Rehab is Over
Now What?

NSCIA Webinar Series
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Have a Question?

Type question here.

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www.NeurotechNetwork.org

Helping people regain life thru neurotechnology

www.theMiamiProject.org

The Miami Project is dedicated to finding more effective treatments and, ultimately, a cure for paralysis resulting from spinal cord injury.

Focusing on education of and advocacy to access neurotechnology devices, therapies and treatments for people living with impairments, their care-givers and medical professionals.
The information presented in this session is not meant to replace the advice from a medical professional. You should consult a health care professional familiar with your specific case, concerns and condition. We highly suggest for you to take information to a trained medical professional familiar with your case to discuss options that are best for you.
Agenda

• Importance & Need for Post Rehab Programs
• Types of Programs
• Questions to Ask
• Resources to find programs
Inpatient and Outpatient stays getting shorter...

The Human Body only heals so fast...

Source: Jennifer McParland, Brooks Rehabilitation Hospital
Why is exercise important for people with paralysis?

• High incidences of:
  – Obesity*
  – Cardiovascular disease
  – Diabetes
  – Low metabolic rates
  – Pulmonary disorders
  – Osteoporosis
  – Pressure Sores

Key Take Away:
Exercise same impact as able bodies.
Can’t maintain gains if stop exercising

* According to the CDC, people with disabilities have a 58% higher incidence of obesity compared to their able-bodied counterparts.
Rehabilitation vs Fitness

- **Definition:** Rehabilitation is a treatment or treatments designed to facilitate the process of recovery from injury, illness, or disease to as normal a condition as possible.
  
- **Focus is**
  - Restoration/recovery
  - Compensation
  - Limitations/adjustment
  - Independence

- **Definition:** Fitness is physical activity that is planned, structured, and repetitive for the purpose of conditioning any part of the body.

- **Focus is**
  - Improve health condition,
  - Maintain or improve fitness and
  - Prevention/performance

Wellness: An active process of becoming aware of and making choices toward a more successful existence
Low Tech vs High Tech Options

**Low Tech**
- Theraband
- Weights
- Yoga
- Dance
- Ropes
- Aquatics
- Adapted equipment

**High Tech**
- Video Gaming
- Virtual Reality
- Robotic Repetitive Motion Systems
- Exoskeletons
- NMES
- Biofeedback
- FES
### Importance & Access to Exercise

<table>
<thead>
<tr>
<th>Is exercise important to functional recovery?</th>
<th>Currently have access to exercise?</th>
<th>With or without a trained therapist?</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO 3.5%</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>YES 96.5%</td>
<td>UNKNOWN 24.2%</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>NO 18.9%</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>YES 56.9%</td>
<td>WITH 12.2%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>WITHOUT 44.7%</td>
</tr>
</tbody>
</table>

Overall, a total of **63.6%** (44.7% exercising on their own plus 18.9% without any access to exercise) **do not have access to a trained therapist** to oversee their exercise regimen.

Most Prevalent Barriers to Exercise

(1) Lack of energy,
(2) Lack of motivation,
(3) Lack of time,
(4) Not knowing where to exercise, and
(5) The cost of the program

Most Impactful Barriers to Exercise

(1) Exercise will make your condition worse,
(2) Too lazy to exercise,
(3) Exercise is too difficult,
(4) Do not know how to exercise, and
(5) Lack of interest.

No striking differences in:

- Age
- Education
- Employment
- Injury level
- Injury completeness
- Independence
- Income?

Important Points

• While more than half reported their physician had advised them to exercise, less than a quarter had received specific instructions from their doctor regarding the kind of exercise to engage in or how often.

• Not having exercise equipment at home reduced the odds of being an exerciser by 68%.

• Lack of transportation did not decrease the odds of being an exerciser, but not knowing of an accessible fitness center did.

Conclusions

• Our results suggest that barrier prevalence may not be indicative of whether a barrier is associated with exercise status. Highly prevalent barriers may not decrease the odds of being an exerciser, while very uncommon barriers may strongly decrease the odds of being an exerciser.

• Our results further suggest internal barriers, followed by resource barriers, are most strongly related to exercise participation status.

Types of Programs

• Clinical Programs
• Stand Alone Programs
• Public Access & Private Gym Programs
Clinical Programs

• Locations: Rehabilitation Facility

• Gives You Access to:
  – Trained Rehabilitation Therapists
    • Guidance
  – Rehabilitation Equipment

• Program Structure: Goal-Oriented

• Financial Commitment: Typically not covered under insurance. Payment plans available
Clinical Program Access to Services

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Examples of Programs

• Beyond Therapy - Atlanta, GA: http://www.beyond-therapy.org/

• Brooks Rehab Neuro-Recovery Center - Jacksonville, FL: http://www.brookshealth.org/programsservice/neuro-recovery/

• Neurorecovery Network – Several Locations: http://www.christopherreeve.org

• PEAK Center – Englewood, CO: http://www.craighospital.org/

• Precision Rehabilitation – Long Beach, CA: http://precisionrehabilitation.com/

• SHARE Program – Minneapolis, MN: http://www.couragecenter.org/
Stand Alone Programs

• Locations: Specialized Facility
• Gives You Access to:
  – Personal Trainers/Exercise Physiologists
  – Specialized Equipment
• Program Structure: Goal-Oriented
• Financial Commitment: Membership fees or up-front payment
Examples of Programs

- Journey Forward – Canton, MA: http://www.journey-forward.org/
- NeuroXcel – North Palm Beach, FL: http://www.neuroxcel.com/
- Next Step Fitness – Lawndale, CA: http://www.nextstepfitness.org
- Project Walk – Several Locations: http://www.projectwalk.org/
- The Recovery Project - Two Locations in MI: http://www.therecoveryproject.net/
- Walk The Line – Southfield, MI: http://walkthelinetoscirecovery.com/
Public Access/Private Gyms

• Locations: Gym, Wellness Center, Parks
• Gives You Access to:
  – Limited or No supervision
  – Fitness Equipment
• Program Structure: Limited or None
• Financial Commitment: Lost cost fees or Free
Questions to Ask

• What should I expect from a typical program?
• Is it a rehabilitation program or a fitness program?
• Will there be a trained professional monitoring my program? If so, what are his/her qualifications?
• What type of equipment will I have access to?
• What is the length of the program?
• How much will this cost me?
Where to Find These?

- Wellness Center/YMCA
- Therapeutic Recreation
- Parks & Recreation
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www.theMiamiProject.org/StayingHealthy

STAYING HEALTHY

Stretching
Stretching is an important part of keeping your body healthy. You may also hear it referred to as passive range of motion.

GUIDES

Exercise
There are many ways to exercise, as well as many reasons. It helps increase your strength and endurance, but can also help prevent other problems from developing.

RESOURCES

Diet & Nutrition
Eating healthy is something we all know we should do, but we don’t always know how. It doesn’t have to be hard, start with small changes first!

TIPS

Sports & Leisure
Living healthy doesn’t have to be boring! There are many ways you can include sports or leisure activities into your daily life and have fun while you are burning energy!

CONNECTIONS
Questions?

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Exercise Weak or Paralyzed Muscles
http://www.neurotechnetwork.org/educate_exercise.htm

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