

# Comprehensive Psychosocial Approaches and Evidence-Based Strategies to Enhance Outcomes in Cardiopulmonary Rehabilitation Patients



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# Learning Objectives



IDENTIFY AND IMPLEMENT 4  
COMPREHENSIVE STRATEGIES TO  
ENHANCE PSYCHOSOCIAL FUNCTIONING



APPLY MOTIVATIONAL INTERVIEWING TECHNIQUES  
TO FACILITATE BEHAVIOR CHANGE

# Biopsychosocial Model of Health



**Bio**  
(body)



**Psycho**  
(mental health)



**Social**  
(support)

Research shows that maintaining a positive attitude and using mental skills are related to a shorter rehabilitation. Comparing slow and fast healers, researchers found that the fast healers:

- took personal responsibility for healing
- had high desire and determination
- had more social support
- maintained a positive attitude
- used creative visualization

# Comprehensive Strategy #1 Assessing Biopsychosocial Functioning

- Early identification of problems at start of care
- Use validated screening tools to assess
  - depression (PHQ-9)
  - anxiety (GAD-7)
  - social isolation (PROMIS Social Isolation Scale)
  - Stress (PSS-10)
  - substance use (AUDIT-C plus 3)
- Regularly monitor psychosocial status throughout the rehab program
  - How is this built into your intake and appointment system?
- Ensure patients have access to mental health professionals for more in-depth evaluations and support as needed



## **Comprehensive Strategy #2 Mind Body Connection & Stress Management**



- Mind-body techniques bridge the gap between physical and psychosocial health.
- Incorporate techniques such as deep breathing, mindfulness meditation, progressive muscle relaxation, and guided imagery into appointments.
- Encourage regular practice of relaxation exercises in waiting room and at home, supported by printed materials or mobile apps.

# Deep Breathing



## 4-7-8 Breathes

Breathe in through the nose for 4 seconds

Hold breath for a count of 7 seconds

Exhale forcefully through the mouth,  
pursing the lips, and making a “whoosh”  
sound for 8 seconds



## Alternate Nostril Breathing

Bring right hand up to nose, with index finger hovering over left nostril and thumb hovering over right

Use thumb to block right nostril and inhale through left nostril

Use index finger to block left nostril and hold breath for 1-2  
beats

Release thumb to unblock right nostril, exhale and pause

Then switch sides, close left nostril and inhale through right  
nostril.

# Pain Management Imagery

- Visualize relaxing images
  - tight muscles getting massaged
  - muscle fibers separating
  - concentrate on feelings of warmth
- Distraction from thinking about pain through pleasant images
  - being on the beach or floating in a pool
  - rehearsing skills (e.g., playing guitar)
- If associate a certain image with pain (e.g., the color red, sparks or bolts of light), use imagery to reverse these images
  - if red is associated with pain, image the sore body part turning a soothing pale blue
  - focus on the bright light getting dimmer
- Additional examples of pain control images include:
  - feel heat/ice on sore body part
  - imagine swelling draining out of the body
  - imagine pain flowing out of the injured body part
  - if you have throbbing pain, image “pain bubbles” leaving the body with each beat



# Applying Positive Psychology through Gratitude

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Practicing gratitude significantly benefits patient recovery by nurturing a hopeful and optimistic outlook. It encourages a focus on personal progress, fostering resilience despite setbacks.

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Gratitude journals

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Asking patients what is going well



# Promoting Positive Psychology

Build resilience through growth mindset



# Comprehensive Strategy #3 Social Support

- Foster support groups for patients
- Facilitate buddy systems or peer mentoring for patients at similar stages of recovery
- Engage family and caregivers to increase understanding and support at home
- Encourage participation in community activities as patients regain confidence



## Comprehensive Strategy #4

### Positive Lifestyle Behaviors

- Encourage regular, safe physical activity tailored to individual capacity.
- Promote balanced nutrition, explaining its impact on mood and energy.
- Support smoking cessation and reduction of alcohol consumption, linking these behaviors to both cardiac and mental health.
- Incorporate behavioral change theories, such as motivational interviewing, to sustain long-term engagement.

# Motivational Interviewing

**Guiding** style of communication, that sits between **following** (good listening) and **directing** (giving information and advice).

Designed to **empower** people to change by drawing out their own meaning, importance and capacity for change.

Based on a **respectful** and **curious** way of being with people that facilitates the natural process of change and honors client autonomy.



# Effective Elements of Motivational Interviewing

Express Empathy	Use reflective listening to understand the patient's perspective and demonstrate genuine concern for their feelings and experiences.
Develop Discrepancy	Help patients recognize the gap between their current behaviors and their broader health goals or values, encouraging self-motivation for change.
Roll with Resistance	Avoid direct confrontation; instead, acknowledge resistance and invite the patient to explore their ambivalence about change.
Support Self-Efficacy	Encourage and reinforce the patient's belief in their ability to make positive changes, highlighting past successes and strengths.
Collaborative Partnership	Engage patients as active partners in the conversation, promoting shared decision-making and respecting their autonomy.
Elicit Change Talk	Prompt patients to verbalize their reasons for change, their desires, and their plans, which can increase commitment to new behaviors.



The background of the slide is a dense, overlapping collage of numerous small, rectangular sticky notes. These notes are in various colors including shades of blue, green, yellow, and purple. Each sticky note features a large, bold, black question mark. The entire scene is framed by a thin, white, hand-drawn rectangular border.

# Thank you!

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Questions?!