy expenditure (Pate et al., 2008). That is the light activity we engage likely accounts for the majority of daily energy expenditure. This points to the relative importance of light behavior independent of MVPA, particularly because light behavior is easier to accumulate and individuals who are obese or those with motivational barriers may more easily incorporate light behavior into a daily routine (Ross & McGuire, 2011).

Similarly, breaks in sedentary behavior are also important. These might include getting up while watching TV to get a drink or pacing while talking on the phone. Research has found that frequent breaks in sedentary behavior, even breaks lasting an average five minutes or less are significantly related to a smaller waist circumference, lower body mass index, and lower levels of triglycerides (G. N. Healy et al., 2008). Literature also indicates light intensity activities can significantly increase muscle glucose transporter protein content, again, which aids in the metabolism of carbohydrates, more so than participation in moderate or vigorous physical activity (Tremblay et al., 2010).
Moderate-Vigorous physical activities (MVPA) are those that expend the most amount of energy. Aerobic activities are activities that make you breathe harder and make your heart beat faster. Moderate-intensity aerobic activities include walking fast, water aerobics, biking with few hills, playing doubles tennis, and pushing a stroller. You can tell you are engaging in a moderate-intensity aerobic activity when your heart rate is increased enough to make you sweat and it is difficult to sing the words to your favorite song, but you are still able to talk.

Vigorous-intensity aerobic activities include jogging, running, swimming laps, biking fast or on hills, playing singles tennis, and playing basketball. You can tell that you are engaged in a vigorous-intensity aerobic activity when you are breathing hard and fast, your heart rate is significantly increased, and you have difficulty saying more than a few words without pausing to breathe. One minute of vigorous-intensity activity is about the same as 2 minutes of moderate-intensity activity, which gives similar health benefits in half the time. Yet, it is important to start with moderate-intensity activities before moving to vigorous activities if one has not been engaged in physical activity recently. Research indicates that as little as a collective increase of 10 minutes of sporadic moderate physical activity across average days can decrease one’s risk factors for all causes of mortality by 6.5% and for cardiovascular disease by 7.5% (Ross & McGuire, 2011).

Increasing physical activity can largely improve physical and mental health outcomes of individuals with mental health conditions.

Integrating physical activity programs into mental health services can help individuals increase their health related fitness and overall physical health. Increased physical activity has been shown to successfully help individuals with mental health conditions significantly decreased weight and waist circumference. This is significant because weight loss has been proven to significantly reduce the risk of developing an obesity-related cardiovascular disease, which is the number one cause of decreased life expectancy among people with mental health conditions.

In addition, decreases in waist circumference have been proven to reduced one’s risk of early mortality.

You’ll notice that on the left side of the slide, there are a number of physical health benefits one may experience. On the right side, these are more tangible outcomes that someone might experience when engaging consistently in moderate-vigorous physical activity. Reduced weight might be reflected in a smaller pant size. As individuals engage in increase physical activity, they may find their endurance also
increases. They might realize that they are sleeping better at night and more awake during the day.

**Slide 13**
Including physical activity in mental health services can also contribute to improvements in psychological and outcomes. Research has documented that individuals with mental health conditions value the mental health benefits of physical activity.

Individuals with mental health conditions report that physical activity results in feeling more energetic, less stressed, and sleeping better. Walking may lead to feelings of happiness and general satisfaction in one’s self (McCafferty et al., 2011). Consumers have also identified that physical activity can help with managing the stress related to life or work (Johansson, Terry, & Henk, 2011). Active participation in meaningful physical activity can help people cope with stress and feel more actively engaged in life, more satisfied with life, and less bored.

Attending physical activity programs may improve mood and increase one’s ability to manage symptoms of his or her diagnosis. Participation in exercise programs also has been shown to increase one’s sense of independence, social interactions, and ability to make decisions and manage routines.

Research suggests that many individuals with mental health conditions participate in few meaningful activities, so regular participation in an exercise program may help increase sense of purpose. Individuals have also reported an increased sense of achievement and confidence due to their ability to successfully participate on a regular basis and become part of a group.

The left side of this slide summarizes some of the mental health benefits of participation in regular physical activity. The right side may be more concrete examples of what these benefits may look like in one’s day-to-day life.

**Slide 14**
According to the 2008 Guidelines for Americans, adults should engage in two types of physical activity each week in order to improve health. One type of activity is aerobic activity and another type is muscle-strengthening activities.

We’ve talked a primarily about aerobic activities, but muscle strengthening activities are equally important. Examples of muscle strengthening activities include lifting weights, working with resistance bands, doing push-ups and sit-ups, digging and shoveling in the garden, and yoga.

**Slide 15**
The Department of Health and Human Services (DHHS, 2008) has identified recommended levels of physical activity for adults. Participation in physical activity at or above this recommended level is when individuals will start to see health
benefits from participation. Weekly recommendations include both aerobic activity and muscle strengthening activities. The weekly recommendations are as follows:

2 hours and 30 minutes (150 minutes) of moderate intensity activity
OR
1 hour and 15 minutes (75 minutes) of vigorous intensity activity
OR
An equivalent mix of moderate and vigorous activity
AND
A minimum of two days of muscle strengthening activities.

Again, aerobic activity includes those activities that increase your heart rate. This may include traditional exercise or even housekeeping activities such as vacuuming or sweeping. In order to have activities count towards the total minutes, individuals should strive for participating in activities that last at least 10 minutes.

Muscle strengthening activities may not be thought of when trying to lose weight, but it’s important to include both types of activity. Muscle strengthening activities can help ensure body fat is lost, not muscle mass. These types of activities can increase bone and muscle strength. Muscle strengthening activities include traditional weight training, which is often done at a gym where weights are available, but also other activities such as: yoga, gardening, carrying heavy objects, and calisthenics (using one's body as weight), among others.

**Slide 16**
This pyramid gives some great examples of how individuals can plan for physical activity throughout the week. One strategy would be to work with consumers to create an individualized pyramid that tailors the types of activities to those that he or she is interested in.

Then the individual can have a visual reminder of the types of activities he or she enjoys and those activities that will help integrate physical activity across one’s week.

**Slide 17**
Now that we have an understanding of what the different levels of physical activity are and how much one should engage in physical activity, we can start to discuss strategies to assess physical activity participation. The assessment of physical activity (and physical inactivity) is important, as it allows the individual to have an understanding of where he or she started and can then engage in more meaningful goal setting. By using assessment strategies that are driven by the consumer, you also establish strategies for individuals to track and monitor their own progress.

**Slide 18**
There are a number of different assessment techniques that can be used. From an agency perspective, it is important to assess physical activity consistently. The
International Physical Activity Questionnaire (IPAQ) is a standardized assessment that looks at sedentary activity, light activity (walking), moderate, and vigorous activity. While there are some issues with this type of self-report, it does provide a standard measure that is not too time-intensive to complete.

However, when working directly with individuals, it is important to utilize an assessment technique that they can manage independently. This may be as simple as a physical activity diary where he or she can write down the amount of time spent in different levels of physical activity. Or, there are a number of more technologically advanced techniques. Accelerometers are devices that capture steps and the frequency of steps taken. This provides both the amount of time spent in activity, and often the level Light or moderate-vigorous of the activity. Many smartphones have accelerometers built-in. Or there are a number of wrist-worn technologies like the FitBit that are increasingly common. Pedometers are a less technologically advanced option, but often more affordable. Pedometers simply count the number of steps, and one can write the total down at the end of the day. For example, the recommended number of steps per day is 10,000. This way individuals can see where they are in terms of steps and whether or not they are meeting the recommended amount. Pedometers are often available through health care centers or can be purchased for a few dollars at drug stores like CVS or walgreens.

A list of examples of strategies to self-monitor physical activity can be found in lesson five of the Supporting Physical Activity: A guide for Peer Support Specialists that can be found on our website and also there is a link at the end of this presentation.

Slide 19
Once you've established a way to monitor physical activity and have an understanding of an individual's baseline level of physical activity participation, you can move forward into some strategies for setting physical activity goals. As with any goal, it is important to first identify what you or the individual with whom you are working hopes to accomplish through changing their behavior.

Some questions you might consider asking yourself or the individual with whom you are working include:
What personal benefits do they hope to achieve? Is it being more active for health reasons? Or is it being more active to increase dating opportunities? Are there different physical or mental health benefits they hope to achieve?

Identifying outcomes that are valued by each individual can help create a clearer picture of how to set goals in a way that will promote increased physical activity. If individuals are able to experience their desired outcomes, such as feeling more energetic, losing weight, or increasing positive moods, through increased physical activity, they are more likely to continue participating in physical activities in the future.
After the meaning behind the goal is identified, start to think about how to achieve those goals. There isn't just one type of physical activity that leads to increased physical activity. Activities that are interesting, enjoyable and meaningful are more likely to lead to sustained behavior change. Often, individuals assume that exercise has to be hard, painful, and tedious; however, you should explore your own interests or, if you're not developing your own goals, the interests of the individual with whom you are working.

Ask about activities they have participated in previously and enjoyed. If this is difficult, create a list of possible physical activities that would help them to achieve their goals. Individuals with mental health conditions may have a difficult time coming up with activities they find interesting or meaningful activities due to depressed moods and decreased enthusiasm for activities, so they may require additional support. In addition, offer suggestions of physical activities that you have found personally fulfilling and meaningful or make suggestions based on other individuals’ experiences. Looking through magazines with individuals that focus on mainstream physical activities or offer alternative activities such as yoga, hiking, gardening, or martial arts may also help stimulate interests and ideas.

Remember! Exercise doesn’t have to be a four letter word! In fact, if the chosen activity is not something that is also meaningful or enjoyable, it’s not likely that the individual will integrate the changes into his or her life. Here are some examples of physical activities that might be more enjoyable than simply going to the gym.

Beyond identifying enjoyable activities, it’s often helpful to develop an action plan that identifies the necessary tasks for achieving one’s goals.

Here is an example of what an individualized physical activity goal and plan might look like. After setting goals and determining that the advantages of an activity outweigh the disadvantages of an activity, it is then time to start taking steps towards participating in the activity and developing an action plan. An action plan is a specific plan that describes when, where, and how an individual will increase their desired behaviors, such participating in a selected physical activity.

Let’s imagine that someone named Joe has decided he wants to jog in a 5k race. After talking with Joe, you get a better understanding that he is motivated to participate in this activity because he will be able to spend time with a family member, he hopes to lose weight, he also hopes that by jogging he will have more energy and spend less time being bored at home. For Joe, running a 5k is something that he can work towards that will provide him a sense of accomplishment. Beyond why he wants to participate, this plan has identified the race he hopes to run (the recovery 5K), and places both inside and outside where he can train. Financial barriers may also be a
concern, so this plan identifies what costs he needs to prepare for. The other factors are items that Joe identified that he needs to do in order to be successful. Notice some of these are physical goods that he will need to purchase, other items are the supports he needs to be successful. Specifically, running with his cousin is a social support he identified and the calendar to track runs will help him monitor his own progress. Finally, the last column identifies how often he thinks he needs to participate in order to be successful. This information could be transferred to his calendar, so he could monitor his own progress.

This is just one example, the columns on the table could be modified based on the goals and needs of the individual with whom you are working. The gist, however, is that a specific plan developed by the individual is laid out identifying key components they need to be successful. Not just identifying the goal, but also identifying what they need in order to achieve it.

**Slide 23**

Once the plan and action steps are set, be sure to build in check points and strategies for the individual to self-monitor progress. Self-monitoring is a critical tool for increasing accountability and sustainability of behavioral change.

For starters, the individual whose goal is to increase physical activity is realistically the only one who will be able to keep track of daily physical activity participation. Others will not be able to monitor their behaviors every day, so it is important to support strategies for the individual to record his or her own physical activity independently.

Secondly, it is helpful for individuals to be a part of the process of monitoring progress towards achieving their goals. Charting activities makes the process more tangible and helps increase one’s accountability. It is more likely that individuals will follow through with attaining their goals if they are responsible for recording their own progress.

Self-monitoring also provides individuals with a sense of independence and control, which has been shown to increase participation in activities among adults with mental health conditions.

Self-monitoring may also help increase individuals’ self-efficacy, the belief that they can achieve their goals. Self-efficacy has been shown to be the most consistent factor related to increased participation in physical activity. Research interventions have shown that keeping records of physical activity can increase feelings of self-efficacy and help individuals maintain physical activity participation over an extended period of time. Therefore, individuals who increase their self-efficacy through self-monitoring are more likely to engage in increased levels of physical activity and achieve their physical activity goals through sustained participation.
The strategies discussed in assessing physical activity can be integrated into the individual’s self-monitoring plan.

**Slide 24**
Finally, it’s important to set benchmarks and time points to discuss progress. Use the Action Plan as a reference to help evaluate one’s progress towards achieving his or her goals. During this review, it is important to focus on successes and remind the individual that behavior change is difficult. Having goals and revisiting them is an important step in the change process, even if he or she hasn’t achieved all of benchmarks.

That being said, it’s important to be candid about progress. Discuss barriers that may not have been initially identified. It’s ok to modify one’s plan or to identify additional supports that may be needed. Remember, if there are any modifications to the physical activity plan, make sure to document what those modifications are and also document what the individual needs in terms of supports to achieve those goals. That way the review process becomes action oriented and can help increase one’s motivation to continue working towards success.

**Slide 25**
This was a relatively quick overview of why physical activity is important for individuals with mental health conditions. This slide provides a summary of what we talked about and steps to support individuals in increasing physical activity participation.

1. Understand why physical activity is important both for one’s physical and mental health
2. Individuals with mental health conditions engage in reduced amounts of physical activity and high amounts of sedentary behavior
3. It is important to develop strategies to assess physical activity levels and current participation with consumers. You should develop assessment strategies that can be used by the individual to help him or her monitor progress. If you’re thinking about agency level outcomes, you should also consider a measurement tool that can be integrated into the assessment process.
4. Identify personally meaningful outcomes of physical activity participation and physical activity goals
5. Identify personally meaningful activities - activities that the individual will enjoy participating in.
6. Set goals and specific action steps to achieve those goals. Including the supports needed in order to be successful
7. Monitor, review, and support progress

**Slide 26**
Here are some additional resources that we have developed at the Temple University Collaborative on Community Inclusion. Remember, while promoting physical activity can look like exercise programs within the mental health agency,
that’s not the only way to increase and support physical activity. These resources really aim to support consumers and providers to integrate physical activity into one’s regular routine outside of the mental health facility, thus creating more self-directed and sustainable physical activity participation.

Please check out these resources and don’t hesitate to contact us if you would like more information or consultation on implementing these strategies.

The recommendations for physical activity document is a resource that documents the benefits of physical activity and reviews physical activity interventions that have been successfully implemented with individuals who have mental health conditions.

The Guide for Peer Specialists is a 5 lesson toolkit for peer support specialists or other providers to support consumers in increasing physical activity.

The Exercise and Walking fact sheets are 2 page documents that identify the benefits of exercise and walking and provide some quick tips on supporting others or increasing your own engagement in these activities.

**Slide 27**
A number of questions were asked during the webinar. We have attached a FAQ sheet with this presentation you can review. If you have other questions, please see our contact information on the next slide and feel free to reach out to us with any questions you might have!

The last two slides list the references we used in this presentation. I would also check out the physical activity documents identified on the previous slides, as they go into even more detail and will help connect you directly to the referenced material.

Thanks! I hope you’ve enjoyed this presentation. Again, if you have any questions, please don’t hesitate to contact us.