## **Community Based Exercise**

Produced by: Parkinson Disease Knowledge Translation Task Force

Fact Sheet	Physical therapists should recommend community-based exercise to reduce motor disease severity, and improve nonmotor symptoms, functional outcomes, and quality of life in individuals with Parkinson disease (PD). Evidence Strength: High; Recommendation Strength: Strong				
	Community-based exercise includes exercise groups or individual exercise program in the community or home where the person follows a manual or set exercises.				
	<ul> <li>Types of people with PD (PwP) who would most/least benefit from community-based exercise training as a part of a multimodal program.</li> <li>1. Community-based exercise is appropriate for people with mild-moderate PD (H&amp;Y 1-3), based on published studies.</li> <li>2. Those with balance and/or cognitive impairments community-based exercise programs may not be appropriate for exercise groups or the community-based exercise may need to be adapted.</li> </ul>				
	How to recommend community-based exercise programs				
	<ol> <li>Frequency: 2 times per week</li> <li>Intensity: Classes should maximize intensity with optimal safety based on individual needs in Hoehn and Yahr stage 1-3.</li> <li>Time/Volume: 45-60 minutes for at least 12 weeks.</li> <li>Type:</li> </ol>				
	a. Recommend the individual with PD select a type of exercise that is interesting and fun for them.				
	<ul> <li>b. Recommend the individual with PD select a type of exercise that provides physical benefits based on your evaluation of the individual.</li> </ul>				
	How to choose a type of community-based exercise (CBE) program? Encourage the person with PD to participate in a CBE program that addresses their deficits. The chart on the next page shows which forms of community-based exercise may improve the associated outcomes. However, it is also important to keep in mind the personal preferences of the individual with PD and the knowledge, skills, and abilities of the exercise instructor. The absence of an icon does not mean the CBE program is ineffective, only that it hasn't been shown to be effective in an RCT for that outcome measure.				
	<ol> <li>Considerations related to safety         <ol> <li>Falls are a potential risk with community-based exercise programs. Take appropriate precautions by adapting activities to a supported position or providing adequate supervision to at-risk individuals.</li> <li>Type of exercise and level of supervision should be personalized based on the individual's safety profile, including falls, orthostatic hypotension, cardiovascular comorbidities, osteoporosis/osteopenia, spinal stenosis, musculoskeletal problems, cognitive abilities, and ability to maintain a good biomechanical form.</li> <li>Community-based exercise classes should be performed "ON" medication.</li> <li>Community-based exercise will be most effective when individuals have adequate cognition to follow instructions without personalized support, and when they have motivation, knowledge, and confidence with exercise to push themselves at an appropriate intensity.</li> </ol> </li> </ol>				

	Community-Based Exercise: Match Your Desired Outcome with an Appropriate Type of Exercise					
EXAMPLES (#)	Motor Disease Severity	With an Aj Functional Mobility	Balance	Gait	Non-Motor Symptoms (**)	Quality of Life
Aerobic Exercise (##)	()					
Balance Exercise	Ť	Ť	Ť			
Boxing (non-contact)						
Dance	*	*	5	5	<b>*</b>	5
Pilates	<u></u>	<u></u>	<u></u>			
Resistance Training					*	
Tai Chi	オ	オ	オ	オ	オ	オ
Yoga	٣		٣	٣	۴	٣

(#) EXAMPLES include commonly available CBE programs. Other local options, such as ai chi, Feldenkrais Method, or Nordic walking may also be considered.

(##) Specific examples of aerobic exercise include cycling, outside walking, running, swimming, and treadmill walking.

(\*) OUTCOMES for gait include measures of endurance, speed, and freezing.

(\*\*) Nonmotor outcomes include anxiety, cognition, depression, fatigue, and sleep.

## Considerations for practice setting

- 1. Community-based exercise programs can be held in clinical settings or community gyms, which may have access to different equipment and personnel.
- 2. Community-based exercise programs may be adapted to be remote, but this will have additional technology, access, and safety considerations.

## Considerations for implementation (cost and space)

- The effectiveness of any community-based exercise program is reliant on the knowledge, skills, and abilities of the group exercise instructor. Work with certified exercise professionals (group exercise instructor, personal trainer, medical fitness professional, exercise physiologist) with experience in Parkinson's disease. Experience in Parkinson's disease can be gained through reputable training courses, on-the job training, and 1:1 training with an experienced physical therapist.
- 2. Build relationships between interprofessional care teams and exercise professionals. Physical therapists should familiarize themselves with community-based exercise providers and programs that they recommend.
- Access to a local fitness facility and the cost of a membership or class (Individuals will need to drive, arrange a ride, or take local transportation):

   a. Senior Center
  - b. Local fitness center (YMCA's often have senior programs and discounts)
  - c. Local outpatient clinics that have a gym attached for individuals to continue their home programs
  - d. Hospital based fitness center
  - e. Non-profit based neurological fitness centers
- 4. Cost of fitness apparel and additional fitness equipment.

Produced by Parkinson Disease Knowledge Translation Task Force



