

Amputation Rehabilitation – Harvard Business School (HBS) Style Case Puzzle

Case Scenario: "The Reluctant Return"

A 35-year-old male factory supervisor underwent a **right transtibial (below-knee) amputation** following a road traffic accident 4 months ago. He has been fitted with a prosthesis and is medically stable.

During physiotherapy assessment:

- Residual limb wound is healed.
- Knee ROM: Full.
- Quadriceps and hamstrings: Grade 5 strength.
- Single-leg standing balance on the sound limb: Good.
- Walking with prosthesis: Independent on level surfaces.
- Walking speed is slow.
- He avoids crowded places and refuses to return to work.
- He reports, "I am physically okay, but I don't feel confident."

Puzzle 1: What Is the Real Problem?

Question

The surgeon says recovery is excellent.

The physiotherapist says gait training is progressing well.

The patient still refuses to return to work.

What is the biggest barrier to rehabilitation?

Options

- A. Muscle weakness
 - B. Contracture
 - C. Poor prosthetic fit
 - D. Psychosocial adjustment
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Puzzle 2: Prioritize Like a Manager

You are the rehabilitation team leader.

Rank the following interventions:

1. Advanced gait training
 2. Counseling
 3. Workplace assessment
 4. Community reintegration
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Puzzle 3: Resource Allocation Challenge

The rehabilitation center has funding for only ONE additional service.

Which should be selected?

- A. Extra strengthening sessions
 - B. Prosthetic cosmetic upgrade
 - C. Vocational rehabilitation program
 - D. Ultrasound therapy
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Puzzle 4: KPI (Key Performance Indicator)

Which outcome best measures rehabilitation success?

- A. Knee ROM
 - B. Muscle strength
 - C. Prosthetic alignment
 - D. Return to meaningful employment
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Puzzle 5: Ethical Decision-Making

The employer is hesitant to rehire the patient due to safety concerns.

As the physiotherapist, what should be recommended?

- A. Permanent disability leave

B. Immediate full-duty return

C. Functional capacity evaluation and workplace modification

D. Prosthesis removal

Puzzle 6: Strategic Thinking

Situation

The patient can:

- Walk independently
- Climb stairs
- Perform ADLs

But avoids social gatherings.

Question

Is rehabilitation complete?