




**[www.elearnSCI.org](http://www.elearnSCI.org)**

**Online training modules for health professionals and consumers**



The University of Sydney **Lisa Harvey, on behalf of ISCoS**

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**What is it?**

**FREE online learning modules for:**

- Doctors
- Nurses
- Physiotherapists
- Occupational therapists
- Psychologists and social workers

**.....CONSUMERS**

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**Who initiated this?**



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**Who funded this?**

**Access to Healthcare**

**.....and others**

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4



 

**Who developed the content?**

**Over 300 healthcare professionals and consumers from 60 countries**

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**Acknowledgements**

- Dr H Chhabra
- Stephen Muldoon

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## Languages

- English
- Spanish
- Portuguese
- Chinese
- Russian
- German
- Arabic

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## Who is the intended audience?

**Students and junior clinicians**  
especially from low-resource countries but  
content is appropriate for ALL

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## Guiding principles

- Short-sharp-snappy
- Simple language
- Very visual
- Practical skills
- Case studies
- Active learning

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### Physiotherapists

**Physiotherapists**  
Learn about SCI physiotherapy



The physiotherapy module covers 14 topics including assessment, setting goals, formulating treatment plans and administering interventions. The module includes videos, case studies, interactive activities and interviews with physiotherapists and patients from around the world.

The module focuses on developing problem-solving skills. Learners are required to devise treatments for patients with different clinical problems.

- The health essentials
- Principles of management
- Assessment
- Setting goals
- Bed mobility and transfers understanding movement
- Wheelchair mobility understanding movement
- Gait understanding movement
- Upper limb function understanding movement
- Strength, assessing and training
- Contractures, assessing and training
- Motor skill, assessing and training
- Fitness, assessing and training
- Respiratory, assessing and training
- Pain, assessing and training

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### Physiotherapists

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**Overview**

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## The overviews

**Introduction to essential concepts**


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Physiotherapists  
Pain: assessing and treating - Activity: Shoulder Pain

Shoulder pain significantly impacts on the quality of life of people with SCI.

Listen to Hamish talk about his experience with shoulder pain and the impact it has had on his life since becoming a paraplegic.



 [click here.](#)

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## The activities

- Expand on concepts
- Actively engage the learner
- Look, think, do and revise

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Physiotherapists  
Bed mobility and transfers: understanding movement - Activity: Horizontal Transfers

David sustained a motor complete T4 spinal cord injury (SCI) 4 years ago.

He is highly skilled at moving from his wheelchair to the bed.

Look at him performing this transfer.




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Physiotherapists  
Bed mobility and transfers: understanding movement - Activity: Horizontal Transfers



**Activity**

List 4 sub-tasks involved in moving from the wheelchair to the bed (for example, move forwards in the wheelchair).

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Physiotherapists  
Bed mobility and transfers: understanding movement - Activity: Horizontal Transfers



Look at the 4 sub-tasks one at a time.


**Step 1**  
Moving to the front edge of the wheelchair.

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Physiotherapists  
Bed mobility and transfers: understanding movement - Activity: Horizontal Transfers




**Step 2**  
Positioning the feet on the floor.

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Physiotherapists  
Bed mobility and transfers: understanding movement - Activity: Horizontal Transfers



**Step 3**  
Positioning the hands.


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Physiotherapists  
Bed mobility and transfers: understanding movement - Activity: Horizontal Transfers



**Step 4**  
Lifting and shifting the body onto the bed.

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Physiotherapists  
Upper limb function: understanding movement - Activity: Incomplete

Look again at the patient trying to open the scissors.

Firstly, consider what action she is having difficulties performing.



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PREVIOUS COMMENT NEXT

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Physiotherapists  
Upper limb function: understanding movement - Activity: Incomplete

**Activity**

Which statement best reflects the patient's difficulties with opening the scissors?  
The patient is having difficulties:

- abducting the thumb and extending the fingers
- extending the thumb and flexing the fingers
- flexing the thumb interphalangeal joint

SUBMIT

Screen 19 of 37

PREVIOUS COMMENT NEXT

22

Physiotherapists  
Upper limb function: understanding movement - Activity: Incomplete

**Activity**

Which statement best reflects the patient's difficulties with opening the scissors?  
The patient is having difficulties:

- abducting the thumb and extending the fingers
- extending the thumb and flexing the fingers
- flexing the thumb interphalangeal joint

Wrong. Try again.

SUBMIT

Screen 19 of 37

PREVIOUS COMMENT NEXT

23

Physiotherapists  
Upper limb function: understanding movement - Activity: Incomplete

**Activity**

Which statement best reflects the patient's difficulties with opening the scissors?  
The patient is having difficulties:

- abducting the thumb and extending the fingers
- extending the thumb and flexing the fingers
- flexing the thumb interphalangeal joint

Correct. Click next to progress.

SUBMIT

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PREVIOUS COMMENT NEXT

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Physiotherapists  
Upper limb function: understanding movement - Activity: Incomplete

**Answer**

The patient is having difficulties abducting the thumb and extending the fingers.

Adduction and abduction of the thumb. Flexion and extension of the thumb.

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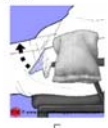

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Physiotherapists  
Upper limb function: understanding movement - Activity: Incomplete

**Activity**

Which 2 exercises best address the underlying impairments of poor strength and poor dexterity in the finger extensors?

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## Global relevance


- Case studies from high and low resource countries
- High cost and low cost solutions

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Physiotherapists  
Respiratory: assessing and treating - Overview

Physiotherapy interventions aim to remove secretions and increase ventilation. Interventions to remove secretions include *assisted cough*.



People with acute injuries may require spinal precautions, a collar/brace or orthosis. Physiotherapists need to be aware of any precautions before treating.

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Physiotherapists  
Respiratory: assessing and treating - Activity: Case Study

This is Zabbar. He is in a spinal unit in Bangladesh.

He is 45 years old and sustained an incomplete C5 injury 2 days ago.

He is highly susceptible to respiratory complications which could lead to respiratory arrest and death.

Consider how important it would be to assess Zabbar promptly after admission.



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Physiotherapists  
Gait: understanding movement - Overview

People with lumbosacral paraplegia and motor incomplete lesions may have partially paralysed lower limbs.

Walking is more likely to be realistic if the person has:

- lower extremity motor scores of more than 20/50 on the International Standards for Neurological Classification of SCI
- one knee unsplinted
- intact proprioception
- good upper limb strength
- good fitness



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Physiotherapists  
Gait: understanding movement - Activity: Case Studies


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Mei has more standing options.

She does not need to use a tilt table to stand because she has T4 paraplegia and therefore good upper limb function.

Mei can use a frame to stand.

This is a very simple and inexpensive type of frame used in rural China and similar countries.



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## How do you get people to the website? and How do you support them to move through the content?

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### What is a MOOC?

- M**assive  
They have a large number of people.
- O**pen  
They are free.
- O**nline  
They use the internet.
- C**ourse  
They have learning objectives and a curriculum.




SCI MOOC  
Spinal Cord Injuries Massive Open Online Course

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### Our MOOCs

- Physiotherapy management of people with spinal cord injuries.
- Run every 2 years
- 10,000+ participants from 120 countries



SCI MOOC  
Spinal Cord Injuries Massive Open Online Course

Courses run regularly by ISCoS and others  
THEY ARE FREE FOR ALL!


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### Our MOOC

Key features:

- 5 weeks long
- 3-5 hours study per week
- Elearn content
- Community
- Facebook – 20,000 posts!



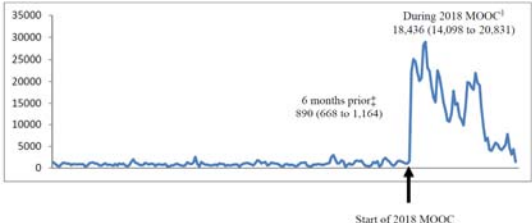
Learn about SCI  
AT YOUR OWN PACE

Week One

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### Website usage



35000  
30000  
25000  
20000  
15000  
10000  
5000  
0

During 2018 MOOC<sup>1</sup>  
18,436 (14,098 to 20,831)

6 months prior<sup>2</sup>  
890 (668 to 1,164)

Start of 2018 MOOC

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**Limitations**

MOOCs can not:

- replace high quality face-to-face teaching
- teach everything

**Benefits**

MOOCs can:

- reach the masses
- direct and support students to move through [www.elearnSCI.org](http://www.elearnSCI.org)
- be rolled out for all professional groups and consumers

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**www.physiotherapyexercises.com**

enables physiotherapists to use their PCs or any mobile device to prescribe exercises




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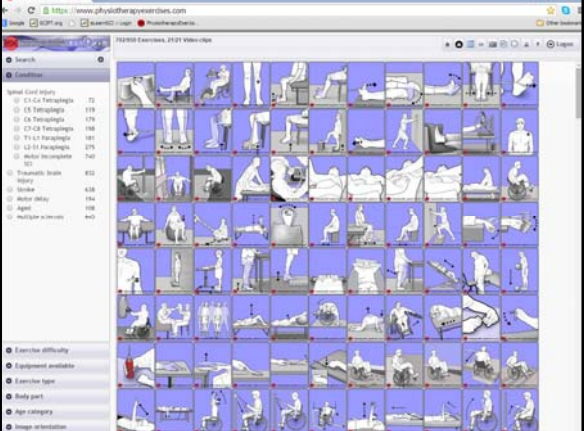
**It is FREE.....**

free, free, free.....for all to use

Available in 14 languages




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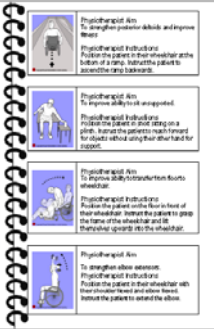


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Exercise booklet for [patient's name]



Compiled by: [therapist]  
January 2013



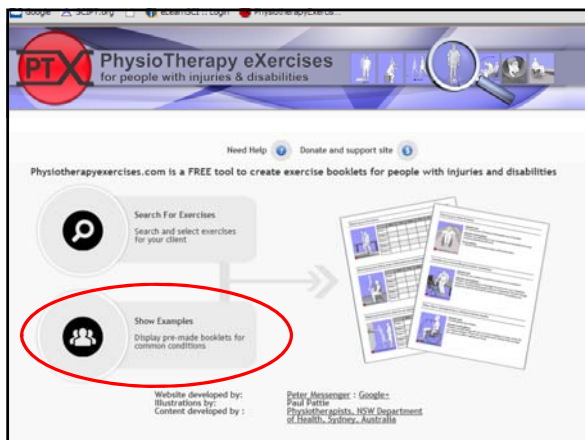
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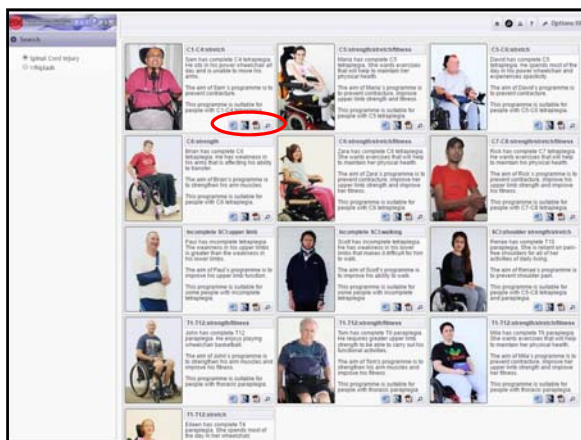


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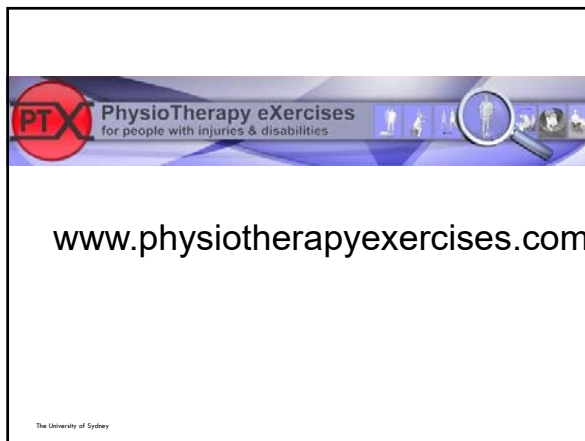
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## Acknowledgements

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 and  
[www.physiotherapyexercises.com](http://www.physiotherapyexercises.com)







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