



Mass General Brigham

Spaulding Rehabilitation

Adaptive Sports Centers

From Data to Development: Using Goal-Related Documentation Systems to Strengthen Adaptive Sport Programming

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Elizabeth Dahlen, CTRS – Spaulding Adaptive Sports Centers

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Learning Objectives

1. **Identify** key performance indicators and assess the feasibility of Spaulding Adaptive Sports Centers GRIDS tool.
2. **Highlight** individualized client goals and examine their impact on program facilitation and client progress.
3. **Evaluate** past summer program data and apply findings to improve and strengthen our adaptive sports program.



Who We Are



Brendan Cormier, CTRS

Research Coordinator at
Kelley Adaptive Sport
Research Institute

Program Specialist at
Northeast Passage



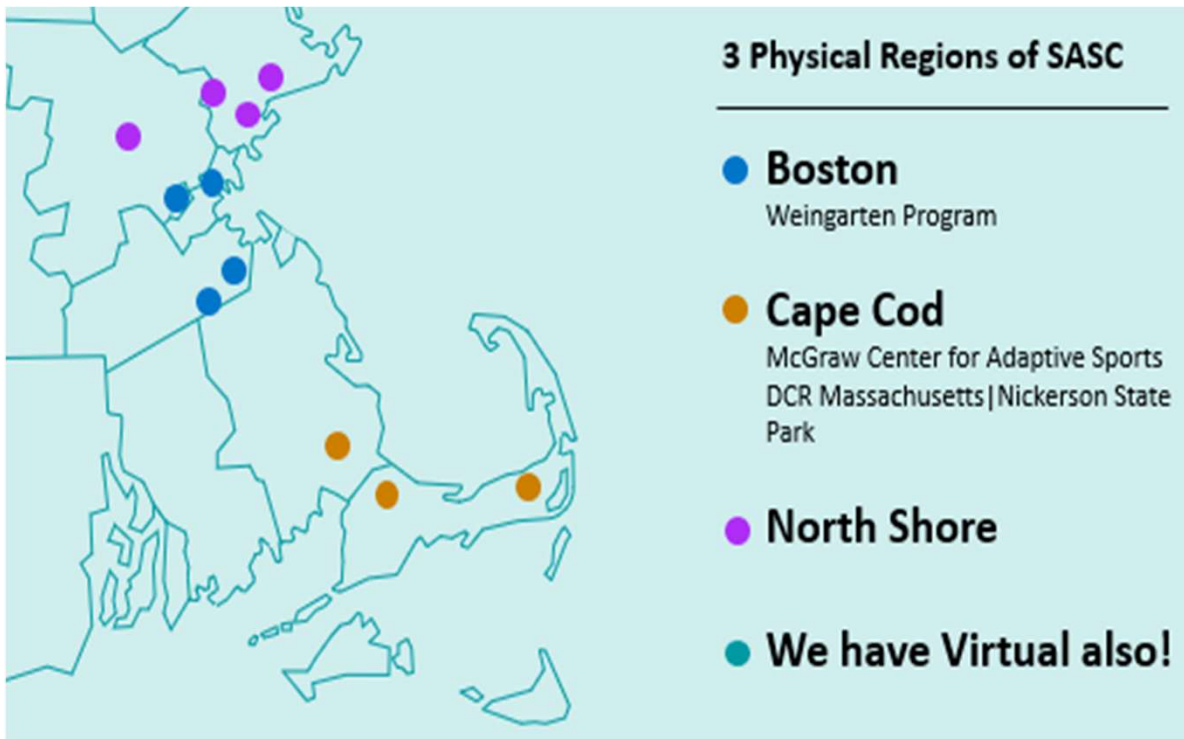
Elizabeth Dahlen, CTRS

Cape Cod Programs Manager
Network Programs Manager

Spaulding Adaptive Sports
Centers



Spaulding Adaptive Sports Centers (SASC)



Part of the Mass General Brigham Healthcare System

PT, OT, TR, Adaptive Sport Professionals

Low – cost accessible sport & recreation

Over 46 sport & recreation programs serving over 500 clients annually

Bridging the gap from rehabilitation to lifelong health and wellness



Introducing REDCap

- Secure web platform for building and managing online databases and surveys
- Streamlined process for rapidly creating and designing projects
- Free to use survey software available to non-profit organizations that join REDCap consortium
- Supported by Mass General Brigham HealthCare System with unique MGB staff login



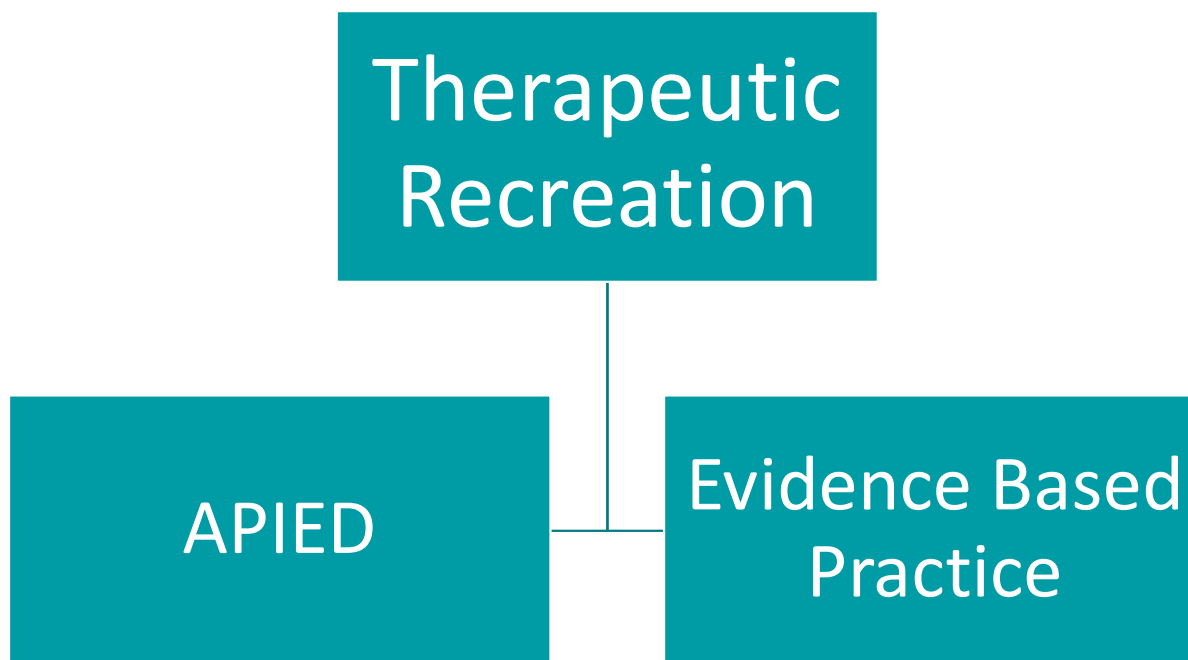
Goal Related Internal Documentation System GRIDS

Developed in 2020 to:

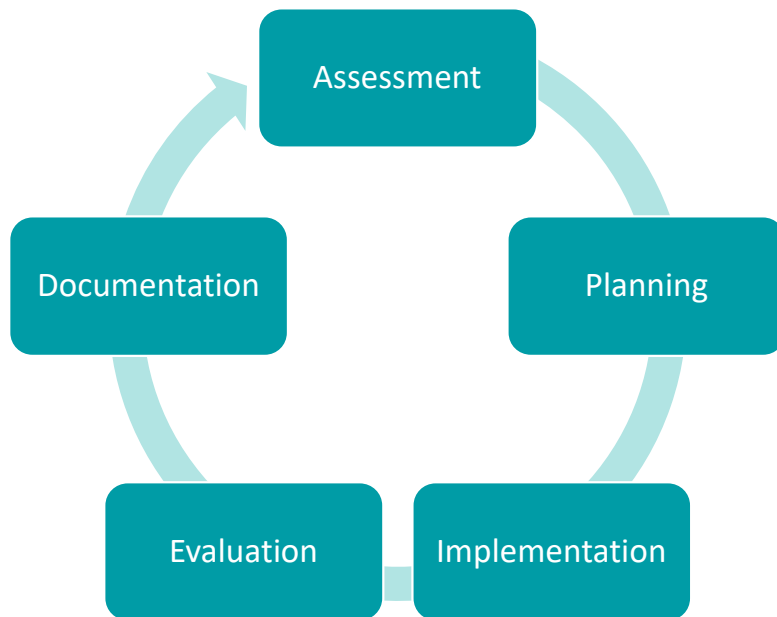
1. Strengthen SASC's clinical emphasis through the integration of Therapeutic Recreation principles.
2. Provide a structured framework to support staff plan, structure, individualize, and facilitate sessions effectively.
3. Promote consistent high-quality documentation across our system.
4. Emphasize SMART goals to guide, educate, and motivate both staff and participants during daily adaptive sports sessions.



Therapeutic Recreation Foundations



APIED Process



Helps programs standardize:

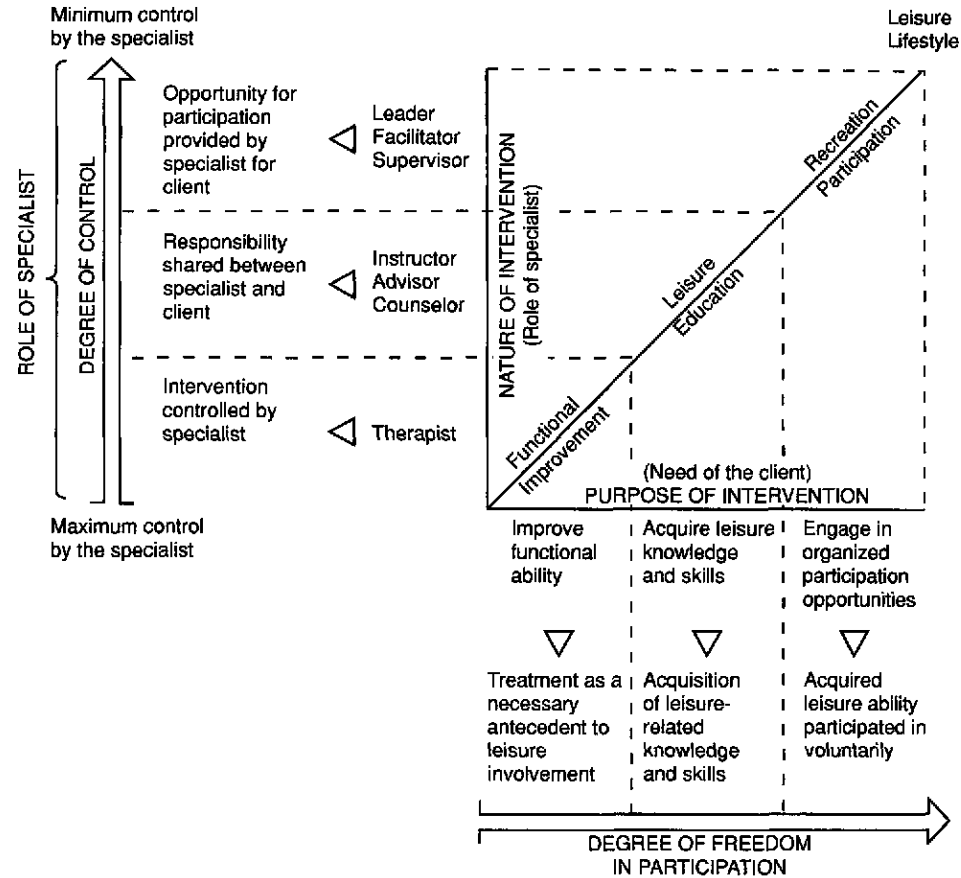
- Who test is given to
- How test is given
- How answers are scored
- Procedure to interpret findings

Serves as SASC Feasibility Outcome Measure:

- Each step becomes a Key Performance Indicator (KPI)
- Goal of 75% form completion for each APIE metric.



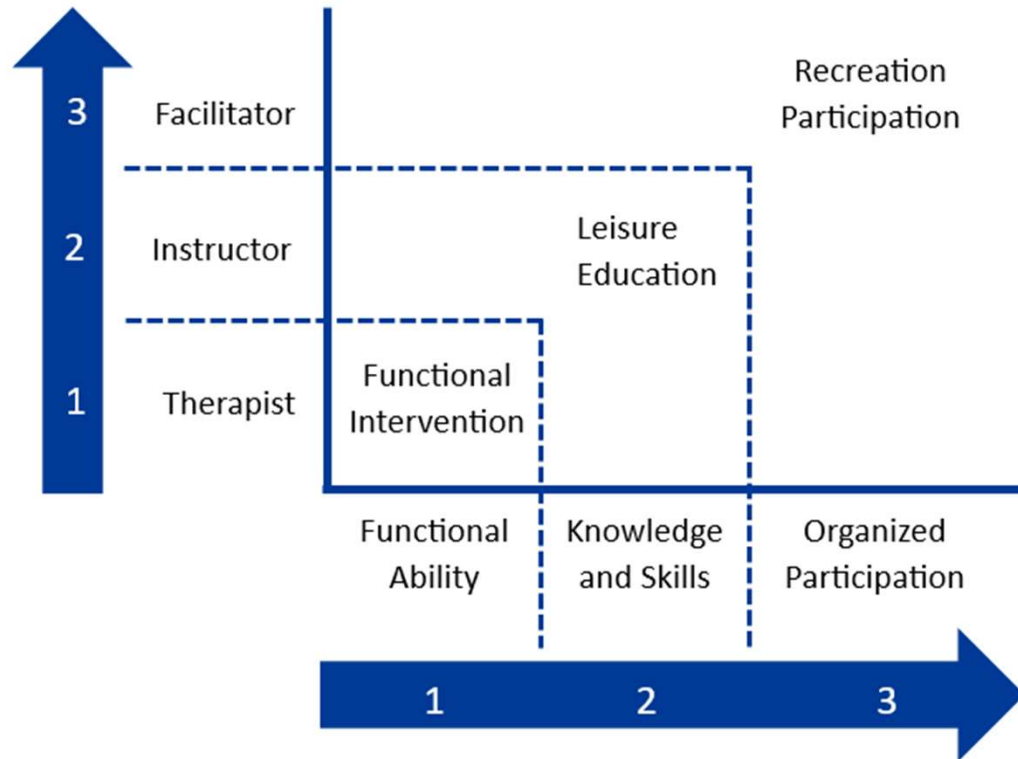
Leisure Ability Model



Leisure Ability Model

Staff Role Scale

- 1: Therapist (maximum influence)
- 2: Instructor (moderate influence)
- 3: Facilitator (minimum influence)



Participant Need Scale

- 1: Functional Ability (needs maximum support)
- 2: Knowledge and Skills (needs moderate support)
- 3: Organized Participation (needs minimum support)



Goals Falling Into Three Anticipated Outcomes

Functional Intervention

Physical
Cognitive
Emotional
Social

Leisure Education

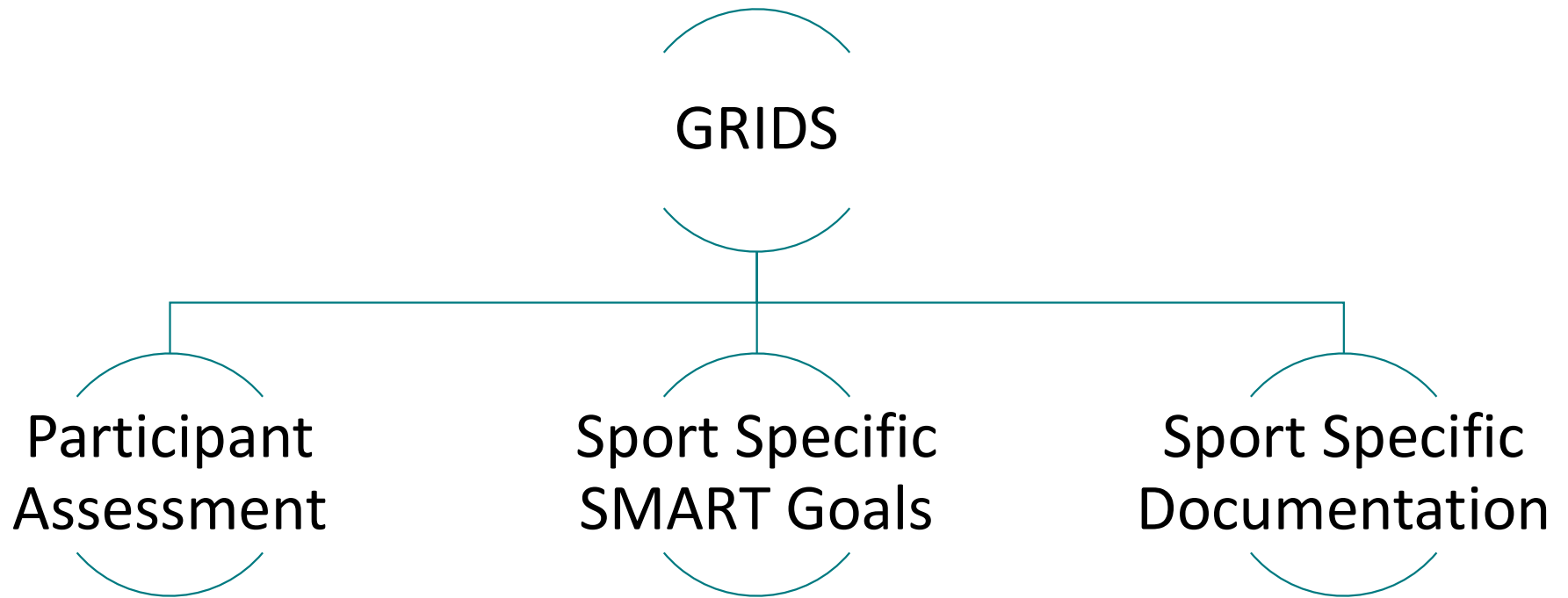
Referrals
Resources
Opportunities

Recreation Participation

Skill
Development
Challenge
Fun



Components of GRIDS



Participant Assessment

Date Main: <input type="text" value="12/1"/> Today M-D-Y		Staff Initials: <input type="text"/>		
Participant Name: <input type="text"/>		Region: <input type="checkbox"/> Boston <input type="checkbox"/> Cape Cod <input type="checkbox"/> North Shore		
Primary Diagnosis:	Neurological: <input checked="" type="checkbox"/> <input type="checkbox"/> Spinal Cord Injury <input type="checkbox"/> Spina Bifida <input type="checkbox"/> Stroke <input type="checkbox"/> Traumatic Brain Injury <input type="checkbox"/> Multiple Sclerosis <input type="checkbox"/> Parkinson's Disease <input type="checkbox"/> Cerebral Palsy	Musculoskeletal: <input checked="" type="checkbox"/> <input type="checkbox"/> Amputee <input type="checkbox"/> Joint Osteoarthritis <input type="checkbox"/> Spine Conditions <input type="checkbox"/> Post Surgical	Developmental: <input checked="" type="checkbox"/> <input type="checkbox"/> Autism Spectrum <input type="checkbox"/> Asperger's Syndrome <input type="checkbox"/> Global Development Delay <input type="checkbox"/> Downs Syndrome	
	Hearing: <input checked="" type="checkbox"/> <input type="checkbox"/> Deaf <input type="checkbox"/> Hard of Hearing	Visual: <input checked="" type="checkbox"/> <input type="checkbox"/> Low Vision or Legally Blind <input type="checkbox"/> Completely Blind	Other: <input checked="" type="checkbox"/> <input type="checkbox"/> Burn Injury <input type="checkbox"/> Post-Covid Recovery <input type="checkbox"/> Please list any other types of disability not previously listed:	Mental Health: <input checked="" type="checkbox"/> <input type="checkbox"/> Attention Deficit Disorder/Attention Deficit Hyperactivity Disorder (ADD/ADHD) <input type="checkbox"/> Post Traumatic Stress Disorder
	Secondary Diagnosis: <input type="text"/>			

Speech/Language Affected?	<input type="radio"/> Yes <input type="radio"/> No	reset
Mobility	<input type="text" value=""/>	
Mobility Device	<input type="checkbox"/> Crutches <input type="checkbox"/> Quad Cane <input type="checkbox"/> Straight Cane <input type="checkbox"/> Rollator <input type="checkbox"/> Rolling Walker <input type="checkbox"/> Prosthetic <input type="checkbox"/> AFO <input type="checkbox"/> Gait Belt	
Have you experienced any changes to your medical history?	<input type="radio"/> Yes <input type="radio"/> No	reset
Assessment Notes:	<input type="text"/>	Expand
Staff Considerations and Safety Concerns:	<input type="text"/>	Expand



Sport Specific SMART Goals

Cycle Assessment and Planning		Date: 05-20-2024 Today M-D-Y Staff Initials: EMD		
Participant Goal	SMART Goal	Staff Role	Participant Need	Leisure Ability Model
<input checked="" type="checkbox"/> Cycle 40 miles on first day of MV Ride.	Client will complete 40 miles during day 1 of MV Ride in October.	<input type="radio"/> Therapist <input type="radio"/> Instructor <input type="radio"/> Facilitator	<input type="radio"/> Functional ability <input type="radio"/> Knowledge and skills <input type="radio"/> Organized participation	
Expand		reset	reset	
<input checked="" type="checkbox"/> Client wants to start conversation about adaptive bike storage in area for her and other adaptive cyclist	Advocate for storage space for adaptive cyclist by setting up a meeting with SASC and DCR by end of season.	<input type="radio"/> Therapist <input type="radio"/> Instructor <input type="radio"/> Facilitator	<input type="radio"/> Functional ability <input type="radio"/> Knowledge and skills <input type="radio"/> Organized participation	
		reset	reset	



Live Poll



Sport Specific Documentation

Goal Focus:	<input checked="" type="checkbox"/> Client will complete 40 miles during day 1 of MV Ride in October. <input type="checkbox"/> Advocate for storage space for adaptive cyclist by setting up a meeting with SASC and DCR by end of season. <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> Other
Session Notes:	<p>Client goal for session was to go over 11 miles today to work on her endurance. Client independently initiated 3 water breaks t/o session.</p> <p>Client stated she wants to try to go left on the trail next session to get more experience with doing hills to work on muscle strength and endurance to prepare for MV Ride.</p>

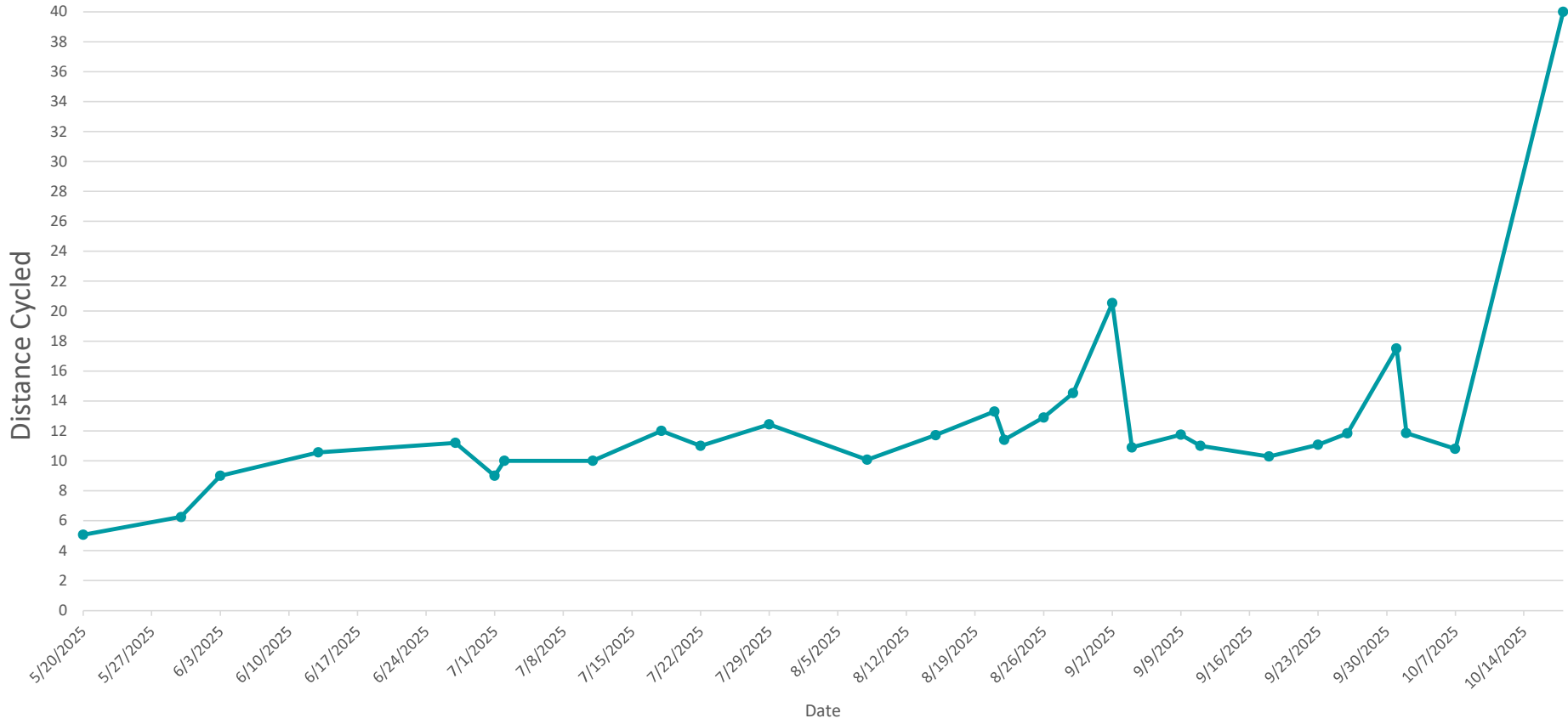


Goal Evaluation

Cycle Evaluation		Date: 10-27-2024 Today M-D-Y		
		Staff Initials: EMD		
Goal Focus	Staff Role	Participant Need	Leisure Ability Model	Goal Status
Client will complete 40 miles during day 1 of MV Ride in October.	Facilitator <input type="radio"/> Therapist <input type="radio"/> Instructor <input checked="" type="radio"/> Facilitator <small>reset</small>	Functional ability <input checked="" type="radio"/> Functional ability <input type="radio"/> Knowledge and skills <input type="radio"/> Organized participation <small>reset</small>	Recreation Participation	Completed Completed 40 miles on Day 1 and 25 miles on Day 2. <small>Expand</small>
Advocate for storage space for adaptive cyclist by setting up a meeting with SASC and DCR by end of season.	Instructor <input type="radio"/> Therapist <input checked="" type="radio"/> Instructor <input type="radio"/> Facilitator <small>reset</small>	Knowledge and skills <input type="radio"/> Functional ability <input checked="" type="radio"/> Knowledge and skills <input type="radio"/> Organized participation <small>reset</small>	Leisure Education	Ongoing Conversations were started but bigger logistics to flush out (liability, storage space location, access, etc.).



Client's Mileage



Program Evaluation: Summer 2025



209 Unique Clients Assessed



289 Client Goals Collected



173 Cycle Specific Goals



Cycling Summer 2025: Distance Goals



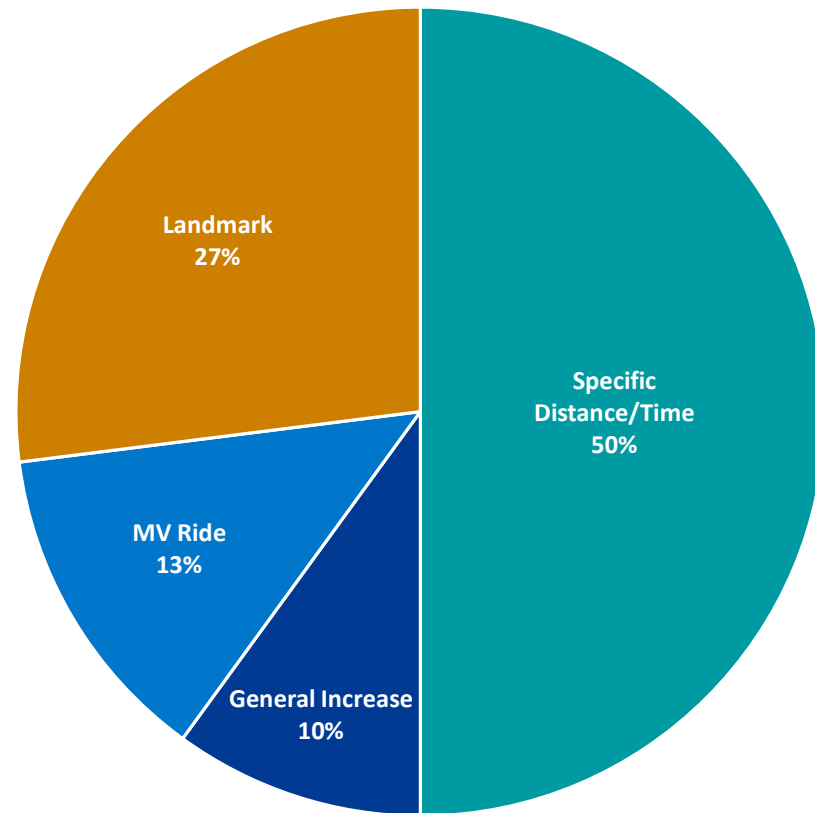
144 Clients Participated in Cycling



173 Cycle Specific Goals



79 Goals Related to Distance



Strengthening Adaptive Sports Programming

Leveraging structured data collection and standardized documentation to improve participant progress, staff communication and overall program quality

1

Evaluate goals to identify barriers to progress

2

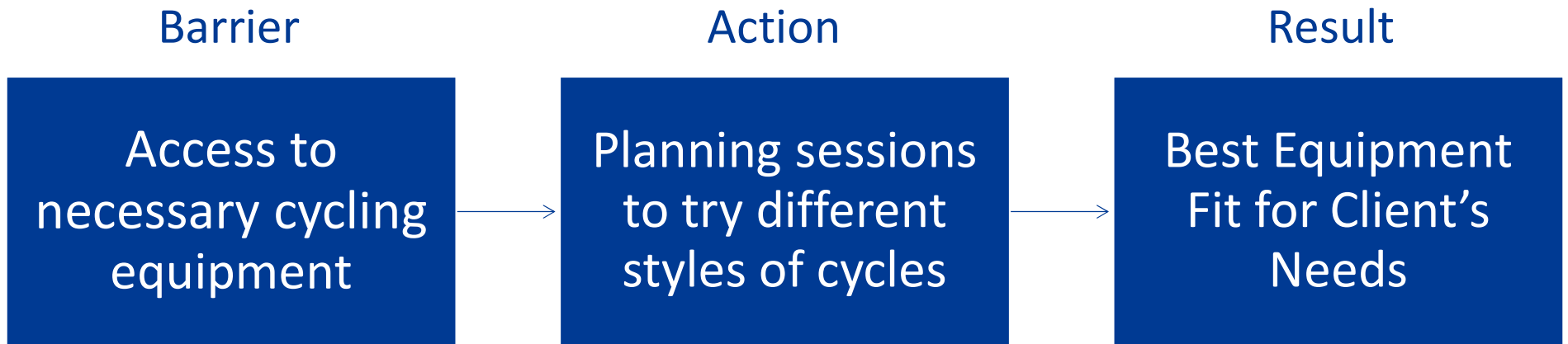
Implement short-term action items to address challenges

3

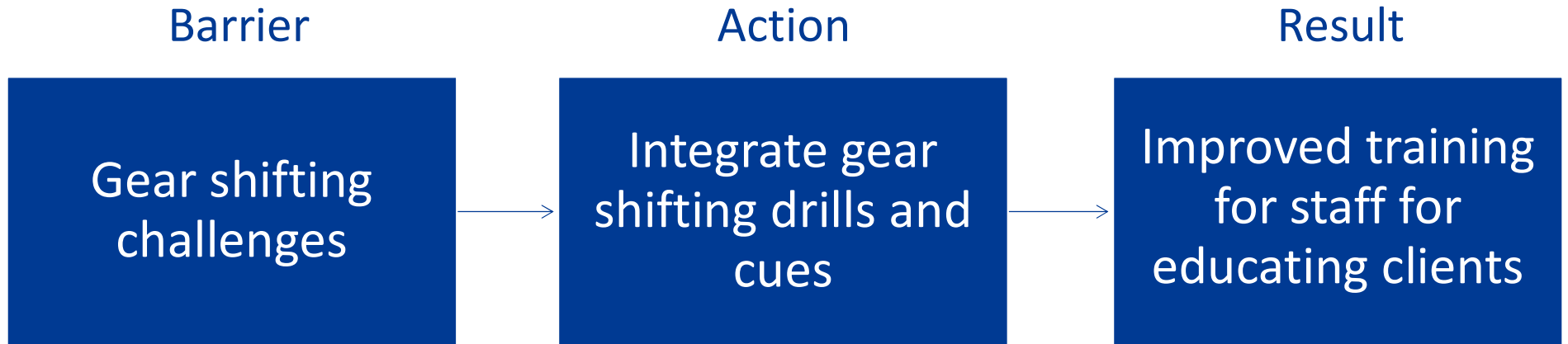
Apply program evaluation to improve pre-season training, structure and overall program facilitation



Breaking Barriers for Goal Attainment Functional Intervention



Breaking Barriers for Goal Attainment Leisure Education



Breaking Barriers for Goal Attainment Recreational Participation

Barrier

Action

Result

90-minute
sessions limit
distance progress



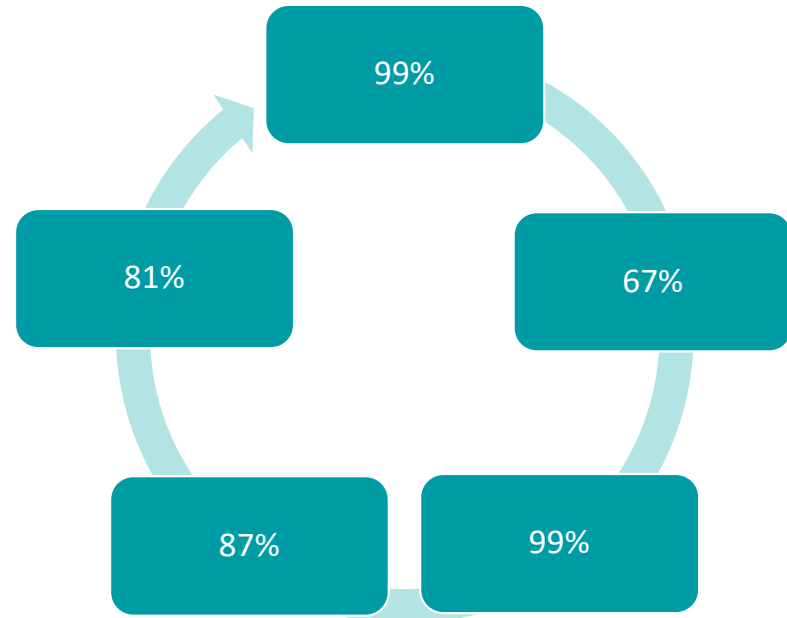
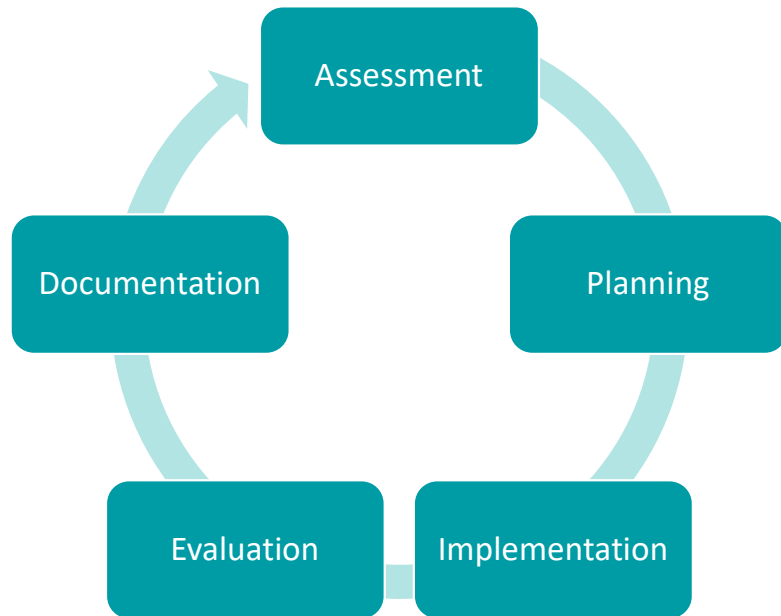
Schedule back-to-
back sessions



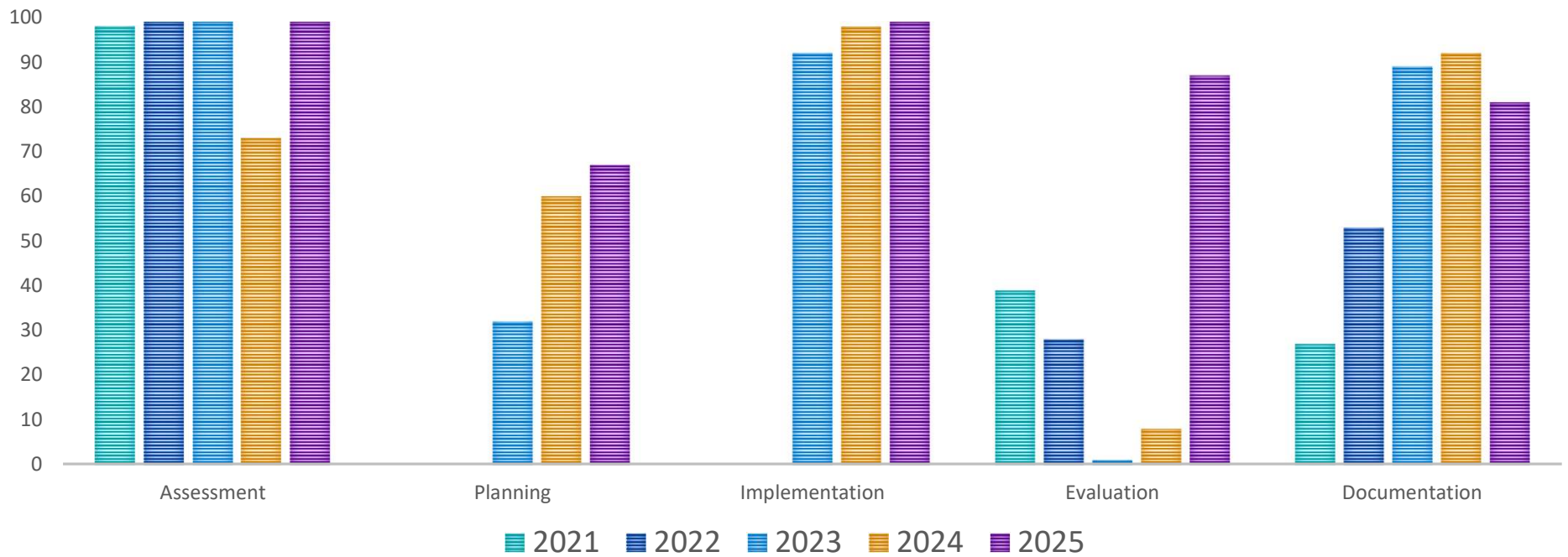
Build longer
sessions into
program schedule



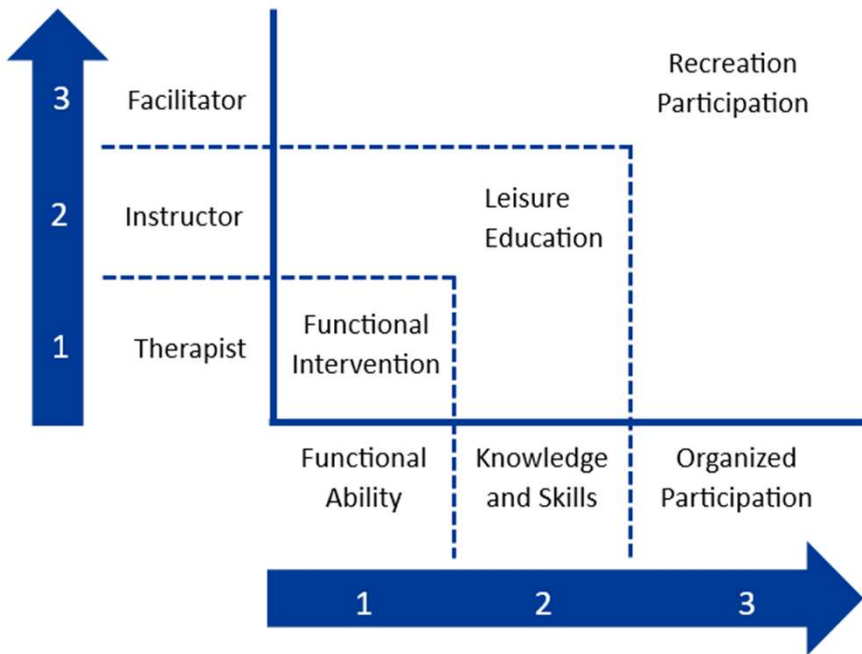
GRIDS Feasibility Measures 2025



Feasibility of APIED Process 2021-2025



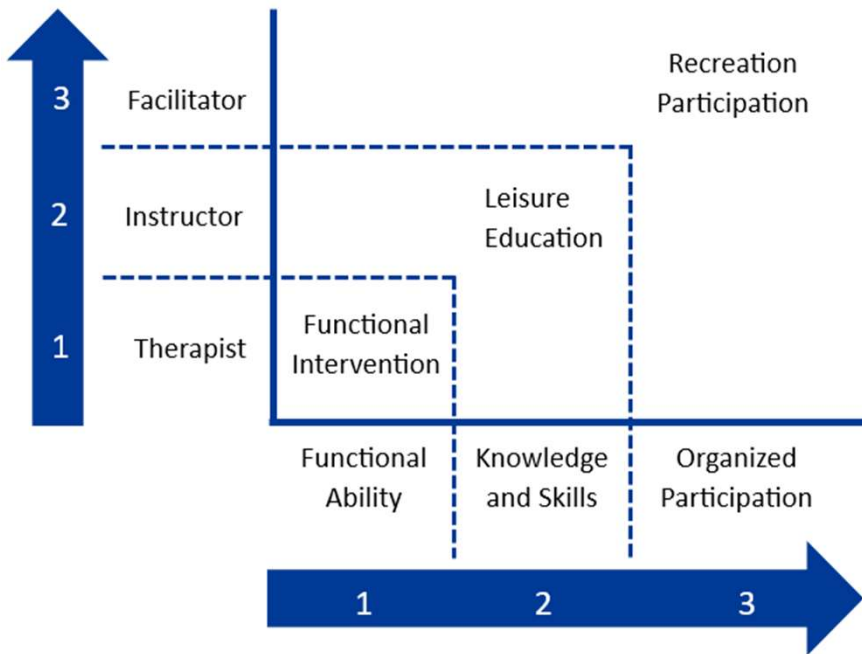
Outcome Measures at Assessment



Professional Role	Functional Ability	Knowledge and Skills	Organized Participation
Facilitator (3)	11%	3%	34%
Instructor (2)	6%	26%	3%
Therapist (1)	13%	1%	2%



Outcome Measures at Evaluation



Professional Role	Functional Ability	Knowledge and Skills	Organized Participation
Facilitator (3)	10%	2%	41%
Instructor (2)	2%	24%	1%
Therapist (1)	15%	1%	2%



REDCap Poll Results



Future Directions

Goal:

- Launch an Institutional Review Board (IRB) approved pilot longitudinal feasibility study to evaluate whether a larger study is practical, acceptable, and ethically sound.

Steps:

- Implement competency system for REDCap documentation to improve training quality for staff, students, and volunteers
- Develop “smart phrases” to improve documentation consistency and efficiency
- Expand documentation to include more sport programs
- Continue to improve feasibility numbers in the APIED process and expand database
- Introduce validated outcome metrics to measure acceptability of tool for both staff and participants:
 - QoL scales
 - PROMs including functional and social measures



Thank You!

For more information:

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Adaptive Sports Centers

References

Stumbo, NJ, Peterson CA. The Leisure Ability Model. Therapeutic Rec Journal. 1998 2nd Quarter:82-96.

<https://project-redcap.org/>

