

# MORE THAN “JUST SPORTS”

Promoting & Measuring  
Health & Wellness  
Impacts through  
Adaptive Sports  
& Recreation



# What is **sportable**?

- Adaptive sports non-profit founded in 2005 in Richmond, VA
- MISSION is to CREATE OPPORTUNITIES and TRANSFORM the LIVES of individuals with physical and visual disabilities through sport
- Currently offers 16 adaptive sport and recreation programs and...
  - Local tournaments and competitions
  - Camps and clinics
  - New wellness programs
  - Community events



*Creating opportunities. Transforming lives.*

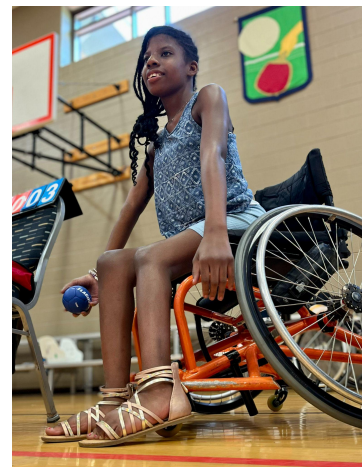
**Sportable provides 16 adaptive sports and recreation opportunities for nearly 500 athletes annually, from ages 3 to 83 with a variety of physical disabilities.**

- Archery
- Boccia
- Kayaking
- Rock Climbing
- Cycling
- Road Racing
- Swimming
- Rowing
- Power Soccer
- CP Soccer
- Goalball
- Pickleball
- Wheelchair Basketball
- Wheelchair Lacrosse
- Wheelchair Rugby
- Wheelchair Tennis

**Beyond our weekly programs, we also host clinics, camps, competitions, and other community events!**

**[sportable.org](https://sportable.org)**





# TEAM SPORTS









Hi, I'm Caitlyn Berry! (she/her) I'm an Occupational Therapist that works for Sportable as their Health & Wellness Outcomes Manager. I volunteered for Sportable through a variety of programs and roles since 2014. I'm passionate about sharing the therapeutic impacts of adaptive sports for kids and adults with disabilities.





Hi, I'm Erica Wilson! (she/her) I'm an occupational therapy doctorate student at Duke University. I coached youth wheelchair basketball at Bridge2Sports for one season. Additionally, I played wheelchair basketball collegiately at the University of Illinois in Urbana-Champaign. My goal is to continue to engage individuals with disabilities in activities that are meaningful to them.



# Tell us about you!



[PollEV.com/CaitlynBerry033](https://PollEV.com/CaitlynBerry033)



# Learning Objectives:

**At the conclusion of this presentation, participants will...**

- apply key takeaways from the evidence to describe how their program improves the overall health and wellness of individuals with disabilities in their community.
- recognize at least one strategy their program is already using that promotes or measures health and wellness and one new strategy they want to try.
- have at least one idea of a new strategic partner they can reach out to in their community to help grow and/or fund their program.





How much physical activity does the CDC recommend all kids get?





Children 6 through 17 should get 60+ minutes daily of physical activity!

Mostly consisting of aerobic activities, plus...

- vigorous-intensity activities
- muscle strengthening activities
- bone strengthening activities

Each ^ 3 days per week

(Children 3 through 5 should “be physically active throughout the day”)





How much physical activity does the CDC recommend all adults get?



Each week adults need...

**150 minutes of moderate-intensity physical activity** and 2 days of muscle strengthening activity.

= 30 minutes 5 times per week

Adults should move more and sit less throughout the day.

Some physical activity is better than none.

Adults who sit less and do any amount of moderate-to-vigorous physical activity gain some health benefits.



# WHAT DO YOU DO TO STAY ACTIVE?

What benefits do you experience  
through those activities?



# The problem...

**1 in 2**  

More than half of adults with physical disabilities get no aerobic physical activity

Research shows regular physical activity and participation in sports contribute to the prevention of disease and depression, promotion of health, and maintenance of functional independence (CDC).

Children with Disabilities are **less active** than non-disabled peers



The participation of children with disabilities in physical activity promotes inclusion, minimizes deconditioning, optimizes physical functioning, improves mental health as well as academic achievement, and enhances overall well-being (AAP).



Adults with disabilities are **2x** as likely to be physically inactive as their non-disabled peers.

People with disabilities who are physically active are more likely to be employed, to believe that being physically active has helped them advance in their jobs, and to lead to a healthier lifestyle (DSUSA).

People with disabilities are underserved in many areas of life and access to physical activity through sport and recreation is no exception.

# Barriers to Adaptive Sports Participation:




- Biases about what people with disabilities can or cannot do (both internal & external)
- Negative self-perceptions, identity, and readiness
- False belief that participation is unsafe or too risky
- Assumption that rules are too hard or the sport/activity can't be adapted
- Lack of transportation, accessible facilities, and/or nearby programs
- Limited providers with adaptive sports and recreation expertise
- High cost of adaptive equipment



# WHO Global Physical Activity and Sedentary Behavior Guidelines for People Living With Disability:

- There are NO MAJOR RISKS for people living with disability engaging in physical activity when it is appropriate to an individual's current activity level, health status, and physical function; and the health benefits accrued outweigh the risks.
- People living with disability may need to consult a health care professional or other physical activity and disability specialist to help determine the type and amount of activity appropriate for them.
- People living with disability should limit the amount of time spent being sedentary and replacing sedentary time with physical activity of any intensity (including light intensity) has health benefits.
- People living with disability should start by doing small amounts of physical activity and gradually increase the frequency, intensity, and duration over time.

**Doing some physical activity is better than doing none!**

 Link!

Carty, C., van der Ploeg, H. P., Biddle, S. J., Bull, F., Willumsen, J., Lee, L., Kamenov, K., & Milton, K. (2021). The First Global Physical Activity and Sedentary Behavior Guidelines for People Living With Disability, *Journal of Physical Activity and Health*, 18(1), 86-93.  
<https://journals.humankinetics.com/view/journals/jpah/18/1/article-p86.xml>



## Promoting the Participation of Children and Adolescents With Disabilities in Sports, Recreation, and Physical Activity

Paul S. Carbone, MD, FAAP;<sup>1</sup> Peter J. Smith, MD, MA, FAAP;<sup>2</sup> Charron Lewis, MD, FAAP;<sup>3</sup> Claire LeBlanc, MD, FAAP;<sup>4</sup>  
COUNCIL ON CHILDREN WITH DISABILITIES, COUNCIL ON SPORTS MEDICINE AND FITNESS

The benefits of physical activity are likely universal for all children, including children and adolescents with disabilities (CWD). The participation of CWD in physical activity, including adaptive or therapeutic sports and recreation, promotes inclusion, minimizes deconditioning, optimizes physical functioning, improves mental health as well as academic achievement, and enhances overall well-being. Despite these benefits, CWD face barriers to participation and have lower levels of fitness, reduced rates of participation, and a higher prevalence of overweight and obesity compared with typically developing peers. Pediatricians and caregivers may overestimate the risks or overlook the benefits of physical activity in CWD, which further limits participation. Preparticipation evaluations often include assessment of health status, functional capacity, individual activity preferences, availability of appropriate programs, and safety precautions. Given the complexity, the preparticipation evaluation for CWD may not occur in the context of a single office visit but rather over a period of time with input from the child's multidisciplinary team (physicians, coaches, physical education teachers, school nurses, adaptive recreation specialists, physical and occupational therapists, and others). Some CWD may desire to participate in organized sports to experience the challenge of competition, and others may prefer recreational activities for enjoyment. To reach the goal of inclusion in appropriate physical activities for all children with disabilities, child, family, financial, and societal barriers to participation need to be identified and addressed. Health care providers can facilitate participation by encouraging physical activity among CWD and their families during visits. Health care providers can create "physical activity prescriptions" for CWD on the basis of the child's preferred activities, functional status, need for adaptation of the activity and the recreational opportunities available in the community. This clinical report discusses the

### abstract

<sup>1</sup>Department of Pediatrics, The University of Utah, Salt Lake City, Utah; <sup>2</sup>Section on Developmental and Behavioral Pediatrics, The University of Chicago, Chicago, Illinois; <sup>3</sup>Division of Developmental Behavioral Pediatrics and Psychopathology, Rainbow Babies and Children's Hospital, Cleveland, Ohio; and <sup>4</sup>Department of Pediatrics, McGill University, Montreal, Quebec, Canada

All authors participated in conception, design, drafting, and critical revision of the clinical report and approved the final manuscript as submitted.

This document is copyrighted and is property of the American Academy of Pediatrics and its Board of Directors. All authors have filed conflict of interest statements with the American Academy of Pediatrics. Any conflicts have been resolved through a process approved by the Board of Directors. The American Academy of Pediatrics has neither solicited nor accepted any commercial involvement in the development of the content of this publication.

Clinical reports from the American Academy of Pediatrics benefit from expertise and resources of liaisons and internal (AAP) and external reviewers. However, clinical reports from the American Academy of Pediatrics may not reflect the views of the liaisons or the organizations or government agencies that they represent.

The guidance in this report does not indicate an exclusive course of treatment or serve as a standard of medical care. Variations, taking into account individual circumstances, may be appropriate.

All clinical reports from the American Academy of Pediatrics automatically expire 5 years after publication unless reaffirmed, revised, or retired at or before that time.

DOI: <https://doi.org/10.1542/peds.2021-054664>

**To cite:** Carbone PS, Smith PJ, Lewis C, et al.; AAP Council on Children With Disabilities, Council on Sports Medicine and Fitness Promoting the Participation of Children and Adolescents With Disabilities in Sports, Recreation, and Physical Activity. *Pediatrics*. 2021;148(6):e2021054664

**“Pediatric health care providers are urged to promote healthy, active living for CWD through physical activity, exercise, recreation, and organized sport by creating specific physical activity prescriptions suited to the child’s interests and ability. The benefits are substantial not only for the children who participate but also for communities that welcome them.”**

Link!

Carbone, P. S., Smith, P. J., Lewis, C., & LeBlanc, C. (2021). Promoting the participation of children and adolescents with disabilities in sports, recreation, and physical activity. *Pediatrics*, 148(6). <https://doi.org/10.1542/peds.2021-054664>



# Benefits of Adaptive Sports for Children:

## PHYSICAL CHANGES:



aerobic capacity/fitness  
muscular strength  
motor coordination  
balance  
bone density



deconditioning  
disease progression  
(Muscular Dystrophy)  
morbidity  
(obesity, infection,  
pressure ulcers)



## PSYCHOSOCIAL CHANGES:



confidence & self-esteem  
friendships and social skills  
emotional adjustment/coping  
executive functioning and  
academic achievement  
overall quality of life



loneliness & depression  
hyperactivity  
maladaptive behaviors

(Carbone et al., 2021)

# Benefits of Adaptive Sports for Adults:

## PHYSICAL CHANGES:



Strength  
Stamina  
Balance  
Mobility  
Daily Function



Chronic Conditions  
Hospitalizations  
Assistance Required  
Body Mass



## PSYCHOSOCIAL CHANGES:



Life satisfaction  
Quality of Life  
Disability Acceptance  
Self-efficacy  
Motivation and hope  
Relationships



Stress  
Social Isolation  
Unemployment

Rayes, R., Ball, C., Lee, K., & White, C. (2022). Adaptive Sports in Spinal Cord Injury: A systematic review. *Current Physical Medicine and Rehabilitation Reports*, 10(3), 145–153. <https://doi.org/10.1007/s40141-022-00358-3>

# Evidence for fostering connection and community:

- People with disabilities experience loneliness, low perceived social support and social isolation at significantly higher rates than non-disabled peers (Emerson et al., 2021).
- The Harvard Study of Adult Development (began in 1938 and still ongoing) is consistently finding that positive relationships keep us happier, healthier, and help us live longer (Waldinger & Shultz, 2023).
- The physical health consequences of poor or insufficient connection include a 29% increased risk of heart disease, a 32% increased risk of stroke, and a 50% increased risk of developing dementia for older adults. Additionally, lacking social connection increases risk of premature death by more than 60% (U.S. Department of Health & Human Services, 2023).
- On May 3, 2023, the U.S. Surgeon General released a new advisory calling attention to the public health crisis of loneliness, isolation, and lack of connection in our country.
  - [New National Strategy to Advance Social Connection](#)
- “Given the significant health consequences of loneliness and isolation, we must prioritize building social connection the same way we have prioritized other critical public health issues such as tobacco, obesity, and substance use disorders. Together, we can build a country that’s healthier, more resilient, less lonely, and more connected.” - Vivek Murthy



**HOW MIGHT YOU BE  
ABLE TO USE THIS  
RESEARCH IN YOUR  
PROGRAM?**



# Assessing Your Impact

- Mult-approach method
- Important to differentiate ourselves from healthcare
- Collaborate with others to create assessment plan (e.g. participants, coaches, students, local universities)



**WHAT ASSESSMENTS  
DO YOU ALREADY  
USE?**





# Objective “Standardized” Assessments



- Formal assessments that have been designed to measure specific characteristics and abilities
- Used in therapy and healthcare to show medical necessity for services
- Widely recognized and often used in research to show an intervention works
- Many, but not all, require specific training or background to administer
- Many assessments cost money to purchase test forms and materials, but many others are available for free
- Shirley Ryan AbilityLab has a Rehabilitation Measures Database with information on 500+ assessments measuring various factors: [sralab.org/rehabilitation-measures](https://sralab.org/rehabilitation-measures)

Link!

# Patient-Reported-Outcomes-Measurement -Information-System (PROMIS) Global

Please respond to each item by marking one box per row		Excellent	Very good	Good	Fair	Poor						
Global 01	In general, would you say your health is:	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1						
Global 02	In general, would you say your quality of life is:	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1						
Global 03	In general, how would you rate your physical health?	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1						
Global 04	In general, how would you rate your mental health, including your mood and your ability to think?	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1						
Global 05	In general, how would you rate your satisfaction with your social activities and relationships?	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1						
Global 09	In general, please rate how well you carry out your usual social activities and roles. (This includes activities at home, at work and in your community, and responsibilities as a parent, child, spouse, employee, friend, etc.)	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1						
		<b>Completely</b>	<b>Mostly</b>	<b>Moderately</b>	<b>A Little</b>	<b>Not At All</b>						
Global 06	To what extent are you able to carry out your everyday physical activities such as walking, climbing stairs, carrying groceries, or moving a chair?	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1						
		<b>Never</b>	<b>Rarely</b>	<b>Sometimes</b>	<b>Often</b>	<b>Always</b>						
Global 10	How often have you been bothered by emotional problems such as feeling anxious, depressed or irritable?	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1						
		<b>None</b>	<b>Mild</b>	<b>Moderate</b>	<b>Severe</b>	<b>Very Severe</b>						
Global 08	How would you rate your fatigue on average?	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1						
Global 07	How would you rate your pain on average?	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input type="checkbox"/> 8	<input type="checkbox"/> 9	<input type="checkbox"/> 10
		No Pain				Worst Imaginable Pain						

**Scoring:**

Re-code Global07. The recoded score ranges from 1 to 5.  
 (0 No pain =5; 1, 2, or 3 =4; 4, 5, or 6 =3; 7, 8, or 9 =2; 10 worst pain imaginable =1)

After recoding, the  
 Global Physical Health score = SUM responses to G03 + G06 + G07 + G08.  
 Global Mental Health score = SUM G02 + G04 + G05 + Global10.

- Created by the National Institute of Health (NIH), PROMIS is an expansive system of person-centered measures that evaluates and monitors functions, symptoms, behaviors, and feelings in a number of different domains.
- 122 different assessment domains, can customize question-set
- Pros: lots of well-designed questions to choose from across many domains, federally created
- Cons: so many questions and versions, can be overwhelming to find what you're looking for

### WHAT ASSISTANCE DO YOU NEED?

People with disabilities often need assistance. We would like to differentiate between personal care for physical disabilities and supervision for cognitive problems. First, focus on physical "hands on" assistance: This includes help with eating, grooming, bathing, dressing, management of a ventilator or other equipment, transfers etc. Keeping in mind these daily activities...

1. How many hours in a typical 24-hour day do you have someone with you to provide physical assistance for personal care activities such as eating, bathing, dressing, toileting and mobility?

\_\_\_\_\_ hours paid assistance  
\_\_\_\_\_ hours unpaid (family, others)

### ARE YOU UP AND ABOUT REGULARLY?

4. On a typical day, how many hours are you out of bed?  
\_\_\_\_hours
5. In a typical week, how many days do you get out of your house and go somewhere? \_\_\_\_days
19. Approximately how much did you pay last year for medical care expenses? (Consider any amounts paid by yourself or the family members in your household and not reimbursed by insurance or benefits.)

"Would you say your unreimbursed medical expenses are...."

Less than 1000  
1,000 – 2,500  
2,500 – 5,000  
5,000 – 10,000  
10,000 or more

# Craig Handicap Assessment and Reporting Technique (CHART)

Link!

- Based on the now outdated WHO ICIDH framework
- Assesses 6 domains: Physical Independence, Cognitive Independence, Mobility, Occupation, Social Integration, Economic Self-Sufficiency
- 32 items (long form), 19 items (short form)
- Administration options of interview or paper
- Pros: Comprehensive assessment, long and short form, could pull out specific questions as guide
- Cons: May be too comprehensive for our field, viewed as intrusive, and dated "Handicap" term in name



Please indicate how well each statement describes you and/or your current situation based on a 11-point scale in which "0 = completely not describe me or my situation" to "10 = fully describe me or my situation".



1.	I move around my living quarters as I feel necessary. 我能在我的住處隨意走動。	
2.	I move around my community as I feel necessary. 我能在我的社區隨意走動。	
3.	I am able to take trips out of town as I feel are necessary. 有需要時，我可隨意安排行程出國。	
4.	I am comfortable with how my self-care needs (dressing, feeding, toileting, bathing) are met. 我能夠妥善照顧個人護理需求(穿衣，進食，如廁，洗澡) 感到滿意。	
5.	I spend most of my days occupied in a work activity that is necessary or important to me. 我的精神體力足夠應付對我有必要或重要的活動上。	
6.	I am able to participate in recreational activities (hobbies, crafts, sports, reading, television, games, computers, etc.) as I want to or is necessary. 我可以參與各類休閒活動(例如：興趣，手工藝，運動，閱讀，電視遊戲，電腦等)。	
7.	I participate in social activities with family, friends, and/or business acquaintances as necessary or desirable to me. 當有需要或對我適合時，我會參與親友及/或工作友好的社交活動。	
8.	I assume a role in my family that meets my needs and those of other family members. 在家庭的角色，我可以照顧家人的需求。	
9.	In general, I am comfortable with my personal relationships. 總括而言，我很滿意我的人際關係。	
10.	In general, I am comfortable with myself when I am in the company of others. 總括而言，我很滿意自己和別人相處時的表現。	
11.	I feel that I can deal with life events as they happen. 我認為我可以處理不同人生的大事。	
Total scores of the 11 items 11 個陳述句的得分總和		/110
Scores after adjustment = (total scores / 110) x 100 調整後分數 = (總分 / 110) x 100		/100

## Reintegration to Normal Living Index (RNLI) Link!

- Developed to assess the degree to which individuals who have experienced traumatic or incapacitating illness achieve reintegration into normal social activities (e.g. recreation, movement in the community, and interaction in family or other relationships)
- Researched and found effective for testing a variety of disabilities (i.e. stroke, TBI, SCI, amputations, nervous system disorders)
- Pros - short, straightforward, scale or simple agree/disagree answer choices (RNLI - P)
- Cons - not as relevant to individuals born with their disability, hard to find assessment form, older created in late 1980s

# Godin Leisure-Time Exercise Questionnaire

During a typical 7-Day period (a week), how many times on the average do you do the following kinds of exercise for **more than 15 minutes** during your free time (write on each line the appropriate number).

Weekly leisure activity score = (9 × Strenuous) + (5 × Moderate) + (3 × Light)

	Times per week		Totals
a) <b>STRENUOUS EXERCISE (HEART BEATS RAPIDLY)</b> (e.g., running, jogging, hockey, football, soccer, squash, basketball, cross country skiing, judo, roller skating, vigorous swimming, vigorous long distance bicycling)		X9	
b) <b>MODERATE EXERCISE (NOT EXHAUSTING)</b> (e.g., fast walking, baseball, tennis, easy bicycling, volleyball, badminton, easy swimming, alpine skiing, popular and folk dancing)		X5	
c) <b>MILD/LIGHT EXERCISE (MINIMAL EFFORT)</b> (e.g., yoga, archery, fishing from river bank, bowling, horseshoes, golf, snow-mobiling, easy walking)		X3	
<b>WEEKLY LEISURE-TIME ACTIVITY SCORE</b>			

## EXAMPLE

Strenuous = 3 times/wk

Moderate = 6 times/wk

Light = 14 times/wk

Total leisure activity score = (9 × 3) + (5 × 6) + (3 × 14) = 27 + 30 + 42 = 99

Godin Scale Score	Interpretation
24 units or more	Active
14 – 23 units	Moderately Active
Less than 14 units	Insufficiently Active/Sedentary

Adapted from: Godin, G. (2011). The Godin-Shephard leisure-time physical activity questionnaire. *Health & Fitness Journal of Canada*, 4(1), 18-22.



# Godin Leisure-Time Exercise Questionnaire

Link!

- Self-report measure of weekly physical activity
- Researched with M.S. and oncology patients
- Provides scoring categories of active, moderately active, and insufficiently active/sedentary
- Pros: short, easy to integrate into program sign-ups, can show change, easy to score
- Cons: only looking at physical activity, examples on form are not inclusive to disability

<p>4. More than 4hr</p> <p>2. During the past 7 days, how often did you walk, wheel, push outside your home other than specifically for exercise. For example, getting to work or class, walking the dog shopping, or other errands?</p> <ol style="list-style-type: none"> <li>1. Never (Go to question #3)</li> <li>2. Seldom (1-2d)</li> <li>3. Sometimes (3-4d)</li> <li>4. Often (5-7d)</li> </ol> <p>On average, how many hours per day did you spend wheeling or pushing outside your home?</p> <ol style="list-style-type: none"> <li>1. Less than 1hr</li> <li>2. 1 but less than 2hr</li> <li>3. 2-4hr</li> <li>4. More than 4hr</li> </ol>		
<p>3. During the past 7 days, how often did you engage in light sport or recreational activities such as bowling, golf with a cart, hunting or fishing, darts, billiards or pool, therapeutic exercise (physical or occupational therapy, stretching, use of a standing frame) or other similar activities?</p> <ol style="list-style-type: none"> <li>1. Never (Go to question #4)</li> <li>2. Seldom (1-2d)</li> <li>3. Sometimes (3-4d)</li> <li>4. Often (5-7d)</li> </ol> <p>What were these activities?</p> <p>On average, how many hour per day did you spend in these light sport or recreational activities?</p> <ol style="list-style-type: none"> <li>1. Less than 1hr</li> <li>2. 1 but less than 2hr</li> <li>3. 2-4hr</li> <li>4. More than 4hr</li> </ol>		
<p>4. During the past 7 days, how often did you engage in moderate sport and recreational activities such as doubles tennis, softball, golf without a cart, ballroom dancing, wheeling or pushing for pleasure or other similar activities?</p> <ol style="list-style-type: none"> <li>1. Never (Go to question #5)</li> <li>2. Seldom (1-2d)</li> <li>3. Sometimes (3-4d)</li> <li>4. Often (5-7d)</li> </ol> <p>What were these activities?</p> <p>On average, how many hours per day did you spend in these moderate sport and recreational activities?</p> <ol style="list-style-type: none"> <li>1. Less than 1hr</li> <li>2. 1 but less than 2hr</li> <li>3. 2-4hr</li> </ol>		

# Physical Activity Scale for Individuals with Physical Disabilities (PASIPD)

Link!

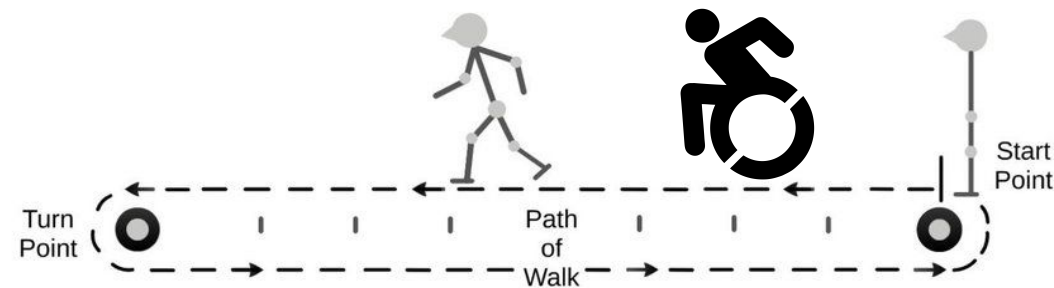
- Modified disability version of the 10 item Physical Activity Scale for the Elderly (PASE), developed targeting individuals with visual/auditory and locomotor/SCI disabilities
- Assesses 5 distinct dimensions of physical activity: home repair, lawn and garden work, housework, vigorous sport and recreation, moderate sport and recreation, and occupation and transportation
- 13 questions, each with 2 parts, assessing frequency then duration across past week
- Pros: Disability sensitive and specific, only 13 questions, looks at physical activity through a functional lens
- Cons: Some examples feel dated, may not account for differences in lifestyle and priorities (e.g. "In past 7 days, how often did you engage in outdoor gardening?")



# 6 Minute Walk/Push Test

Link!

- Originally designed to assess patients with cardiopulmonary issues, but over time has been studied and found effective to assess nearly all ages (2 and older) and many disability types
- Can be administered walking independently, walking with assistive technology, or pushing in a wheelchair
- Uses some basic supplies including cones, tape, stopwatch, and RPE scale



- Pros: can show change in cardiovascular fitness over time, can be integrated into practices
- Cons: takes some training, uses script, takes time and space to administer, not valid for power mobility

# Subjective “Self-report” Data

Please rate how the following **physical health factors** are affected by your participation in Sportable programs.

## Strength

1=Major Decrease 2=Decrease 3=No Change 4=Increase 5=Major Increase

1 2 3 4 5

## Coordination

1=Major Decrease 2=Decrease 3=No Change 4=Increase 5=Major Increase

1 2 3 4 5

- Consider what you’re trying to achieve through your programs
- Design questions around these goals and ask participants for feedback
- Can include:
  - Satisfaction with program
  - General experiences
  - Changes in physical and mental health
  - Self-perceptions
- Paper or online forms
  - Survey Monkey, Involvement.me
- Interviews
- Great opportunity to choose questions specific to your community and what you want to know
  - “Have any of the athletic skills you've gained carried over into other areas of your life?”
  - “Why do YOU participate in Sportable programs?”

# EXAMPLE QUESTIONS WE ASK

## Physical Health *(Required)*

---

How satisfied are you with your physical health (strength, endurance, mobility, etc.)?

- Very Unsatisfied**
- Unsatisfied**
- Neutral**
- Satisfied**
- Very Satisfied**

## Mental Health *(Required)*

---

How satisfied are you with your mental health (self-esteem, coping, overall mood, etc.)?

- Very Unsatisfied**
- Unsatisfied**
- Neutral**
- Satisfied**
- Very Satisfied**

## Social Health *(Required)*

---

How satisfied are you with your social health (having meaningful relationships or friendships, social connection, and feeling sense of community)?

- Very Unsatisfied**
- Unsatisfied**
- Neutral**
- Satisfied**
- Very Satisfied**





# Athlete Stories







# wins

*sportable* WELLNESS INITIATIVES

- MENTOR Wellness Program
- Sportable Squad
- Wellness Webinars



This project and related materials are supported (in part) by Contract # A262 – 90012 from the Commonwealth Neurotrauma Initiative (CNI) Trust Fund administered by the Department for Aging and Rehabilitative Services. The contents are the sole responsibility of the authors and do not necessarily represent the official views of the CNI Trust Fund or DARS.



# Why add wellness?



- To provide an accessible entry point for new athletes
- To promote overall health of our athlete community
- Because it's a natural extension of what we're already doing
- Because we're uniquely positioned to do so

# mentor

Mindfulness, Exercise, and Nutrition To Optimize Resilience



Created by the National Center on Health, Physical Activity, and Disability (NCHPAD) in collaboration with the Lakeshore Foundation & UAB

- Evidence-based, 8 week virtual wellness program designed specifically for people with disabilities
- Meets 5x/week
  - Monday - Mindfulness
  - Tuesday - Exercise
  - Wednesday - Nutrition
  - Thursday - Exercise
  - Friday - Health Coaching
- Classes are live, interactive group sessions via Zoom
- It's completely FREE!
- We've partnered with NCHPAD to lead MENTOR programs locally, but anyone can join
- [mentor.nchpad.org](https://mentor.nchpad.org)

What did you like most about this Sportable Squad event?

“I got to hangout with my soccer friends and other people who are a part of the Sportable community!”

“This was a fun leisure activity with my peers in the adaptive sports community. I enjoyed seeing athletes that I would not normally see at the sports I play.”

“Fun to try something new and also realize that I can.”

“Feeling connected with others like myself.”



### Sportable Squad Events:

This new event series features inclusive fitness and recreation events throughout the year. Move your body, spend time in nature, try a new sport, explore new accessible locations, and make some new friends.

### Wellness Webinars:

Monthly one-hour webinars with experts covering various Health & Wellness topics.

Topics covered:

Nutrition for Athletes presented by Emily Moore, Registered Dietitian

Adaptive Athletes and Functional Fitness presented by Emily Kramer-Throckmorton owner of Kaizen Adaptive Training

Pathways to Independence through Youth Adaptive Sports with Team USA Women's Basketball Coach, Christina Schwab

Empowering People with Disabilities to Promote their own Health presented by Patty Kunze, R.N. with a SCI



**So you have an  
adaptive program, you  
know it's promoting  
health, and you're  
collecting data that  
confirms it. Now what?**

How do you use this information?

# Partnerships:

## Recruiting Athletes



## WHERE TO REACH OUT:

- Inpatient & Outpatient Therapy centers
- Local hospitals
  - Target relevant departments (e.g. Physical Medicine & Rehabilitation)
  - Target specific clinics (e.g. Spina Bifida clinic)
- Local Orthotic & Prosthetic businesses
- Local DME vendors
- Local school systems
- Centers for Independent Living
- Other organizations similar to yours

## WHAT TO DO:

- Deliver posters and flyers
- Offer staff inservices
- Collaborate together

# Partnerships:

Building sustainable programs



## WHERE TO REACH OUT:

- State Rehabilitation Agency
- Local Parks & Recreation Departments
- Local Hospital and Rehabilitation Foundations
- Local universities (OT, PT, etc.)
- Local YMCAs
- Local schools
- Other community organizations doing similar but different work

## WHAT TO DO:

- Trust your expertise
- Remember that often these organizations are trying to reach more people with disabilities
- Collaborate!



**WHO DO YOU  
PARTNER WITH FOR  
RECRUITMENT OR  
SUSTAINABILITY?**



*Remember the evidence...*

Just by creating opportunities  
for people with disabilities to  
be active and be a part of a  
community, **YOU ARE**  
**ALREADY DOING GREAT**  
**WORK!**





"Being part of a team is something that I thought I had lost forever. I feel like an athlete. Sportable gives me an outlet to be competitive on the playing field."



"Soccer was a life changing positive experience for our son. We now have hope on movement and coordination while enjoying a sport, when he used to only do therapies. He is happier, much more confident, and sociable because of his experience at Sportable."



"Participating in sports is my social time. I live alone and enjoy the camaraderie of doing activities like cycling, kayaking, rock climbing, and archery."

# Questions?

**REACH OUT ANYTIME!**

[Caitlyn@sportable.org](mailto:Caitlyn@sportable.org)

[Erica.Wilson459@duke.edu](mailto:Erica.Wilson459@duke.edu)

[sportable.org](https://sportable.org)



# References:

- Carty, C., van der Ploeg, H. P., Biddle, S. J., Bull, F., Willumsen, J., Lee, L., Kamenov, K., & Milton, K. (2021). The First Global Physical Activity and Sedentary Behavior Guidelines for People Living With Disability, *Journal of Physical Activity and Health*, 18(1), 86-93. <https://journals.humankinetics.com/view/journals/jpah/18/1/article-p86.xml>
- Carbone, P. S., Smith, P. J., Lewis, C., & LeBlanc, C. (2021). Promoting the participation of children and adolescents with disabilities in sports, recreation, and physical activity. *Pediatrics*, 148(6). <https://doi.org/10.1542/peds.2021-054664>
- Emerson, E., Fortune, N., Llewellyn, G., & Stancliffe, R. (2021). Loneliness, social support, social isolation and wellbeing among working age adults with and without disability: Cross-sectional study. *Disability and health journal*, 14(1), 100965. <https://doi.org/10.1016/j.dhjo.2020.100965>
- Rayes, R., Ball, C., Lee, K., & White, C. (2022). Adaptive Sports in Spinal Cord Injury: A systematic review. *Current Physical Medicine and Rehabilitation Reports*, 10(3), 145–153. <https://doi.org/10.1007/s40141-022-00358-3>
- Schulz, M., & Waldinger, R. (2023, January 24). *What the longest study on human happiness found is the key to a good life*. The Atlantic. <https://www.theatlantic.com/ideas/archive/2023/01/harvard-happiness-study-relationships/672753/>
- U.S. Surgeon General. (2023, May 3). New Surgeon General Advisory Raises Alarm about the Devastating Impact of the Epidemic of Loneliness and Isolation in the United States. *U.S. Department of Health & Human Services*. Retrieved May 8, 2023, from <https://www.hhs.gov/about/news/2023/05/03/new-surgeon-general-advisory-raises-alarm-about-devastating-impact-epidemic-loneliness-isolation-united-states.html>.