Understanding Basic Rehabilitation Techniques

Massive Open Online Course

Evaluation Report

December 2023

Acknowledgments

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Summary

From September 4 to October 1st, 2023, Learning, Acting, and Building for Rehabilitation in Health Systems (ReLAB-HS), led by Physiopedia, successfully delivered a Massive Open Online Course (MOOC) entitled “Understanding Basic Rehabilitation Techniques” via the Plus online learning platform. The program consisted of eight independent courses, which included:

1. Introduction to Rehabilitation Techniques and Intervention
2. Assessment Before Moving and Handling
3. Assessing Range of Motion
4. Assessing Muscle Strength
5. Assessing Muscle Length
6. Neurological Screen
7. Exploring Positioning
8. Exploring Transfers

In each course, the learner completed required learning activities and a final quiz that tested knowledge gained from the course. To complete the overall Understanding Rehabilitation as a Health Strategy program, the learner had the option to submit and pass a written assignment.

The program was also supported with two optional live webinars with physiotherapist, Stacy Schiurring and Matt Huey, to provide the opportunity for increased learner interaction and engagement with the content experts. The webinar recordings were also made available on the Plus platform for participants unable to access the webinars live.

1. **Webinar 1:** Clinical Case Studies of the Lower Limb
2. **Webinar 2:** Clinical Case Studies of the Upper Limb

Course Type: Free, Open, Online

Institution: ReLAB-HS via Physiopedia

About this Course: This MOOC aimed to equip health and social care professionals to develop knowledge of the fundamental rehabilitation techniques.

Target Audience: These courses were designed and written for health and social care professionals, clinicians, students, assistants, and other rehabilitation-related health systems stakeholders.

Time Commitment: 16 hours over four weeks (with an optional extra eight hours)

Date: September 4 to October 1, 2023, with live webinars on September 14 (Webinar 1: Clinical Case Studies of the Lower Limb)and on September 28 (Webinar 2: Clinical Case Studies of the Upper Limb). These remain available on the Plus platform to members.

Requirements: Participants were required to complete online learning activities, engage with additional resources, and complete the course evaluations and quizzes.

Assessment: There was a quiz at the end of each course, and participants could complete an optional final written assignment to demonstrate knowledge gained from the programme of eight courses.

Awards: Eight course completion certificates awarding a total of 11.8 Plus (P+) points with an additional five Physioplus (P+) points available for the optional assignment to complete the programme.

Accreditation: Each individual course was accredited for continuing education and professional development (CE/CPD) in the USA, Australia and South African and is formally accepted without accreditation as a professional development activity by many other countries

Registrations MOOC:	11,331
Registrations Live Webinars:	533 Lower Limb Webinar
	526 Upper Limb Webinar
Countries Represented MOOC:	111
Countries Represented Live Webinars:	242 Lower Limb Webinar
	83 Upper Limb Webinar
Professions Represented MOOC:	32
Professions Represented Live Webinars:	20 Lower Limb Webinar
	8 Upper Limb Webinar

Content

Introduction

The need for physical rehabilitation services is an urgent and growing global issue. According to a recent report, 2.41 billion individuals worldwide live with conditions that would benefit from rehabilitation services, with approximately 1 in 3 individuals requiring rehabilitation services throughout the course of their illness or injury. The proportion of the worldwide population over 60 will double in the next 30 years, the majority of whom will live with chronic diseases, particularly noncommunicable diseases. There are also approximately 150 million children and adolescents who experience disabilities, and injuries for people of all ages are becoming more frequent due to conflict, rapid urbanisation and motorisation. These changing health and demographic trends are contributing to rapid global increases in the numbers of people experiencing decline in functioning, resulting in enormous unmet rehabilitation needs. Much of these unmet needs are concentrated amongst the poorest and most vulnerable populations in low- and middle-income countries and conflict-affected settings, which are often ill equipped to cope with these increasing needs for rehabilitation services.

The World Health Organisation defines rehabilitation as "a set of measures that assist individuals who experience, or are likely to experience, disability to achieve and maintain optimal functioning in interaction with their environments". Rehabilitation is in effect composed of multiple components or interventions to address issues related to all domains within the World Health Organisation's International Classification of Functioning, Disability and Health (ICF). These rehabilitation techniques and interventions address impairments, activity limitations and participation restrictions, considering contextual factors both personal and environmental, including assistive technology, that impact functioning. When selecting a rehabilitation intervention, it is always important to remember that one cannot change what you cannot measure. Hence, accurate measuring and monitoring using basic rehabilitation techniques, is essential to select and provide appropriate rehabilitation intervention. A clinician's care plan is only as thorough as their assessment. Confidence in fundamental rehabilitation assessment techniques is essential for efficient care.

During September 2023, ReLAB-HS, led by Physiopedia, delivered the Massive Open Online Course (MOOC), "Understanding Basic Rehabilitation Techniques Programme". The MOOC was delivered as eight individual courses with an optional written final assignment to complete the full program of courses. The aim of the MOOC was to equip rehabilitation professionals with a comprehensive knowledge of fundamental rehabilitation techniques and principles guiding selection of rehabilitation techniques so they can play an effective and proactive role in global and local efforts to increase access to high quality rehabilitation and improve health outcomes.

The four-week-long program presented different topics exploring fundamental rehabilitation techniques through a variety of learning activities to suit all learning styles. The required learning activities within each course were developed to take between one to two hours depending on the participant's learning style, with optional activities provided should the participant wish to take part in additional learning. A short orientation period before the course provided participants with an opportunity to become familiar with the delivery platform and the topics via the provided pre-course resources.

The course was delivered through the Plus eLearning platform, an innovative platform specifically developed to provide online education and support participants with a personalized learning dashboard. For each course, the related learning activities were outlined on a specific course page. Participants engaged with each course and the respective learning activities, and their activity was recorded and displayed in their personal learning dashboard.

A course was considered complete once the learner finished all required learning activities and successfully passed the final quiz that tested the knowledge gained within each individual course of the program. On completion of each course the participants had the option to download a completion certificate and export a record of their learning from their activity log. There was also an optional written assignment designed for participants to apply the knowledge gained from the overall program consisting of seven courses.

This report evaluates the engagement and experiences of the participants on the MOOC, Understanding Basic Rehabilitation Techniques Programme.

1.0 About the Program of Courses

1.1 Aim

Through this MOOC, ReLAB-HS aimed to equip health and social care professionals with a comprehensive knowledge of fundamental rehabilitation techniques and principles guiding selection of rehabilitation techniques so they can play an effective and proactive role in global and local efforts to increase access to high quality rehabilitation and improve health outcomes.

The program included an introduction to rehabilitation techniques and interventions, assessment before moving and handling and assessment for range of motion, muscle strength, muscle length and neurological screening and explored positioning and transfers.

1.2 Learning Objectives

At the end of this program of courses, participants were able to:

1. discuss the term "rehabilitation", the World Health Organization's definition of rehabilitation and the global need for rehabilitation
2. discuss the key elements of the International Classification of Functioning, Disability and Health (ICF) model and its role in rehabilitation
3. identify at least four principles that guide the selection of rehabilitation techniques and interventions
4. identify at least three factors that may impact patient safety during moving and handling tasks
5. discuss the measuring procedures and abnormal rates for at least two basic vital signs
6. select an appropriate response from healthcare professionals during moving and handling tasks based on given case scenarios

7. describe the key features of active, active-assisted, and passive range of motion and end-feel
8. identify at least three factors that can impact range of motion
9. describe at least three principles that guide the assessment and measurement of range of motion
10. identify at least two types of muscle contraction and at least three factors that can affect muscle strength
11. list at least two contraindications to muscle strength testing
12. discuss at least two methods of muscle strength testing, the Medical Research Council Scale for grading manual muscle testing and optimal positions for muscle strength testing
13. discuss the basic characteristics of skeletal muscle
14. describe the two main testing methods to assess muscle length, three measurement tools, at least two factors that affect muscle length and key principles of the muscle length assessment
15. identify an appropriate test or testing position to assess muscle length for at least three muscles
16. identify the purpose of the neurological screen and at least three indications to conduct a neurological screen
17. discuss the three main components of the neurological screen and the key features of upper and lower motor neurone lesions
18. identify the potential location of a lesion based on information from a neurological screen in a given case scenario
19. identify at least three indications and contraindications for therapeutic positioning
20. explain at least four key principles of patient positioning
21. identify at least five common patient positions used in rehabilitation and when they should be used
22. identify the key benefits, risks, indications, precautions and levels of assistance for patient transfers
23. discuss at least three guiding principles to ensure safe, appropriate transfers in clinical practice and common patient transfer techniques
24. identify an appropriate transfer technique for a patient in a simple case scenario

1.3 Intended Audience

This course is suitable for all rehabilitation professionals, students, and assistants, including but not limited to: physiotherapists, occupational therapists, speech and language therapists, rehabilitation doctors, rehabilitation nurses, prosthetists, orthotists, psychologists, audiologists, dietetics, social workers, and community-based health workers. Other health, social, and rehabilitation professionals interested in this subject are also invited to participate.

1.4 Cost to Participants

The course was free to all participants who completed the course within the 4-week timeframe and remains free to all Plus members and residents of low-income countries outside of this timeframe.

1.5 Course Availability

The program of eight courses were made available on September 4, 2023. Participants had until October 1, 2023 to complete the courses under their free access to Plus. The course remains available on the Plus platform to members; with membership free to individuals from low-income countries and available at a discounted rate to individuals in middle-income countries.

1.6 Courses, Course Awards, and Accreditation

Eight individual courses were created for the Understanding Basic Rehabilitation Techniques Program, which could each be completed individually or can be completed as a program of courses with an optional assignment. Plus provided individual course completion certificates to all participants that passed each individual course or attended the webinars. For each course completion participants were also awarded continuing professional development (CPD) points (equivalent to hours of learning). Individuals who completed all eight courses and completed the assignment were also provided with a program certificate in recognition of programme completion.

Course 1: Introduction to Rehabilitation Interventions (1.1 P+ Points)

Course 2: Assessment Before Moving and Handling (1.6 P+ Points)

Course 3: Assessing Range of Motion (1.7 P+ Points)

Course 4: Assessing Muscle Strength (1.8 P+ Points)

Course 5: Assessing Muscle Length (1.1 P+ Points)

Course 6: Neurological Screening (1.4 P+ Points)

Course 7: Exploring Positioning (1.8 P+ Points)

Course 8: Exploring Transfers (1.3 P+ Points)

Course Program: Understanding Basic Rehabilitation Techniques Programme P (5.0 P+ Points)

Webinar 1: Clinical Case Studies of the Lower Limb (1 P+ Points)

Webinar 2: Clinical Case Studies of the Upper Limb (1.2 P+ Points)

2.0 Demographics of the Participants

2.1 Country

Of the 11,331 individuals from 167 countries registered for the MOOC, 1388 individuals from 106 countries completed the Pre-Course Knowledge and Competency Self-Rating Tool. Course 1 (Introduction to Rehabilitation Interventions) was started by 1350 individuals from 103 countries, while 443 individuals from 67 countries started Course 8 (Exploring Transfers) before October 1, 2023. The Post-Course Knowledge and Competency Self-Rating Tool was completed by 102 individuals from 40 countries.

Figure 1 and Table 1 below show the numbers of participants and completion rates for the MOOC for the top 10 represented countries across all eight courses, with completion determined by completion of Course 8 of the MOOC. The highest level of participation for each of these countries occurred in Course 1 (Introduction to Rehabilitation Interventions) with 1350 total participation. Of the 10 most represented countries, South Africa had the highest completion rate overall at 44%, followed by Nigeria at 38%.

A full list of all countries with the number of participants from each country and completion rates for each course can be found in Appendix 1.

Figure 1: Top Ten Represented Countries

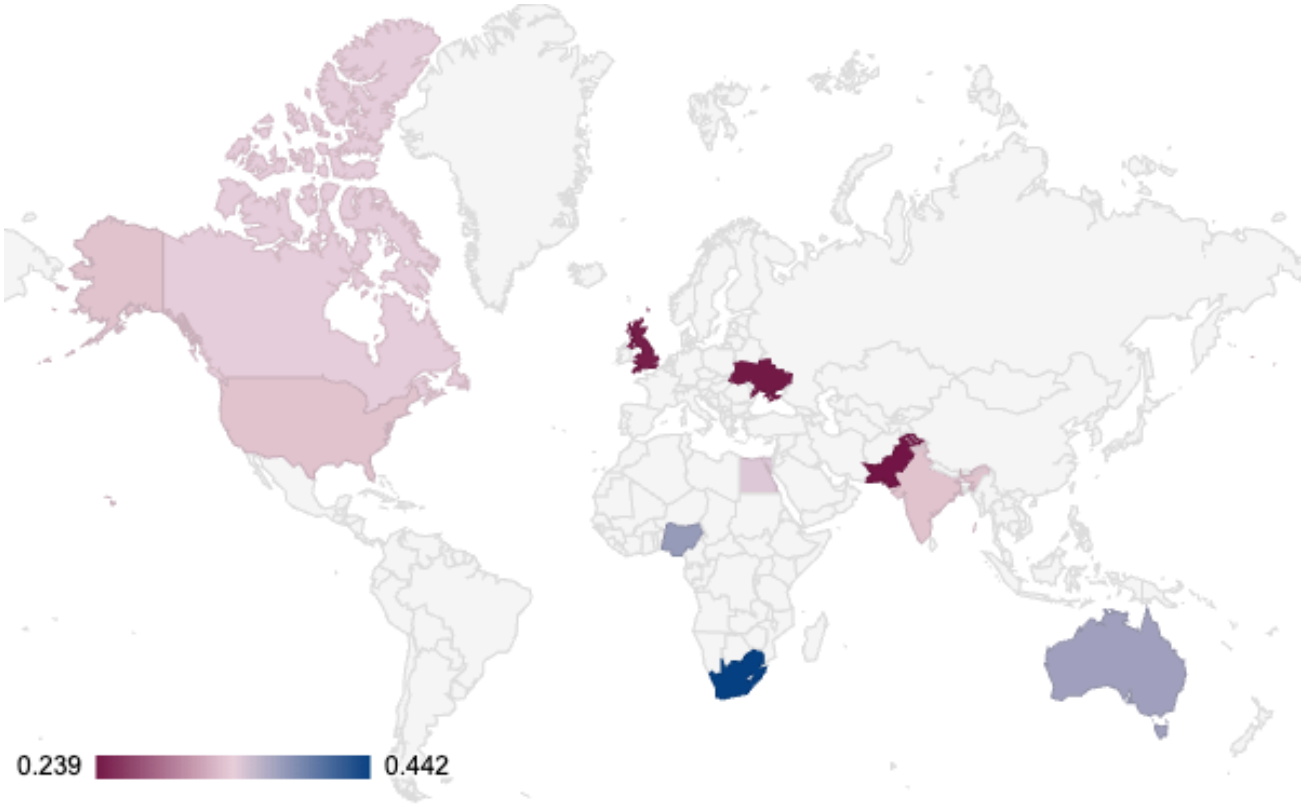


Table 1: Top Ten Represented Countries Participation and Completion Rates

Country	n (# started Course 1)	n1 (# completed Course 8)	n (% completed course 8)
Egypt	136	47	35%
Nigeria	130	49	38%
United Kingdom	115	28	24%
India	66	22	33%
South Africa	52	23	44%
Australia	51	19	37%
Canada	47	16	34%
Pakistan	46	11	24%
United States	33	11	33%
Ukraine	29	7	24%

Data are the number of participants who started course 1 (n), the number of participants who completed course 8 (n1) and the percentage of country participants who completed course 8 (%).

Table 2 - 4 below show a breakdown of participation data and completion rates based on country income classification. The highest number of participants for seven of the eight courses and the program were from low-middle-income countries. The highest participation numbers in an individual course was observed in Course 1 (Introduction to Rehabilitation Interventions) with 508 participants starting the course from low-middle income countries. This was closely followed by participants from high-income countries with 411 participants.

Table 2: Country Income Classification Participation Numbers

Income Classification	Course 1 n (n1)	Course 2 n (n1)	Course 3 n (n1)	Course 4 n (n1)	Course 5 n (n1)	Course 6 n (n1)	Course 7 n (n1)	Course 8 n (n1)	Program n (n1)
High	411 (259)	271 (207)	248 (193)	217 (173)	182 (154)	214 (143)	175 (134)	154 (128)	62 (1)
Upper-middle	121 (88)	87 (73)	79 (62)	65 (51)	58 (48)	62 (49)	52 (44)	50 (44)	19 (1)
Low-middle	508 (363)	346 (291)	278 (249)	225 (209)	200 (189)	203 (185)	177 (162)	177 (163)	112 (2)
Low	63 (50)	50 (45)	39 (41)	33 (33)	32 (32)	27 (27)	22 (22)	22 (22)	19 (0)

Data are numbers (n) of participants who started each course and number (n1) who completed each course.

Table 3 shows the percentage completion data by country income classification for each individual course. While the lowest number of participants were seen from low-income countries, the completion rate for these participants was the highest across all groups. The highest completion rates for the individual courses were predominantly seen among those from low- (79% - 100%) and low- to middle-income countries (71% - 95%) with 100% completion rates observed for low-income countries for Course 3 - 8., outlined in red below.

Table 3: Country Income Classification Individual Course Completion Rate

Income Classification	Course 1 %	Course 2 %	Course 3 %	Course 4 %	Course 5 %	Course 6 %	Course 7 %	Course 8 %	Program %
High	63%	76%	78%)	90%	85%	67%	77%	83%	2%
Upper-middle	73%	84%	78%	78%	83%	79%	85%	88%	5%
Low-middle	71%	84%	90%	93%	95%	91%	92%	92%	2%
Low	79%	90%	100%	100%	100%	100%	100%	100%	0%

Data are percentage (%) of participants from country income classification who completed each individual course.

Table.4 shows that overall MOOC completion rates, based on the percentage of participants who completed course 8 of the MOOC, were similar across all income classifications ranging from 31% for high-income countries to 36% for upper-middle income countries.

Table 4: Country Income Classification MOOC Completion Rate

Income Classification	n (# started Course 1)	n1 (# completed Course 8)	n (% completed course 8)
High	411	128	31%
Upper-middle	121	44	36%
Low-middle	508	163	32%
Low	63	22	35%

Data are number participants started course 1 (n), number participants completed course 8 (n1) and percentage of country participants (%)

Finally, Table.5 highlights the participation and completion rates of participants from ReLAB-HS countries, with the highest number of participants for all eight courses and the program coming from Pakistan, with participation ranges for each individual course ranging from 62 - 100%, with 100% completion seen by participants in Uganda in Course 7 and 8, outlined in red below.

Table 5: ReLAB-HS Countries Participation and Completion Rates

ReLAB-HS Country	Course 1 n (%)	Course 2 n (%)	Course 3 n (%)	Course 4 n (%)	Course 5 n (%)	Course 6 n (%)	Course 7 n (%)	Course 8 n (%)	Program n (%)
Pakistan	46 (70%)	28 (86%)	18 (89%)	20 (85%)	16 (94%)	16 (88%)	12 (92%)	12 (92%)	7 (14%)
Uganda	13 (62%)	11 (91%)	10 (90%)	8 (75%)	7 (86%)	7 (71%)	4 (100%)	4 (100%)	4 (0%)

Data are numbers (n) of participants from ReLAB-HS countries who started each individual course and percentage (%) who completed each individual course.

While overall completion rates for each of the individual courses were high, the completion rates seen for the program of courses, which involved completion of an optional assignment, are much lower (0% - 5%). This is a pattern that has been shown across all MOOCs, suggesting minimal interest or motivation for participants to complete the optional assignment.

2.2 Professions

Thirty two different professions started the Understanding Basic Rehabilitation Techniques Programme before the end date of October 1, 2023. The top ten represented professions can be found in Table 6.

Physiotherapists and Physical Therapists including Doctors of Physical Therapy (DPT) represented the greatest number of participants across all eight courses, followed by students (all professions combined) and Occupational Therapists.

Completion rates varied significantly across all professions. A full list of participants' professional backgrounds can be found in Appendix 1.

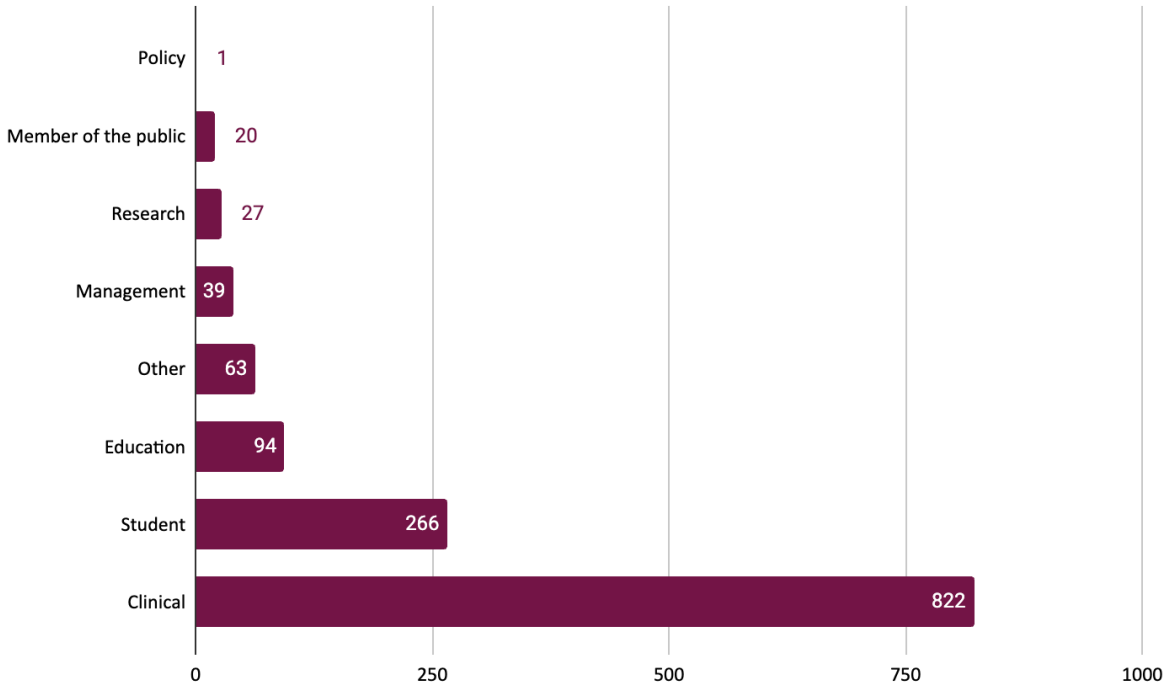
Table 6: Top Ten Participants' Professional Backgrounds

Professional Background	Course 1 n (%)	Course 2 n (%)	Course 3 n (%)	Course 4 n (%)	Course 5 n (%)	Course 6 n (%)	Course 7 n (%)	Course 8 n (%)
Physiotherapist / Physical Therapist including DPT	722 (73%)	515 (84%)	439 (87%)	363 (88%)	311 (92%)	335 (83%)	280 (90%)	266 (93%)
Students (All Professions)	59 (68%)	38 (89%)	36 (83%)	31 (90%)	27 (85%)	29 (69%)	20 (85%)	19 (84%)
Occupational Therapist	26 (54%)	20 (65%)	16 (75%)	15 (73%)	13 (77%)	15 (67%)	13 (77%)	14 (64%)
Physiotherapy / Physical Therapy Assistant	16 (56%)	11 (73%)	11 (82%)	8 (100%)	9 (89%)	9 (89%)	8 (114%)	10 (80%)
Physical Rehabilitation Doctor	11 (45%)	5 (60%)	4 (100%)	4 (100%)	2 (100%)	3 (33%)	1 (100%)	2 (50%)
Massage Therapist	8 (50%)	4 (75%)	5 (40%)	3 (67%)	2 (100%)	2 (100%)	2 (100%)	3 (67%)
Chiropractor	5 (60%)	2 (100%)	2 (100%)	2 (100%)	2 (100%)	2 (100%)	2 (100%)	2 (100%)
Osteopath	4 (25%)	2 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Personal Trainer	5 (50%)	3 (33%)	1 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Educator	4 (50%)	3 (67%)	2 (50%)	1 (100%)	1 (100%)	2 (50%)	1 (100%)	1 (100%)

Data are numbers (n) of participants who started each course and percentage (%) who completed each course.

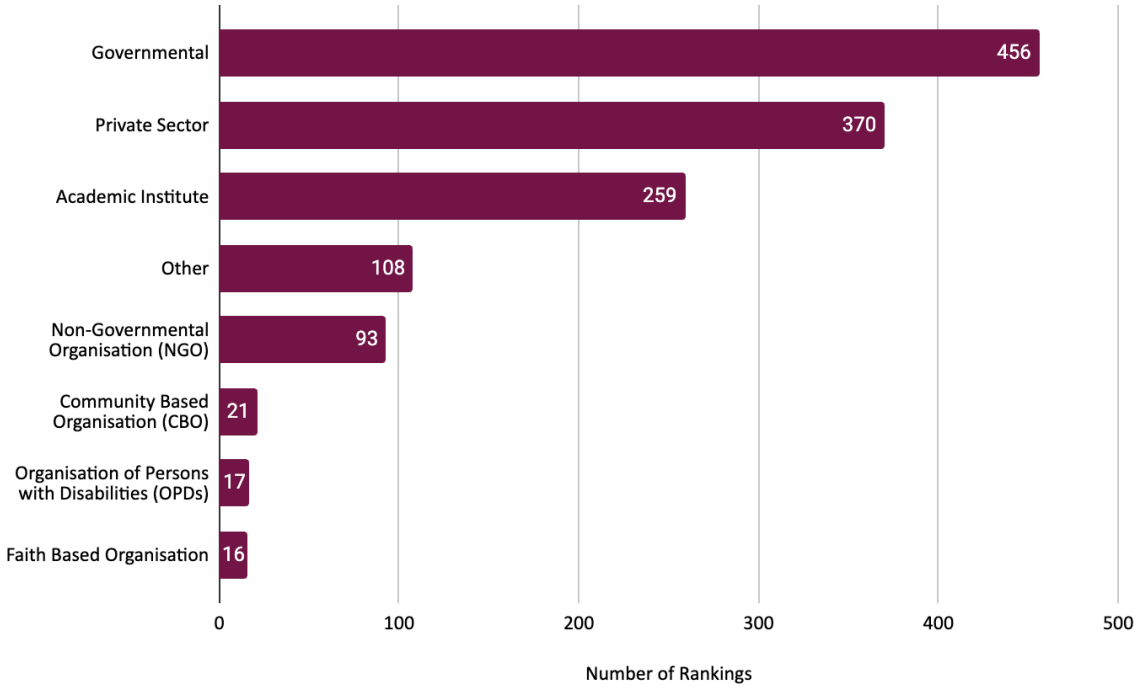
2.3 Professional Role

Figure 2: Professional Role of Participants



2.4 Work-Based Setting

Figure 3: Current Workplace of Participants



2.5 Gender and Age

Women were represented across all age ranges from 18-24 to 75+ and accounted for the greatest number of course participants in every age category, except for under 18, which only had one male participant. Course participants were represented across all age groups with the greatest number from those aged 25 - 34 years for both women and men. Table.8 highlights participation and completion rates for each individual course by gender.

Figure 4: Gender of Participants

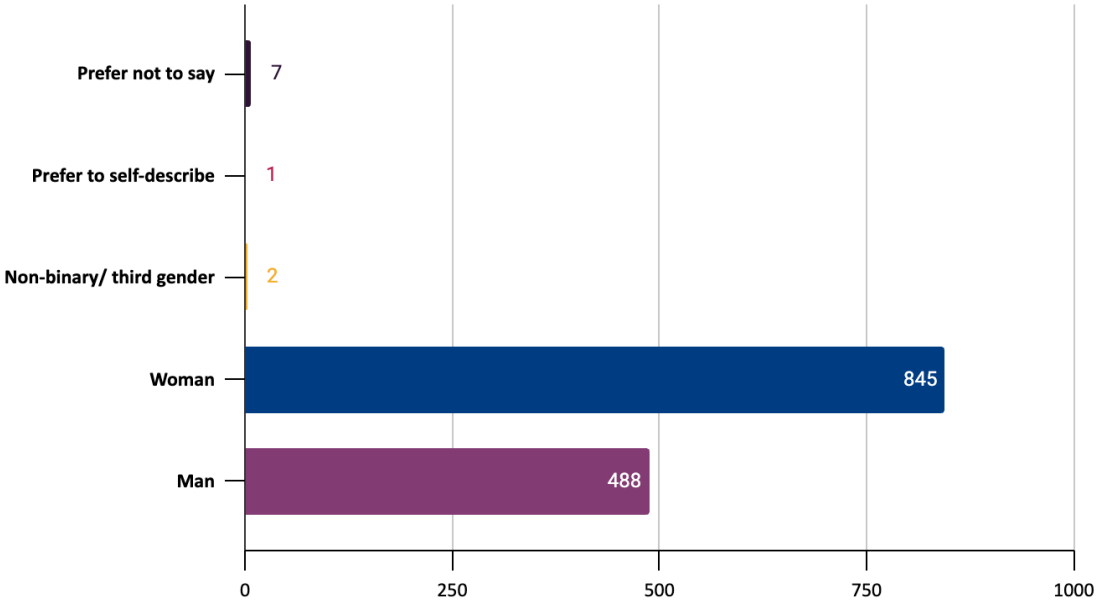


Figure 5: Gender of Participants by Age Range

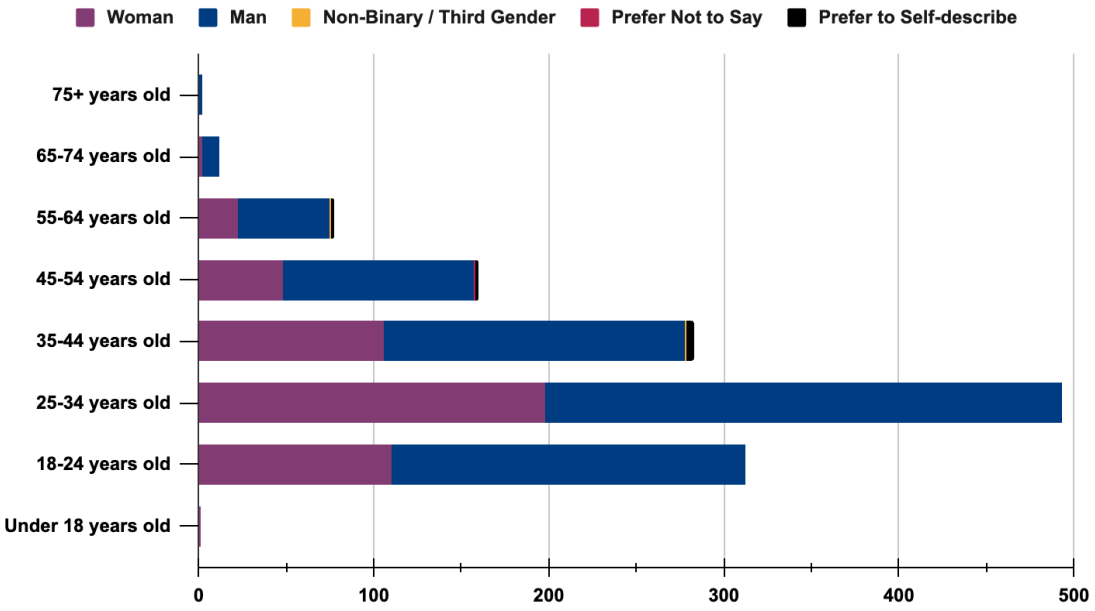


Table 7: Gender Participation and Completion Rates

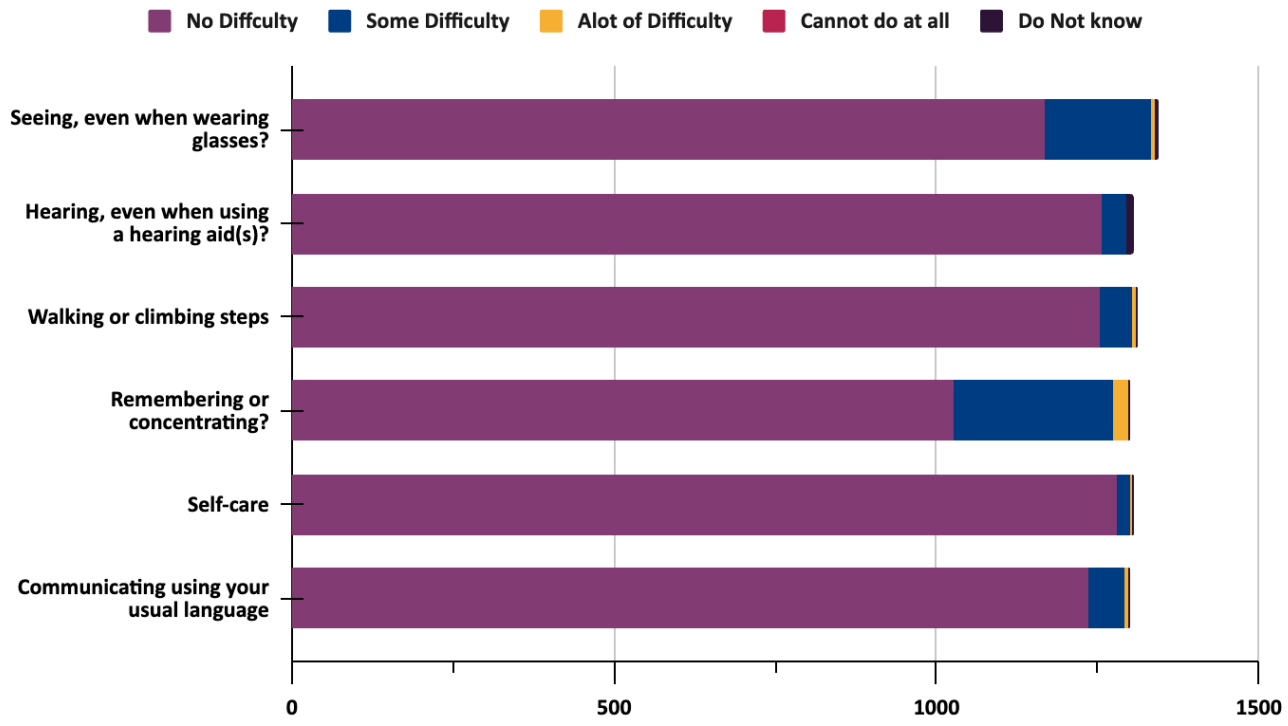
ReLAB-HS Country	Course 1 n (%)	Course 2 n (%)	Course 3 n (%)	Course 4 n (%)	Course 5 n (%)	Course 6 n (%)	Course 7 n (%)	Course 8 n (%)
Female	566 (75%)	399 (86%)	342 (89%)	290 (89%)	256 (89%)	261 (82%)	225 (88%)	233 (88%)
Male	368 (72%)	254 (89%)	221 (90%)	173 (97%)	167 (96%)	160 (94%)	127 (100%)	138 (96%)
Other	1 (100%)	1 (100%)	1 (100%)	1 (100%)	1 (100%)	1 (100%)	1 (100%)	1 (100%)
Not Disclosed	158 (58%)	81 (63%)	69 (65%)	67 (61%)	45 (80%)	77 (53%)	46 (67%)	47 (60%)

Data are numbers (n) of participants who started each course and percentage (%) who completed each course.

2.6 Disability Related

Participants with a wide range of health impairments participated in the MOOC, with the majority of participants reporting no difficulty. For those who reported difficulty with doing certain activities as a result of a health impairment, difficulties with remembering or concentration was the highest reported, followed by vision, and then communication difficulties.

Figure 6: Disability of Participants



3.0 Engagement of the Participants

3.1 Platform

The Understanding Basic Rehabilitation Techniques programme and associated eight courses were delivered on the Plus learning platform. One hundred and two knowledge-sharing topic summary articles on Physiopedia were either created or updated for the learners to use throughout the duration of course.

These required articles received 170,692 total views before the final date of the MOOC on October 1, 2023. A list of knowledge-sharing topic summary articles on Physiopedia with total page views can be found in Appendix 2.

Table 8: Top Ten Physiopedia Pages Reviewed

Professional Role	Number of Page Views
Dermatomes	38,403
Myotomes	36,281
Reflexes	20,019
Range of Motion Normative Values	16,939
Sensation	9,015
Assessing Range of Motion	6,471
Pulse Rate	5,675
Vital Signs	4,795
Assessing Muscle Strength	4,464
Blood Pressure	3,806

3.2 Required Learning Activities

The program included a total of 24 required learning activities and optional learning activities including watching videos, directed reading, practical workbooks and quizzes (full list of all required and optional learning activities can be found in Appendix 2).

To complete each course, participants were required to fully engage with all required learning activities and pass a quiz. Once successfully completed, Plus Points (equivalent to hours of learning) and a completion certificate were awarded. A breakdown of the number of required learning activities and the number of learning activities that were completed in each course can be found in Table 9.

Over the course of the MOOC 24,696 learning activities were logged with 13,962 Plus points awarded. The highest number of learning activities completed and Plus Points awarded within a single course occurred in Course 1, Introduction to Basic Rehabilitation Techniques, with 5844 learning activities logged during the MOOC, resulting in the award of 2,076 Plus Points.

Table 9: Learning activities logged and total Plus Points awarded for each course

	Course 1	Course 2	Course 3	Course 4	Course 5	Course 6	Course 7	Course 8
Required Learning Activities	3	3	3	3	3	3	3	3
Optional Learning Activities	1	1	3	3	3	3	1	3
Learning Activities Logged	5844	3433	3192	2646	2439	2256	1918	1871
Plus Points Awarded	2076	3911	1714	1583	1009	1005	852	1433

3.3 Discussion Forum and Case Studies

Each course contained a number of optional forum discussions. Learners were encouraged to engage with other international course participants on a wide range of different topics associated with the course through our Community of Practice platform, Rehabilitation Community.

This community culture has been developed to foster a professional community of learning among course participants. It is our shared set of beliefs, expectations and values that influence our individual learning and the ways in which the individuals in our community interact with one another and collaborate to achieve common objectives. These discussions were intended to provide a rich learning experience to the learner through self-reflection and community engagement. In total participants submitted 1664 posts over the course of the programme, an impressive level of engagement given all the Rehabilitation Community discussions and case studies throughout this course were optional.

Table 10 presents an outline of the number of posts for each discussion and case study forum in each of the eight courses.

Table 10: Number of Forum Discussion Posts

	Course 1		Course 2	Course 3	Course 4	Course 5	Course 6	Course 7	Course 8
Discussion 1	251	**Case Study 1**	122	80	55	48	39	32	29
Discussion 2	219	**Case Study 2**	99	67	38	32	36	29	25
Discussion 3	191	**Case Study 3**	93	62	34	28	20	16	19

Data are Number (n) of Individual Posts

3.4 Webinars

Following the success of live webinars during the 2022 MOOC Understanding the Rehabilitation Needs of Displaced Person we incorporated two case study live webinars (Webinar 1, "Clinical Case Studies of the Lower Limb", and Webinar 2, "Clinical Case Studies of the Upper Limb") into the programme in week 2 and week 4 of the MOOC to provide additional opportunities for learner interaction and engagement to foster connections and minimize the impact of isolated learning. Further details on the webinars are available in the independently available webinar reports.

Table 11: Webinar Initiation and Completion

	Webinar 1 Overall Number (ReLAB-HS Numbers)	**Webinar 2** Overall Number (ReLAB-HS Numbers)
Participants who Registered (n)	533	526
Participants who Attended (n)(n1)	242 (46)	270 (84)
Percentage who Attended (%) (%1)	45.4% (19%)	51% (31%)
Number Countries Attended (n)(n1)	52 (4)	84 (4)

Data are numbers (n) of participants from all countries, number (n1) of participants from ReLAB-HS countries, percentages (%) of participants who attended the webinar and percentage (%1) of participants from ReLAB-HS countries who attended the webinars.

Overall 91.3% of participants rated Webinar 1 Clinical Case Studies of the Lower Limb as great or excellent (41.8% great and 49.5% excellent), while 96% participants rated Webinar 2 on Clinical Case Studies of the Upper Limb as great or excellent (42.2% great and 53.8% excellent). With 96.7% of participants in Webinar 1 and 99.6% of participants in Webinar 2 reporting an increase in knowledge and / or skills related to the topic from participation in the webinar. The following testimonial from Webinar 1 Clinical Case Studies of the Lower Limb highlights both the quality of the instructors knowledge and the benefits of opportunities for live interaction with instructors to enhance learning.

> *"This webinar provided an invaluable opportunity to delve into real-world scenarios, offering a profound understanding of lower limb conditions and their treatment complexities. The knowledge and insights shared by the expert presenters were both enlightening and immediately applicable. What struck me most was the emphasis on evidence-based practice and the meticulous analysis of case studies. This has undoubtedly enhanced my clinical decision-making, enabling me to provide more precise and effective care to my patients with lower limb issues. Moreover, the webinar highlighted the significance of interdisciplinary collaboration and patient-centered care. It underscored the importance of working collaboratively with physical therapists and other healthcare professionals to deliver comprehensive and holistic treatments. I genuinely believe that the knowledge gained from this webinar will lead to improved patient outcomes and better overall care. It has rekindled my passion for continual learning and growth in the field of physical therapy. I am incredibly grateful for this enriching experience and look forward to implementing what I've learned into my practice. I wholeheartedly recommend this webinar to fellow healthcare professionals seeking to elevate their skills and provide exceptional care to their patients."*

3.5 Final Assignment

An optional final assignment was designed to give participants an opportunity to reflect on their learning and use the knowledge gained throughout the courses. Participants were asked to follow the assignment guidelines or video assignment guidelines on Physiopedia, and the Physiopedia team assessed the submitted assignments. To successfully pass the final assignment, learners needed to demonstrate evidence of learning from the course, academic skill with evidence-based writing, and correct referencing. Assignments had to be written in English.

Of the 18 assignments submitted before October 27, 2023, 6 met the assignment requirements and were rewarded with a passing grade and program certificate, with three needing minor amendments to achieve a passing grade.

3.6 Engagement versus Completion

Of the 11,331 learners who registered to take part in Understanding Basic Rehabilitation Techniques programme. 1,350 learners (12% of registered learners) began Course 1 (Introduction to Rehabilitation Interventions) of the Understanding Basic Rehabilitation Techniques programme before October 01, 2023, with 57% completion rate.

Course 5 (Assessing Muscle Length) and Course 7 (Exploring Positioning) had the highest completion rates with 81% of participants completing these two courses. Completion rates above 75% are seen for all courses of the programme, except for Course 1. The number of learners who began and completed each of the eight individual courses can be found in Table 8.

Table 12: Course Initiation and Completion

	Course 1	Course 2	Course 3	Course 4	Course 5	Course 6	Course 7	Course 8
Learners who Started	1350	823	716	610	524	508	443	466
Learners who Completed	764	619	548	468	425	406	358	366
Percentage Completion	57%	75%	77%	77%	81%	80%	81%	79%

Data are Numbers (n) of Learners

High numbers of dropouts are a common challenge for MOOC's, suggested to be related to limited participant interactions (Fricton et al., 2015) and lack of face-to-face sessions, which generate a sense of isolation and disconnection (Jessica et al., 2021).

A total of 366 participants completed Course 8, the final mandatory course of the MOOC, which is a completion rate of 27%. While a reduction in number of participants was seen with each consecutive course in the Understanding Basic Rehabilitation Techniques programme, the completion rates for Course 2 - 8 were significantly greater than the initial course, suggesting a good connection with the content.

Overall, these completion rates are well above those seen for both health-related MOOC's, with completion rates reported to range between 4.3% and 11% (Maxwell et al., 2018), and technology-related MOOC's that are generally below 13% (Onah et al., 2014).

4.0 Participant Feedback

4.1 Quantitative Data

After the completion of each of the eight courses, learners had the option to share their feedback on the course. The learners were asked to rate their overall opinion of each course on a five-point likert scale ranging from excellent to poor. Overall, all eight courses received predominantly positive ratings. Figures 7 to 15 display the results for each course and the overall programme.

Figure 7: Course Rating for Course 1 Introduction to Rehabilitation Interventions (n=719)

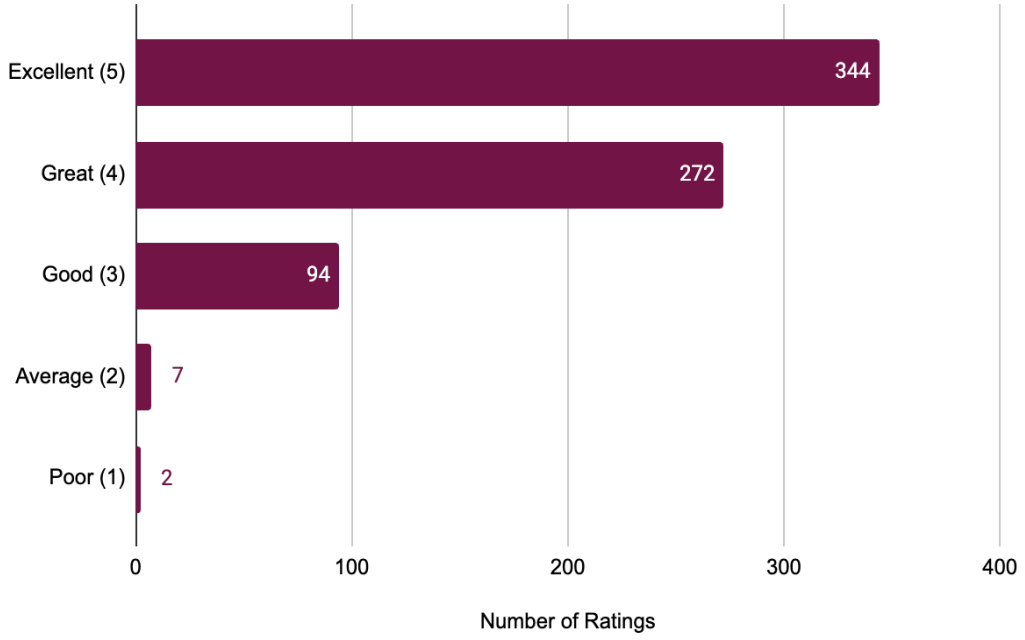


Figure 8: Course Rating for Course 2 Assessment Before Moving and Handling (n=525)

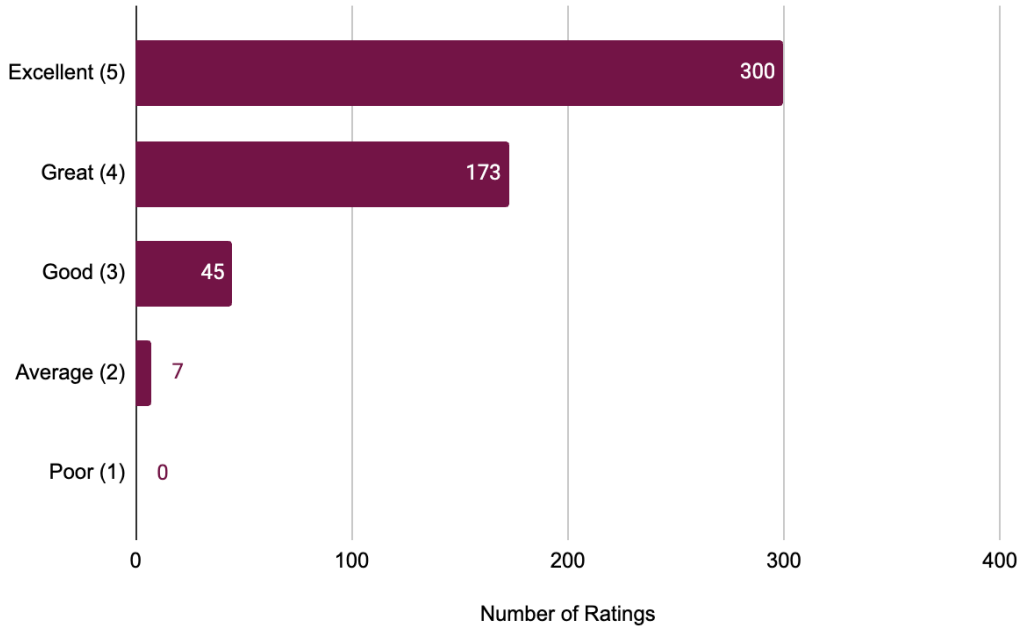


Figure 9: Course Rating for Course 3 Assessing Range of Motion (n=209)

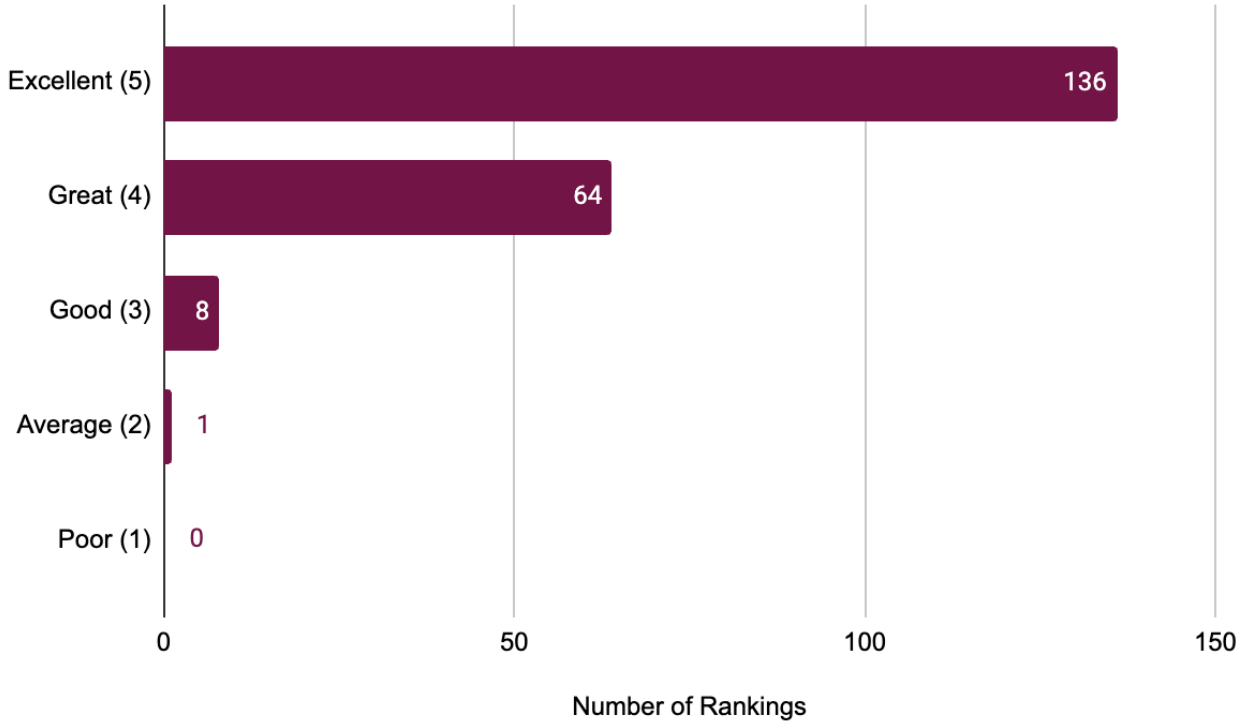


Figure 10: Course Rating for Course 4 Assessing Muscle Strength (n=180)

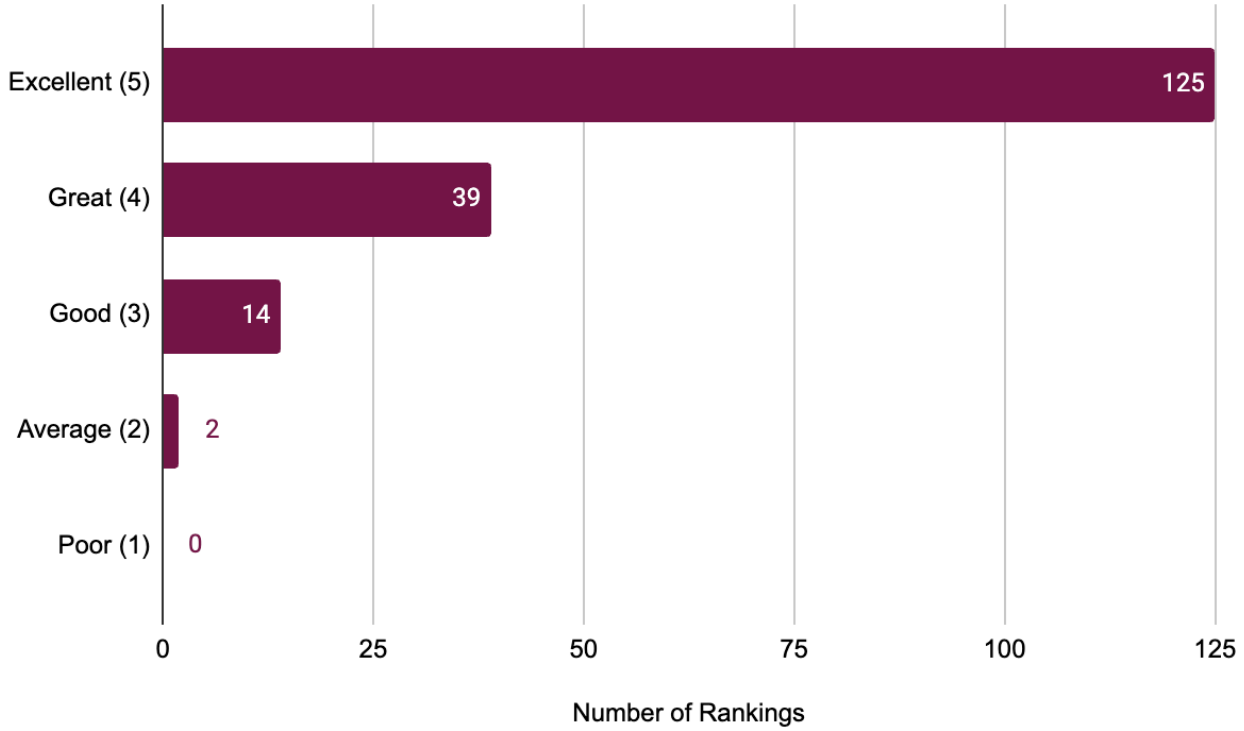


Figure 11: Course Rating for Course 5 Assessing Muscle Length (n=356)

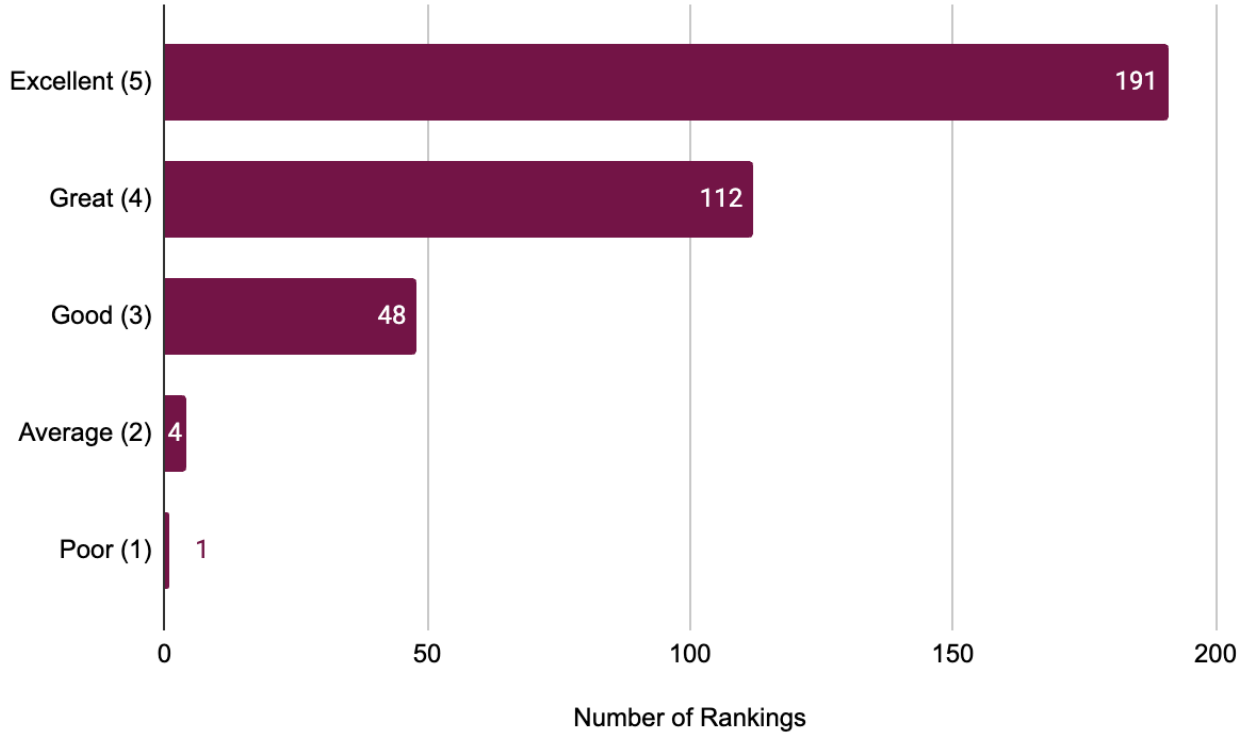


Figure 12: Course Rating for Course 5 Neurological Screening (n=173)

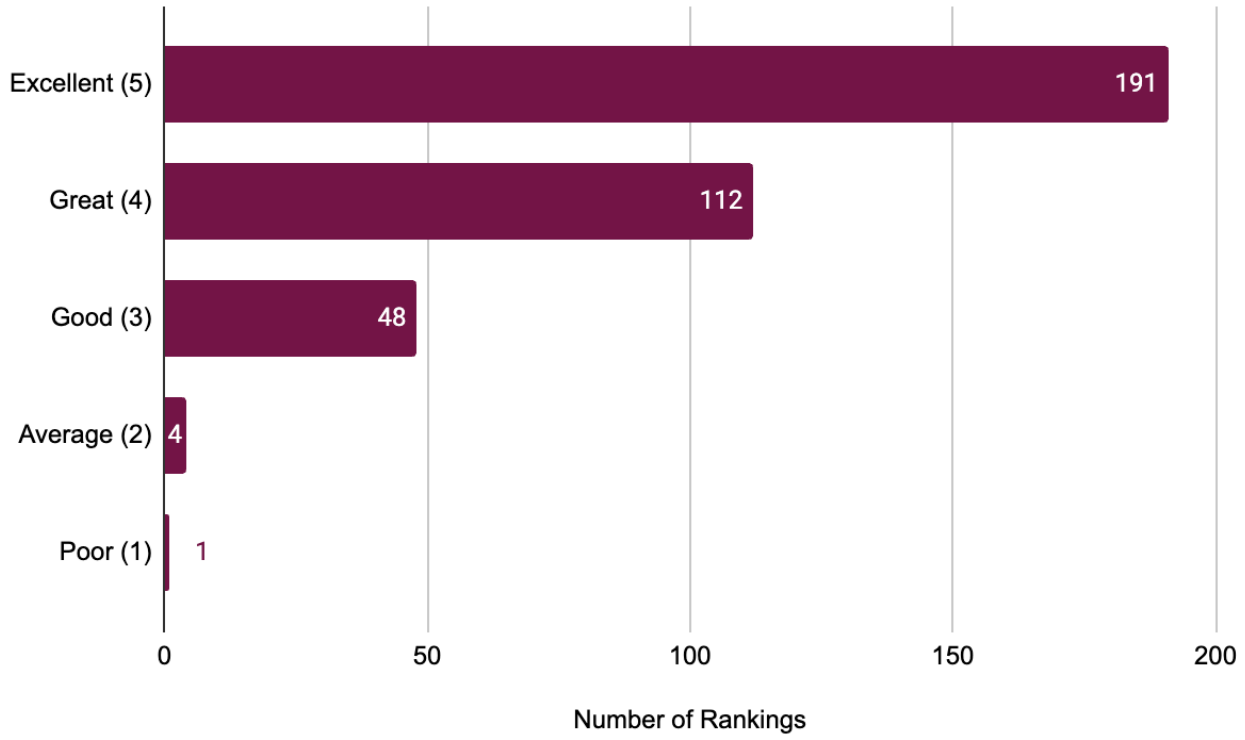


Figure 13: Course Rating for Course 5 Exploring Transfers (n=295)

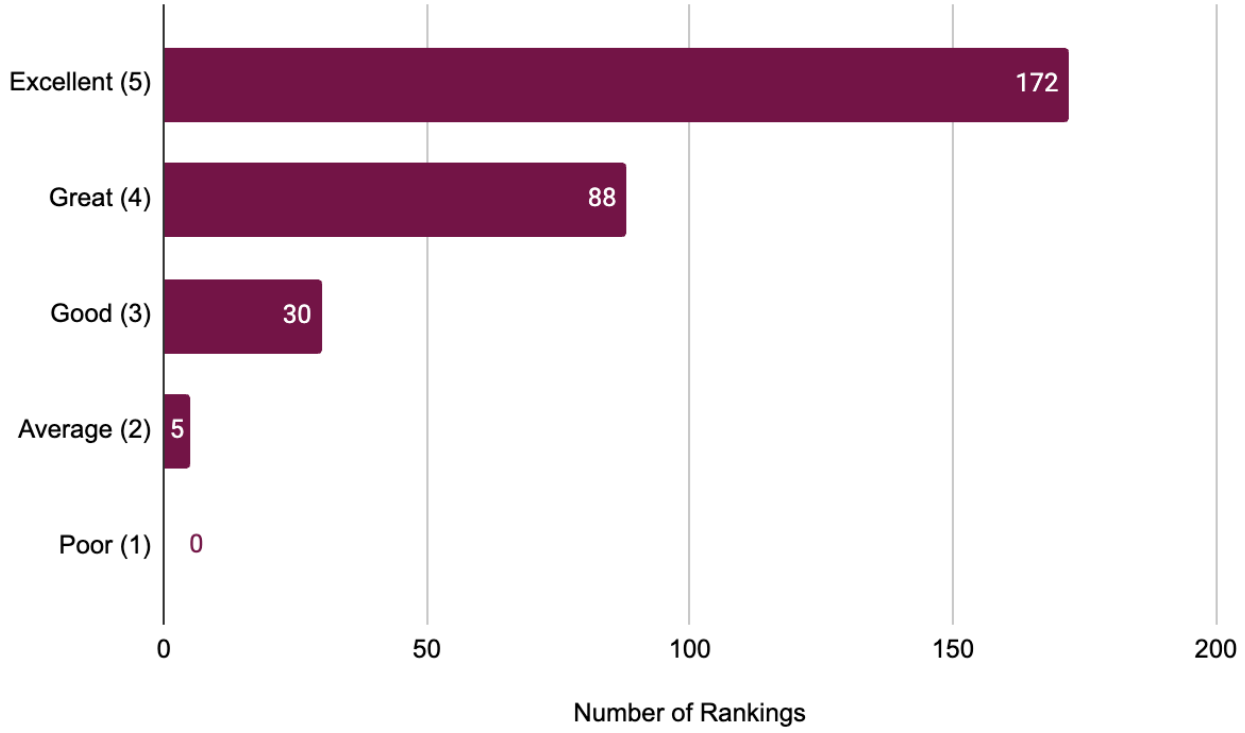


Figure 14: Course Rating for Course 5 Exploring Positioning (n=173)

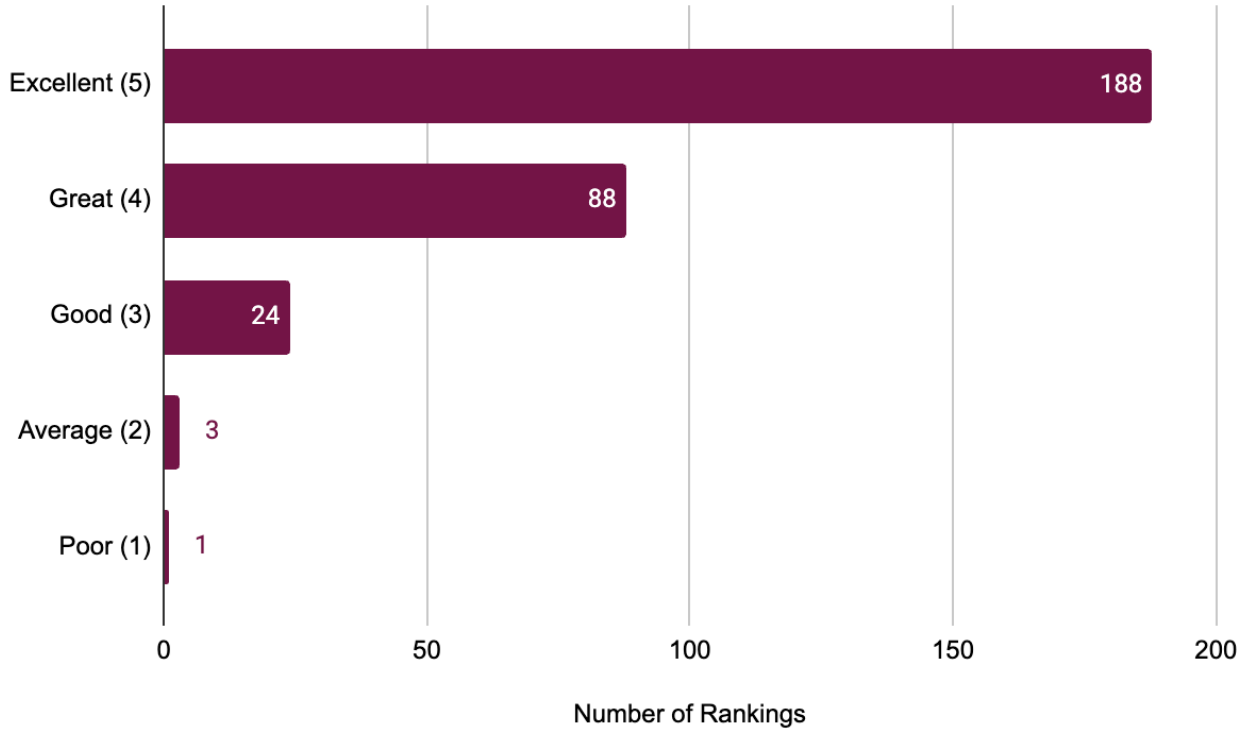
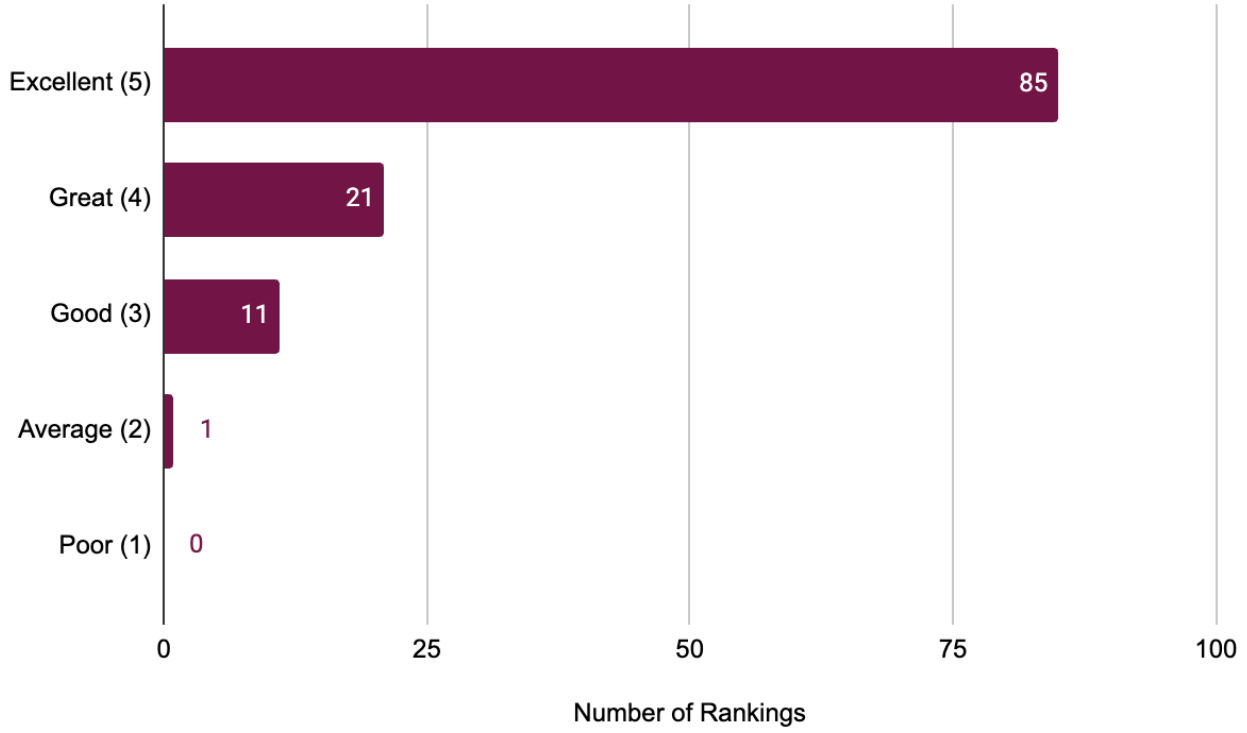


Figure 15: Course Rating for Course Programme (n=118)



4.2 Qualitative Data

Participants were provided the opportunity to give qualitative feedback on their experience with each course. When asked, "What were the best elements of this course?" overall, the participants reported that they enjoyed the variety of learning resources and materials available throughout the courses. The case studies were also highlighted as a great mechanism for relating the content to specific clinical scenarios, which was supported by the two live webinars that further utilised case studies to highlight the integration of the content across all courses and the role each plays in assessment. Participants also reported that the videos were presented clearly and in an engaging way with excellent speakers who were passionate about the content.

In Course 1 (Introduction to Rehabilitation Techniques and Intervention) participants highlighted that the course provided an extensive review of fundamental rehabilitation techniques, and more importantly, it reinforced the role of the ICF in my patient care practice.

> **"This first course was a marvelous conceptual overview of the necessary elements of rehabilitation, frameworks and the importance of outcome measures for practice. It succinctly and expressly impressed upon me core factors in a memorable manner that I know I will remember."**

Despite focusing on the basics it was considered a good introduction and refresher for those involved in either utilising, explaining or teaching the holistic aspects of rehabilitation! This course's fundamentals of choosing rehabilitation interventions have been clearly depicted and beautifully woven together.

"Back to Basics is usually overlooked, but I think it has much to offer! I would recommend this course to every Rehabilitation Professional. It is easy to slip away from basics as you gain more years of experience. You tend to perform techniques you cannot explain, even though they are correct. It's a must-course for me."

In Course 2 (Assessment Before Moving and Handling) participants highlighted that the course details how each assessment relates to rehabilitative intervention, delivered excellently with helpful examples, and was a great refresher as well as additional knowledge when it comes to handling patients that will benefit not only rehab professionals but also other rehabilitation staff, including nurses, physicians and support staff! The course also provided a great handy table that participants felt was something basic that can be shared with all primary caregivers.

"Vitals, bloodwork, and monitors are a staple to inpatient assessment and aim to assist in dealing with the patient's ongoing pathology. This course details how each assessment relates to rehabilitative intervention, delivered excellently with helpful examples."

In Course 3 (Assessing Range of Motion) it was evident that participants knowledge of range of motion was enhanced significantly through the course and felt the course enhanced their current skills in performing range of motion assessments, and being better aware of the factors that can impact assessment.

"As a GP, I have performed ROM assessments for various patients. Yet, this course taught me I still have more to learn about this examination and that more information can be unearthed from examining ROM."

"I did not know much about assessing the range of motion, but this course is excellent! It enhanced my knowledge regarding the assessment of range of motion. It covered all the essential components that every practitioner should know before assessing a patient's range of motion."

In Course 4 (Assessing Muscle Strength) participants highlighted that the course was fantastic for both basic levels, but was also a great review for advanced level rehabilitation professionals. It not only provided a review of skeletal muscle physiology and biomechanics, but explored positions, techniques, and grading systems needed for muscle strength assessment.

"It is an excellent course for basic levels and fantastic revision for advanced levels!"

"This course supplied virtually every piece of information needed for muscle strength assessment in rehabilitation!"

In Course 5 (Assessing Muscle Length) it was evident that for many participants that it provided a refresher for concepts that significantly impact on muscle length assessment such as passive insufficiency and assessing muscle that cross two or more joints, that are frequently overlooked in rehabilitation.

"I did not know what passive insufficiency meant. Will definitely practice various muscle length assessments to become familiar with them. I shall be more mindful of testing positions while evaluating length of two joint or multi joint muscles."

In Course 6 (Neurological Screen) reinforced the importance of using a neurological screen across a wide range of settings and not just for those who work within a neurology setting. Participants highlight that the course guides you through a step by step process for neurological screening with a fast, practical and organized approach so you don't miss any hints that can help you with diagnostic impressions. Another key learning for many participants was the importance of consistency and documentation in screening such as use of the same dermatome maps.

> **"Serves as a review of fundamentals and stresses the importance of consistency. So I will definitely be paying attention to smaller details that can be overlooked when you are the only therapist in your practice."**

> **"I intend to use the same dermatomal map for tests and communicate appropriately to my colleagues to encourage better patient care and follow up."**

> **"I revised my knowledge of neurological screening and special tests to the same. I will have an increased awareness of subjective statements that will indicate the need for a neurological screening such as pins and needles, dizziness and decreased sensation. I will also look to employ the same dermatome map going forward as this will allow for consistency across treatments and for other clinicians to better use my note taking. I have revised the techniques used to test for the different senses such as pain, light touch and temperature, as well as how I test tendon reflexes and myotomes. This will give me more confidence as a first contact clinician going forward. I will also be able to better describe my tests to any patient that requires a screen, which will allow for decreased fear or worry and improve rapport during the session."**

In Course 7 (Exploring Positioning) and Course 8 (Exploring Transfers) participants felt this course was excellent for beginners but also provided superb revision with attention to details for people who are already practicing in a clinical setup. Participants most valued the practical strategies that can be utilised for use in patient positioning and handling. For many they found better use of terminology for describing positioning and transfers, which ensure improved documentation and handover of information to other rehabilitation professionals.

Finally, participants who completed the full programme of eight courses found the programme of courses to be a great refresher of the fundamental rehabilitation techniques that are used in daily clinical practice, helping to both verify current practice, leading to more confidence in application.

> **"Very good refreshment course going back to the basics to help with the assessment of the patients for better and effective rehabilitation outcome."**

> **"Even though I performed some of the assessments, going through these modules allowed me to reflect on my own practice and think about how I can improve my assessment to better form my rehabilitation plan."**

And most importantly, for many participants it has assisted them in being more intentional about their use of evidence based practice, and selection of techniques.

> **"I will be more intentional about implementing the techniques learned in assessment and interventions for my patients."**

When asked, “How could this course be improved?” participants again requested that the course be offered for a longer period of time, which has been a common theme seen year after year. While the MOOC itself ran for 4 weeks, the courses were still available for Plus members after the four week period, so the option was available by becoming a member of Plus.

The case studies were popular and felt to have been a great addition to the course, but many requested access to more clinical case studies, and where possible video based case studies.

> **“I think the introduction of the two clinical case studies webinars have been a great addition. I would suggest more clinical case studies.”**

> **“The significant factors were the practice videos and also the case studies that were used to illustrate and elaborate on the application of the courses to real life events.”**

There were also many requests for further video demonstrations of the practical techniques across all areas of the programme, that can be used during the course but that would also be available as a clinical tool for use within clinical practice.

> **“More visual practical examples (demonstrations on patients) and less presentation.”**

> **“Videos to explain the type of contractions and pictures for the MMT positions”**

> **“More testing technique videos”**

Overall from all the qualitative feedback and suggestions received from the participants, more access to practical demonstrations, case studies and live webinars are valued as key tools to enhance learning opportunities within the courses, and what participants would like to see more of.

> **“My objectives were fully met. The significant factors that led to this achievement were the introduction videos on every topic/course with the transcripts and easy to understand materials with links to more resources and further reading that really helped me gather so much more skills and knowledge. The videos for demonstrations that further increased my understanding. I also enjoyed the rehab community setting different group case study discussions that also helped a lot. The quizzes at the end of each course were also great to check my understanding. Furthermore the two Webinars on upper and lower limb case studies played a greater role to me.”**

4.3 Impact on Knowledge

In order for a participant to show increased knowledge they needed to complete both the Pre- and Post-Course Knowledge and Competency Self-Rating Tools. Increase in knowledge can be evidenced by an increase in the average (mean) self-assessment scores between the Pre- and Post-Course Knowledge and Competency Self-Rating Tools as seen in Tables 9 and 10 below..

Only 102 participants completed the Post-Course Knowledge and Competency Self-Rating Tool, accounting for just 28% of the participants who completed the final course of the MOOC (Course 8 Exploring Transfers). Evidence from the Post-Course Knowledge and Competency Self-Rating Tool also shows improvement in knowledge across all areas following course completion.

Data was analyzed using the Mann U Whitney. All ten questions demonstrated statistically significant increases in scores indicating improvement in participant perceptions.

Table 13: Understanding Data from Pre- and Post-Competency Course Knowledge and Competency Self-Rating Tool - Constructs that Affect Patient Examination

Please rate your understanding of the following constructs that can affect the results of a patient examination on a 0-5 scale with 1 being no understanding and 5 being strong understanding.			
Question	**Pre Mean**	**Pos Mean**	**Mann U Whitney Pre Post**
The influence of muscle strength on the ability of a patient to perform active range of motion (1)	4.09	4.50	<.001
The influence of muscle flexibility on the available range of motion of a joint (2)	3.79	4.45	<.001
The influence of muscle tone on the available range of motion of a joint (3)	3.77	4.42	<.001
The influence of the type of muscle contraction on the strength a patient is able to produce (4)	3.79	4.43	<.001
The influence of neuromuscular inhibition on the strength a patient is able to produce (5)	3.07	4.21	<.001

Table 14: Understanding Data from Pre- and Post-Competency Course Knowledge and Competency Self-Rating Tool - Type of Neurological Impairment

Please rate your understanding of the type of neurological impairment (peripheral nervous system or central nervous system) based on the results of the following neurological assessments on a 1-5 scale with 1 being no understanding and 5 being strong understanding.			
Question	**Mean Pre**	**Mean Post**	**Mann U Whitney Pre Post**
Deep Tendon Reflexes e.g. achilles, patellar, biceps, triceps	3.43	4.36	<.001
Superficial / Cutaneous Reflexes e.g. plantar, anal	3.13	4.24	<.001
Pathological Reflexes e.g. Hofmann's, Babinski, Clonus	3.23	4.23	<.001
Myotomes / Motor Assessment	3.34	4.35	<.001
Dermatomes / Sensory Assessment	3.49	4.38	<.001

Table 15: Understanding Data from Pre- and Post-Competency Course Knowledge and Competency Self-Rating Tool - Factors Affecting Patient Moving and Handling

Please rate your understanding of how the following factors can affect patient movement and handling on a 1-5 scale with 1 being no understanding and 5 being strong understanding.			
Question	**Mean Pre**	**Mean Post**	**Mann U Whitney Pre Post**
Communication between Patient and Healthcare Professional	4.06	4.55	<.001
Patients Cardiorespiratory Status e.g. Heart Rate, Blood Pressure, Respiratory Status, Oxygen Saturation	3.76	4.38	<.001
Patients Neurological Status e.g. Tone, Sensation	3.70	4.41	<.001
Patients Orthopaedic Status e.g. Range of Motion, Strength, Weight-bearing Status	3.74	4.54	<.001
Lines and Leads e.g. Electrocardiogram (ECG), Arterial and Venous Lines, Urinary Catheters	3.11	3.86	<.001

Figure 16 - 25 shows the data related to impact on knowledge before and after course completion.

Figure 16: Understanding of Communication between Patient and Healthcare Professional

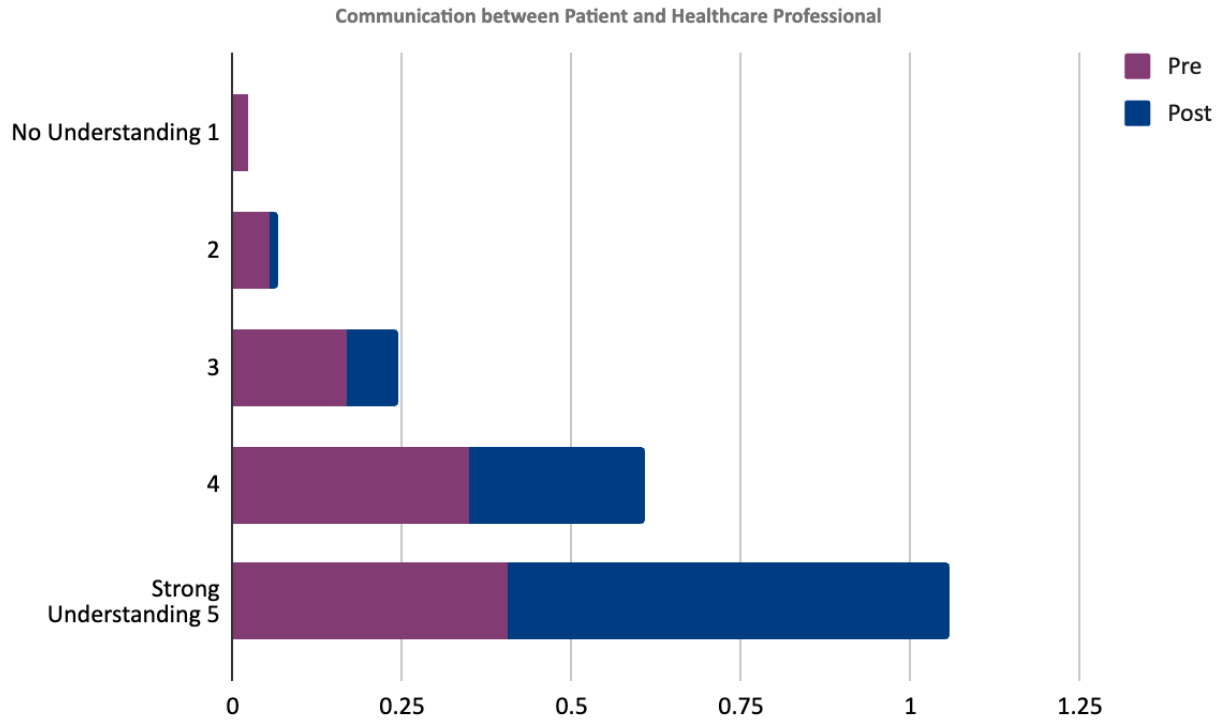


Figure 17: Understanding of Patient's Cardiorespiratory Status

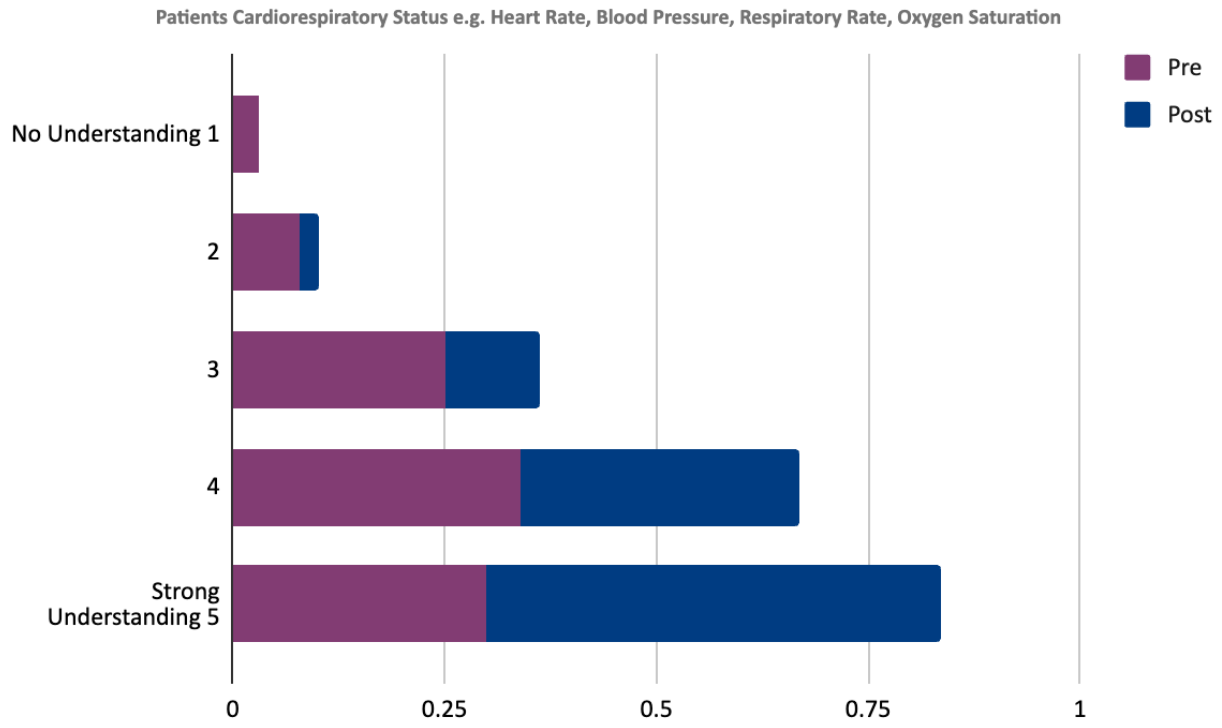


Figure 18: Understanding of Patient's Neurological Status

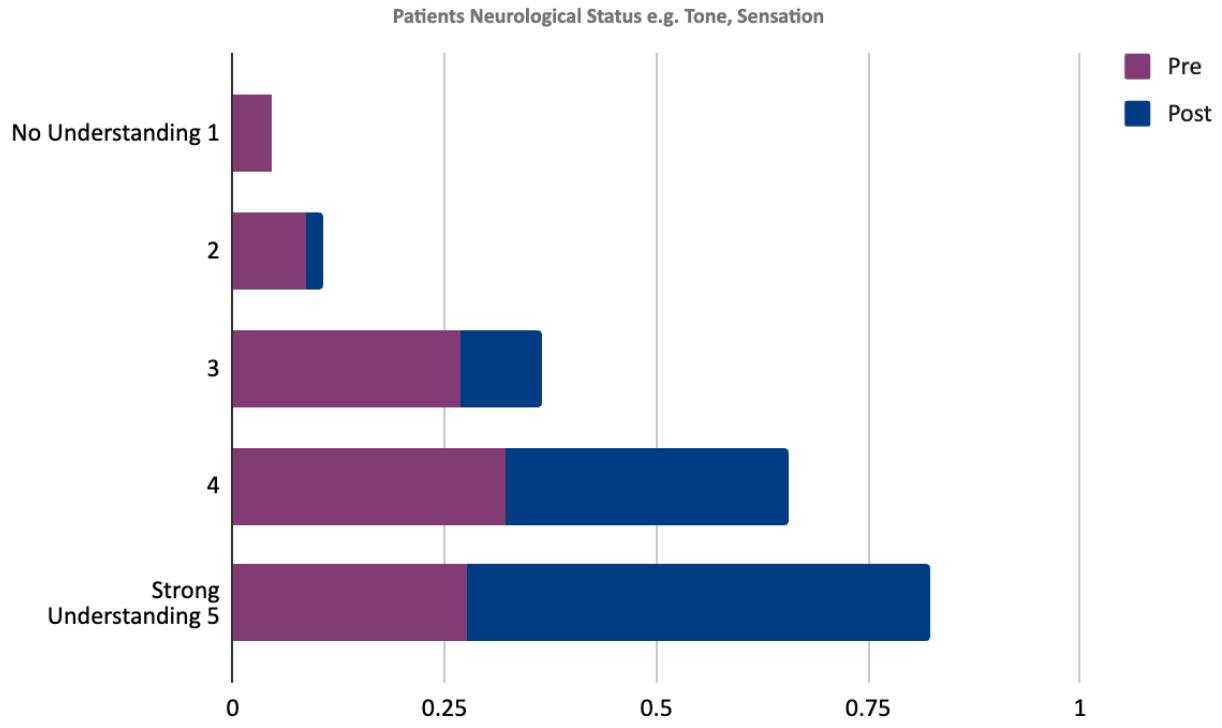


Figure 19: Understanding of Patient's Orthopaedic Status

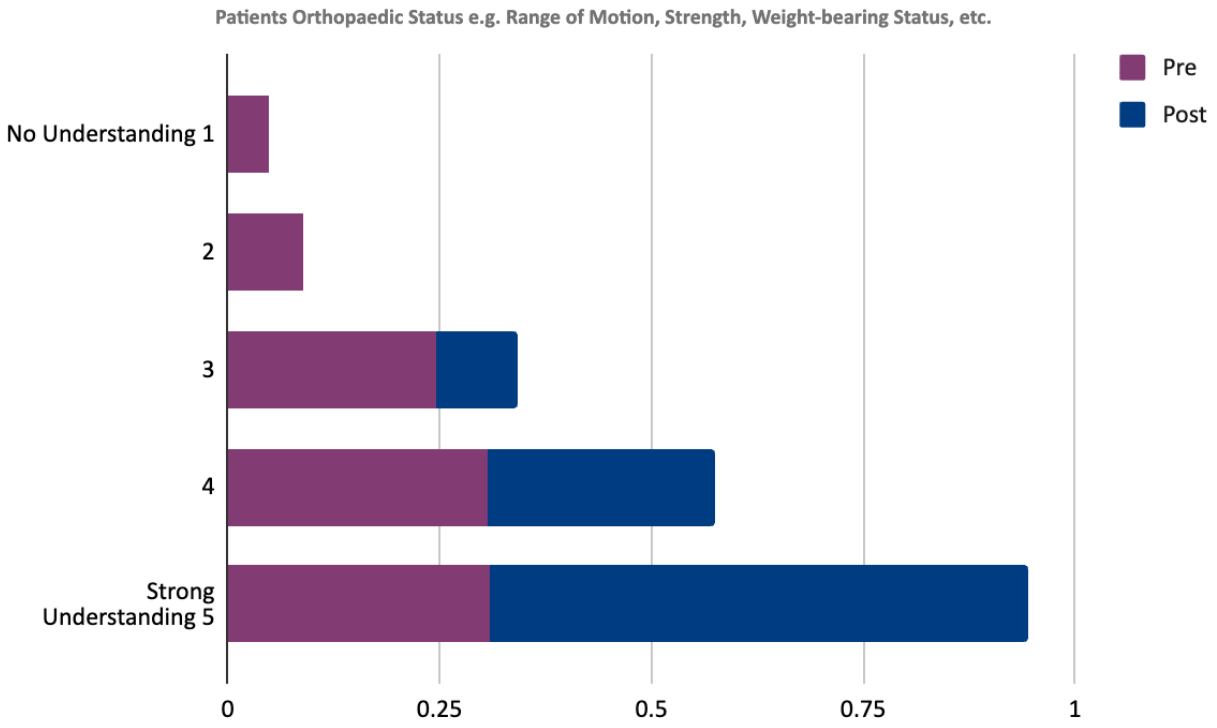


Figure 20: Understanding of Lines and Leads

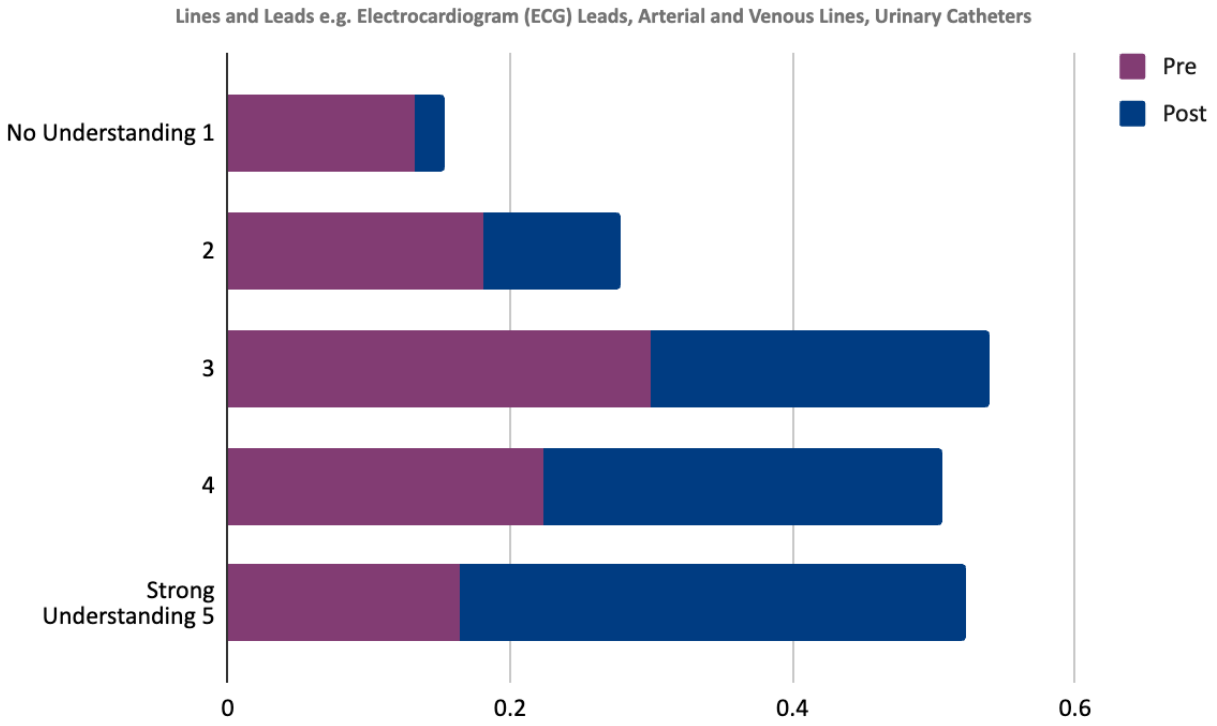


Figure 21: Understanding of Deep Tendon Reflexes (is. Achilles, Patellar, CBicep, Tricep)

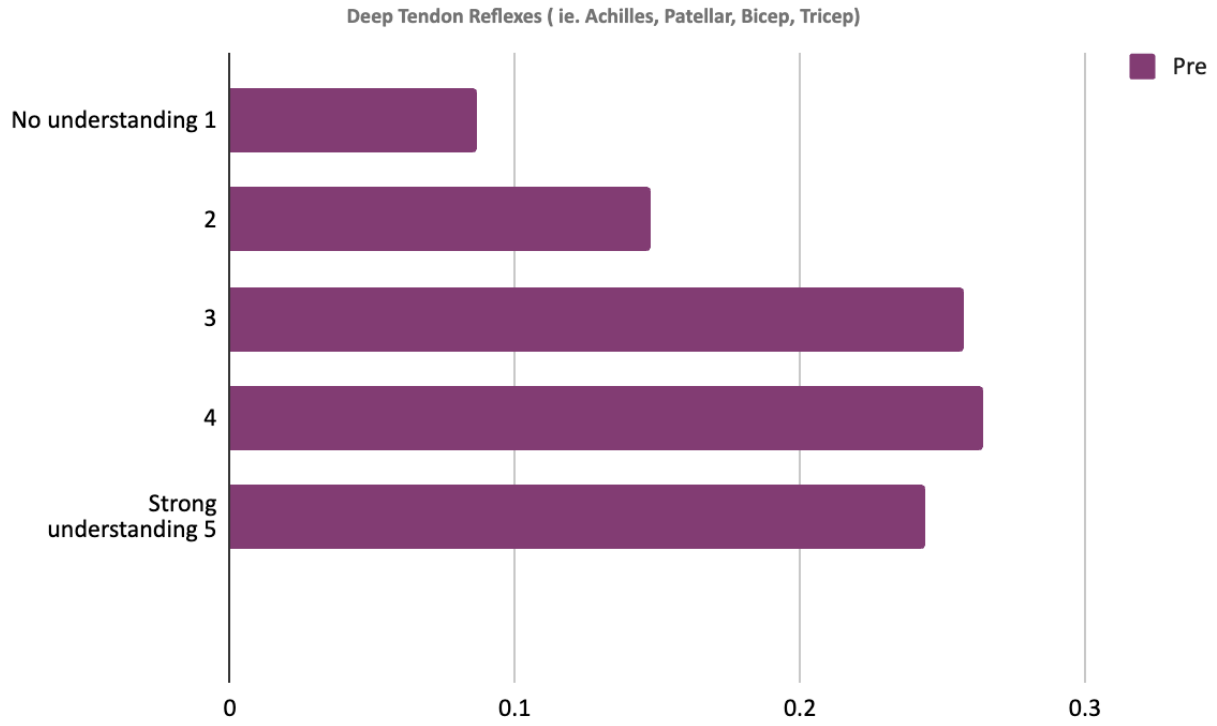


Figure 22: Understanding of Superficial / Cutaneous Reflexes (ie. Plantar, Anal)

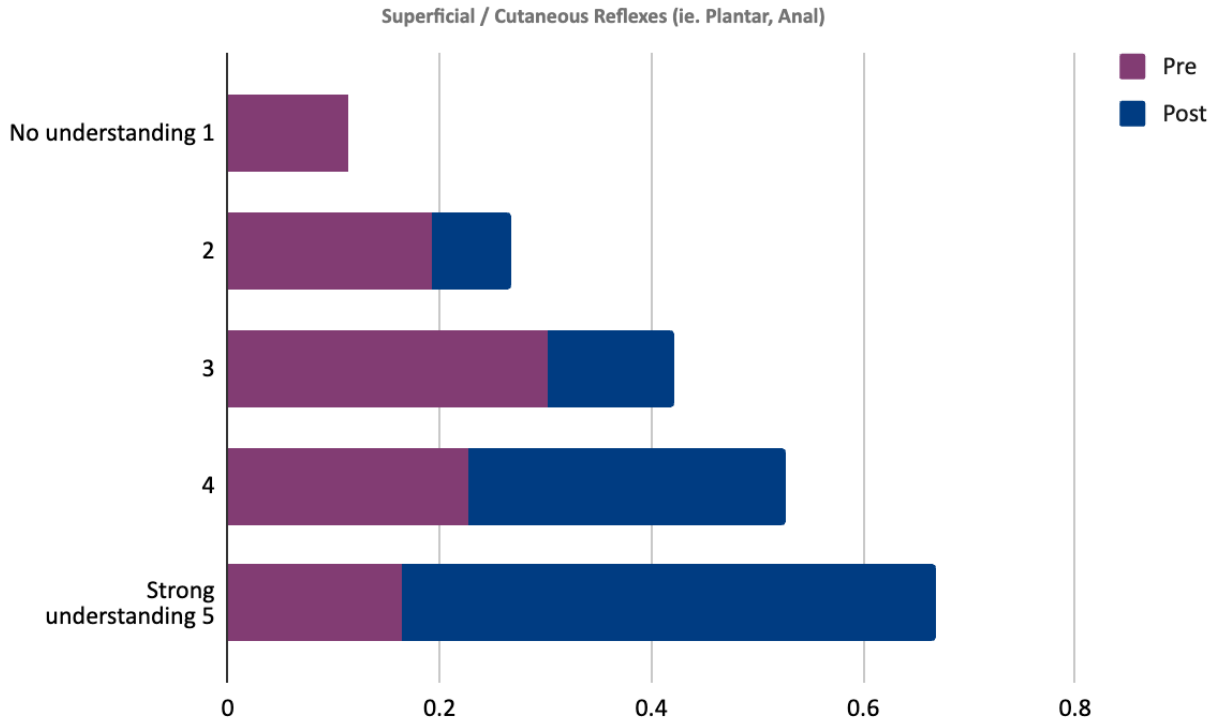


Figure 23: Understanding of Pathological Reflexes (ie. Hoffman's, Babinskis, Clonus)

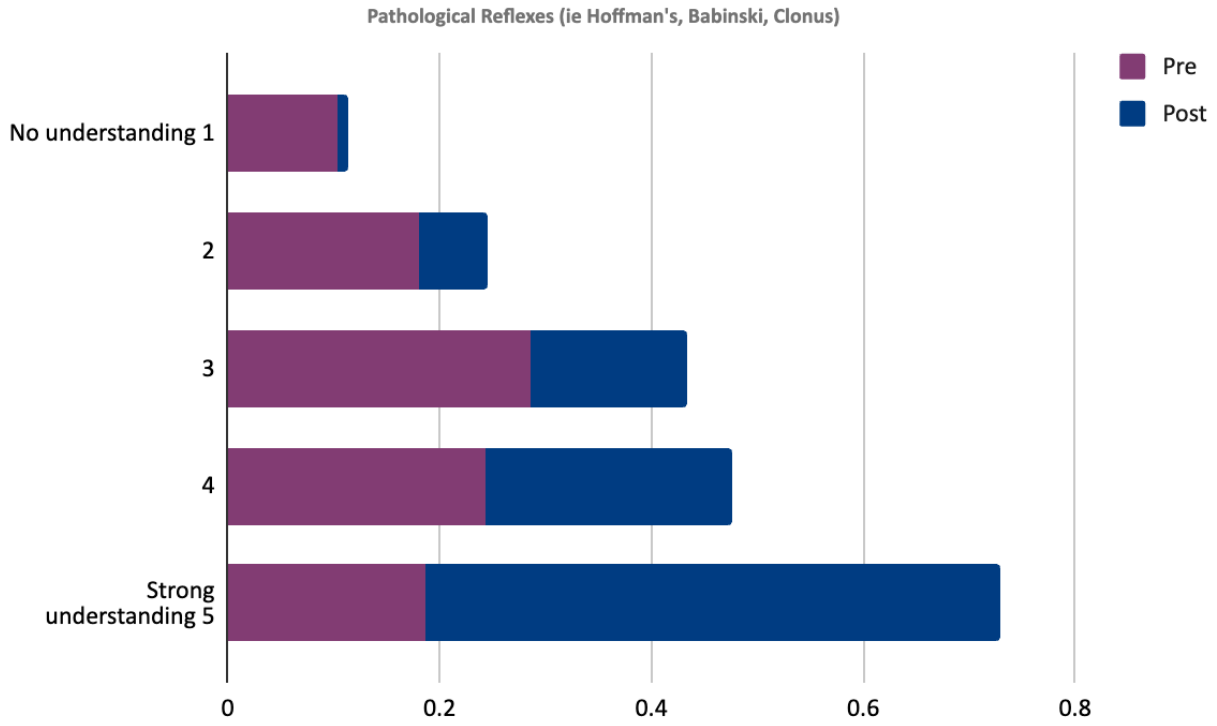


Figure 24: Understanding of Myotomes / Motor Assessment

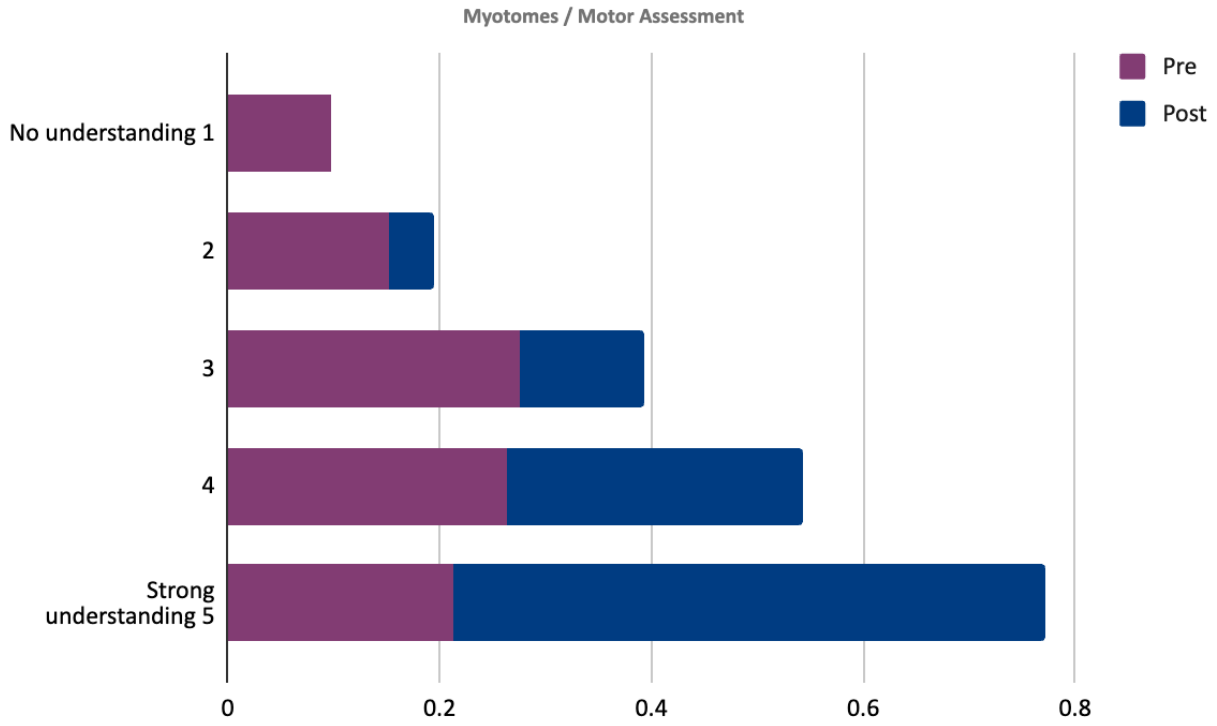
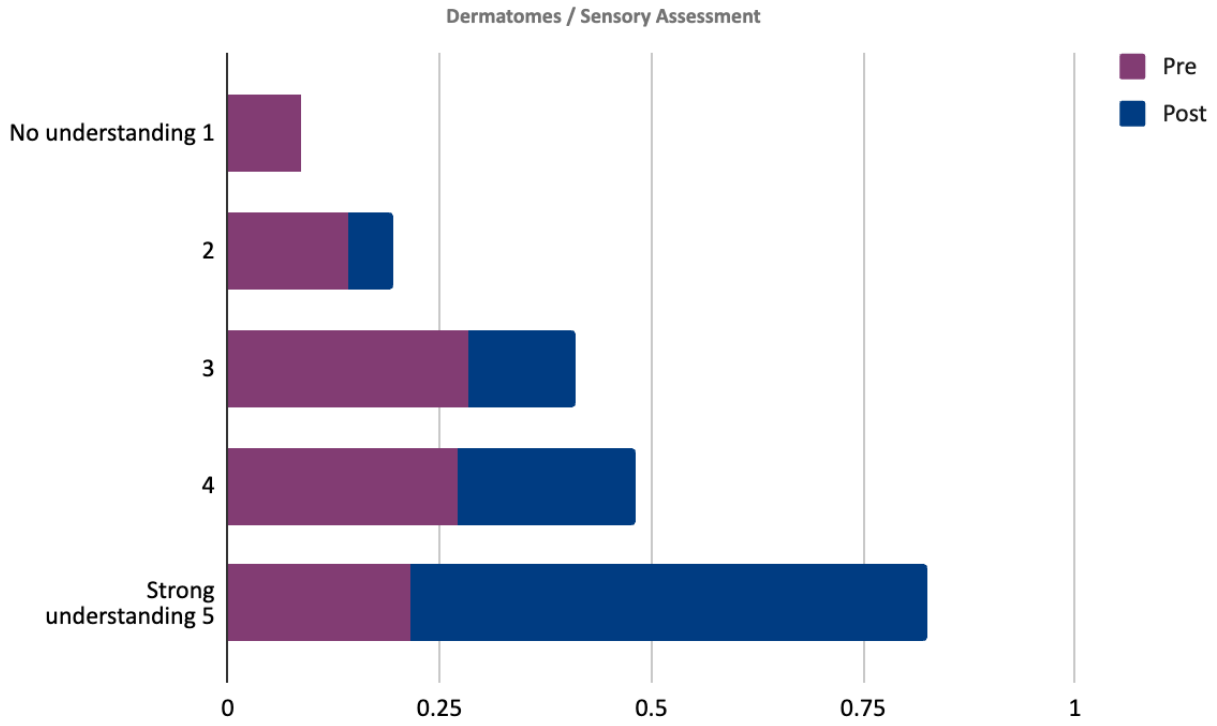


Figure 25: Understanding of Dermatomes / Sensory Assessment



4.4 Impact on Clinical Practice

In the evaluation, participants were asked to "describe any changes to your clinical practices that you have made or intend to make as a result of participation in this course." Generally, it appears that the Understanding Basic Rehabilitation Techniques Programme facilitated improvement of participants' overall fundamental rehabilitation assessment and intervention skills. For the majority of participants the course acted to reinforce knowledge already learned, and to update evidence based practice.

> **"Helps to verify current practice, leading to more confidence in application"**

and

> **"will be more intentional about implementing the techniques learned in assessment and interventions for my patients.**

Further illustrative sample comments on the impact of clinical practice can be found in Appendix 5.

Evidence from the Post-Course Knowledge and Competency Self-Rating Tool also shows increased confidence in skills across all areas identified after completion of the course. All participants were asked to complete a pre- and post-competency survey noting their perception of comfort with the knowledge and skills taught within the MOOC.

Data was analyzed using the Mann U Whitney U. All five questions demonstrated statistically significant increases in scores indicating improvement in participant confidence in use of fundamental assessment techniques.

Table 16: Confidence Data from Pre- and Post-Competency Course Knowledge and Competency Self-Rating Tool

Please rate your confidence in effectively performing the following assessment techniques on a 1-5 scale with 1-no confidence in performing; 5- able to confidently perform consistently with a variety of patient presentations.			
Question	**Mean Pre**	**Mean Post**	**Sig**
Goniometric Measurement of Range of Motion	3.51	4.32	<.001
Measurement of Length of Muscle	2.87	4.16	<.001
Manual Muscle Testing of Various Musculature to Objectify Strength	3.46	4.31	<.001
Neurological Screening including Dermatomes, Myotomes and Peripheral Reflexes	3.22	4.19	<.001
Patient Moving and Handling Techniques and Interventions	3.47	4.36	<.001

Figure 26 - 30 shows the data around confidence performing basic assessment and rehabilitation techniques consistently with a variety of patient presentations.

Figure 26: Goniometric Measurement of Range of Motion

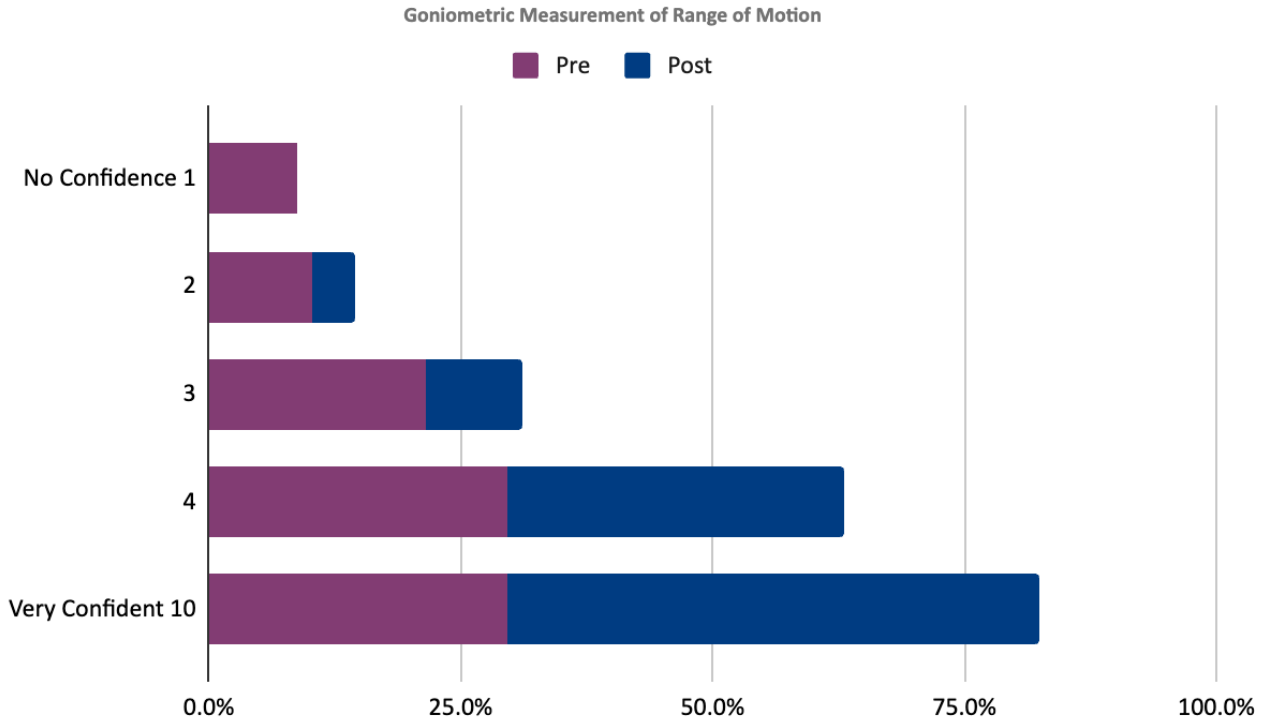


Figure 27: Measurement of Length of Muscle

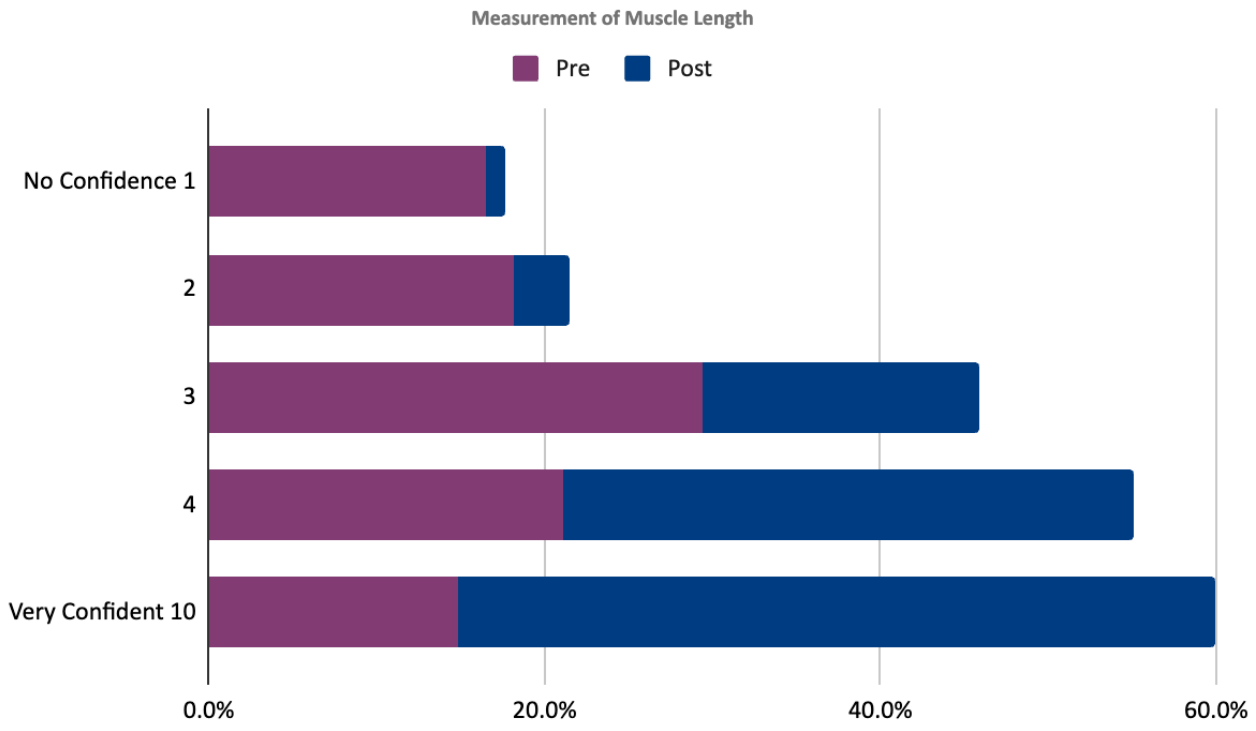


Figure 28: Manual Muscle Testing (MMT) of Various Musculature to Objectify Strength

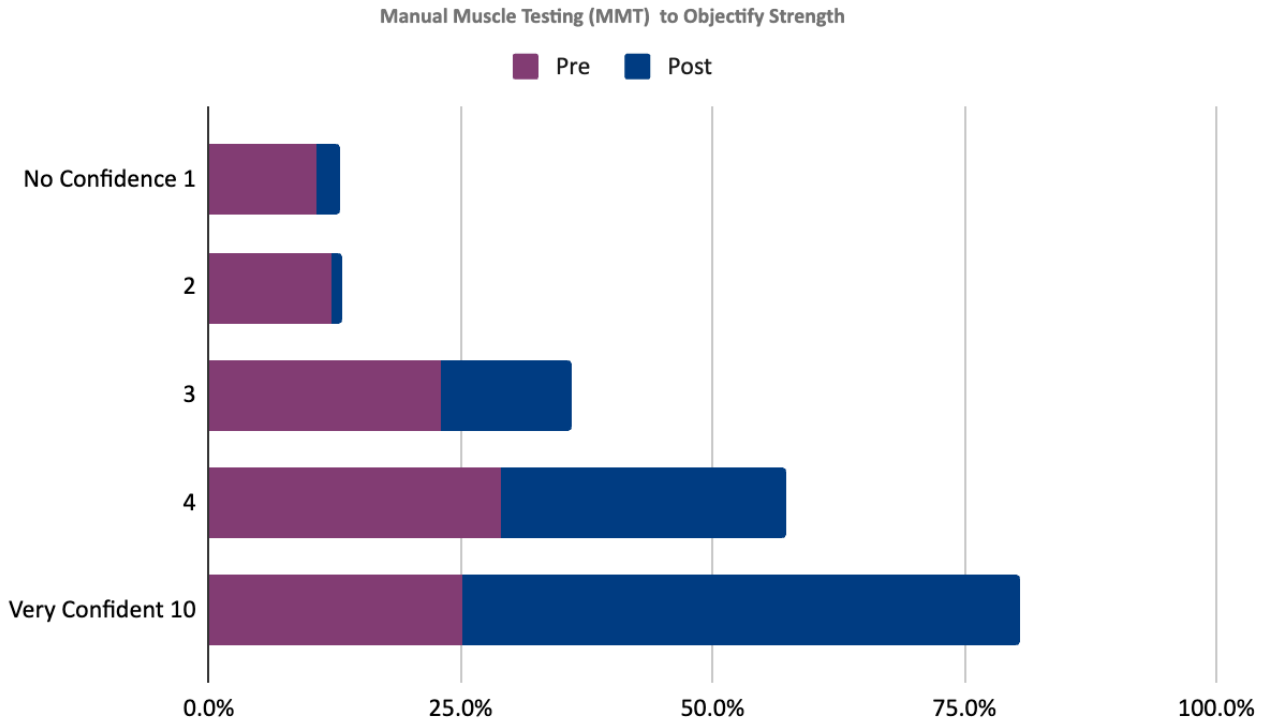


Figure 29: Neurological Screening including Dermatomes, Myotomes and Peripheral Reflexes

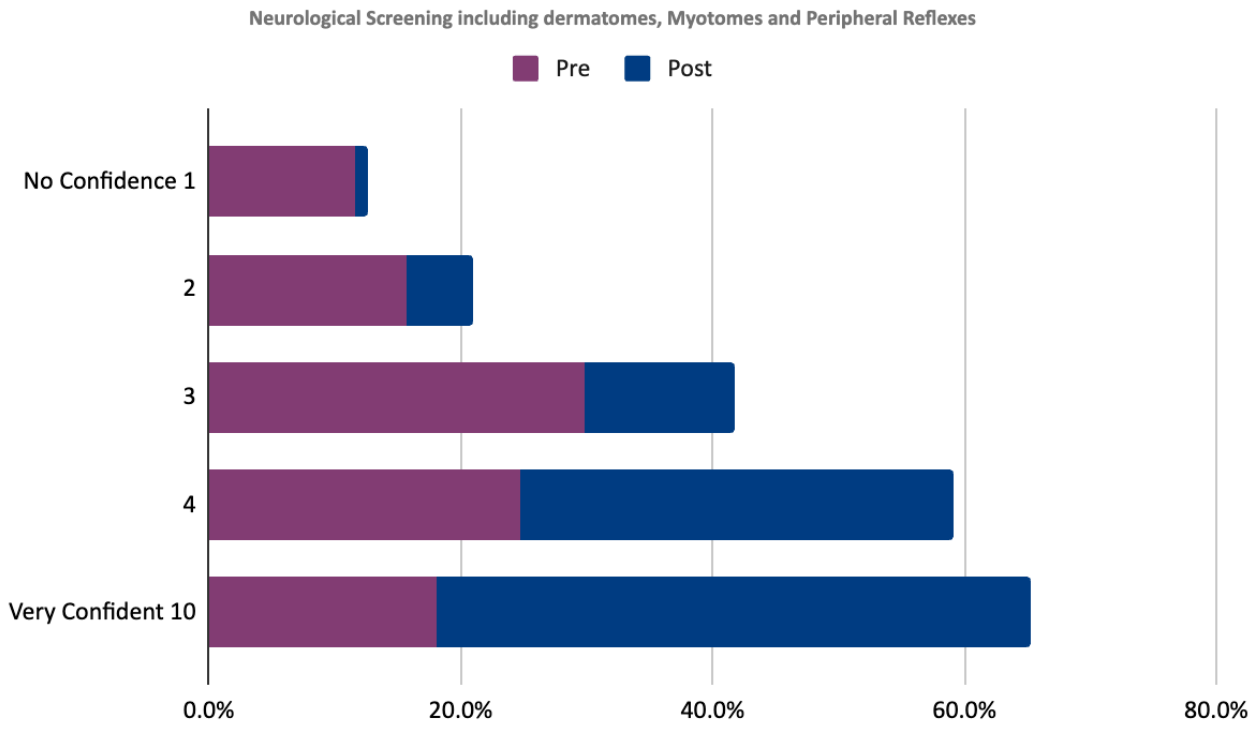
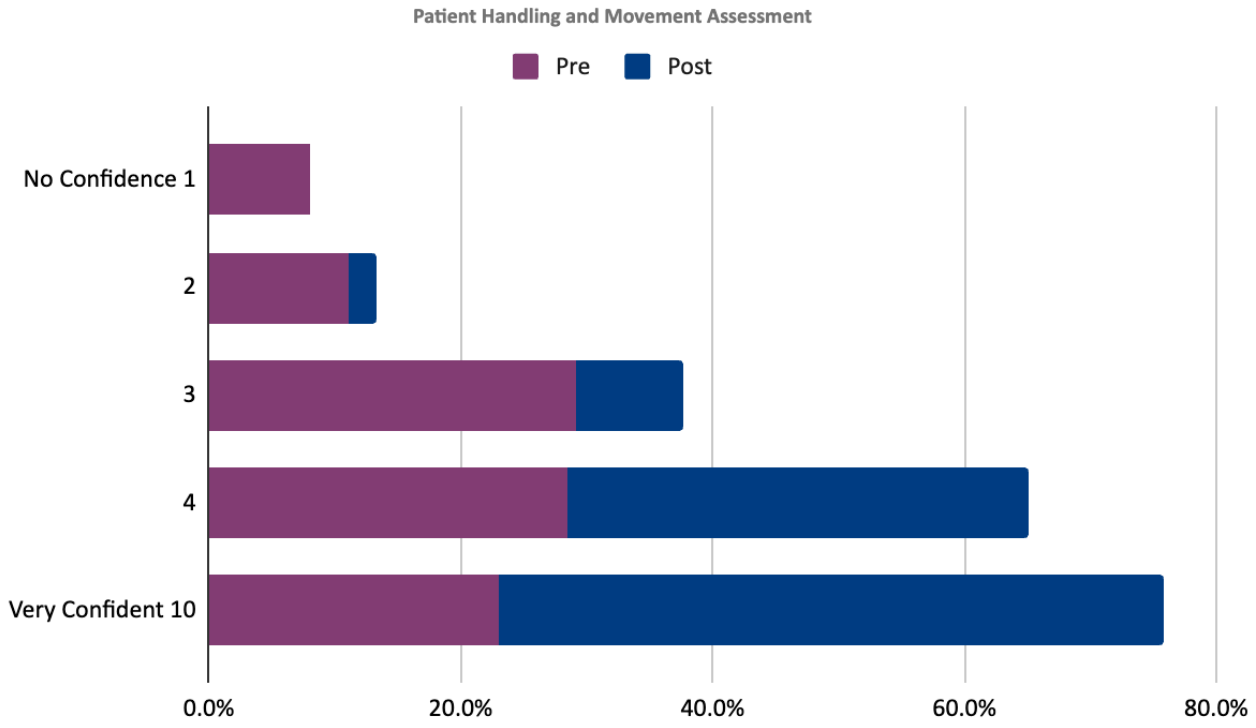


Figure 30: Patient Handling and Movement Assessment



5.0 Conclusion

ReLAB-HS, led by Physiopedia, successfully delivered the MOOC Understanding Basic Rehabilitation Techniques programme over four weeks in September and October 2021. Throughout the duration of the MOOC there were 3,960 course completions across all eight courses with 24,696 learning activities logged earning 13,962 Plus points.

It is apparent from the course registration data that this course was a topic that was relevant to all health, social care, and rehabilitation providers across the world across all levels of practice from students, for those returning to practice, to expert clinicians and academics.

It is evident from learners' feedback that learners gained a new appreciation for the fundamental rehabilitation techniques that underpin everything we do in clinical practice, as highlighted by the following testimonial;

> *"One cannot change what one cannot measure", it's our very basic and logical thinking that we need to remind ourselves of in every rehab session".*

Appendix 1 Course Participants Demographics

Table 17: Number of Participants from the 111 Represented Countries

Country	Course 1 n	Course 2 n	Course 3 n	Course 4 n	Course 5 n	Course 6 n	Course 7 n	Course 8 n
Afghanistan (AF)	6	4	2	1	1	3	0	0
Albania (AL)	1	1	1	0	0	0	0	0
Australia (AU)	50	39	34	30	24	27	24	24
Austria (AT)	1	2	2	2	2	2	2	2
Bahamas (BS)	2	1	0	0	0	0	0	0
Bahrain (BH)	1	1	1	1	0	1	0	1
Bangladesh (BD)	3	2	2	1	0	1	1	1
Belgium (BE)	2	1	1	0	0	0	0	0
Bhutan (BT)	1	0	0	0	0	0	0	0
Bosnia & Herzegovina (BA)	0	0	0	0	1	0	0	0
Botswana (BW)	1	0	0	0	0	0	0	0
Brazil (BR)	5	3	3	3	2	4	3	3
Bulgaria (BG)	3	3	4	4	3	2	1	2
Cameroon (CM)	7	6	6	5	5	5	4	4
Canada (CA)	47	29	25	28	21	24	18	16
Cayman Islands (KY)	2	2	2	1	1	1	1	1
Chad (TD)	1	0	0	0	0	0	0	0
Chile (CL)	0	1	0	0	0	0	0	1
China (CN)	1	1	2	1	0	1	0	0
Colombia (CO)	1	1	0	0	0	0	0	0
Congo, Democratic Republic (CD)	1	0	0	0	0	0	0	0
Croatia (HR)	1	3	3	3	2	3	2	3
Czech Republic (CZ)	1	0	0	0	0	1	0	0
Denmark (DK)	1	0	0	0	0	0	1	0
Egypt (EG)	135	83	70	60	56	55	50	49
Estonia (EE)	3	4	4	2	2	2	1	2
Ethiopia (ET)	1	2	0	0	1	0	0	0
Fiji (FJ)	0	0	1	0	0	0	0	1
Finland (FI)	1	1	1	3	1	1	0	0
France (FR)	7	2	2	1	1	3	1	16
Georgia (GE)	1	0	0	0	0	0	0	0
Germany (DE)	5	4	3	3	1	1	3	2
Ghana (GH)	12	8	6	3	3	3	2	3
Greece (GR)	8	7	6	6	6	6	6	6
Grenada (GD)	1	1	1	1	1	1	1	1
Guyana (GY)	2	0	0	0	0	0	0	0
Haiti (HT)	2	1	1	0	0	0	0	0
Hong Kong (HK)	8	8	6	5	6	6	5	6
Hungary (HU)	4	1	2	1	1	1	1	1
India (IN)	65	46	38	27	24	25	23	22

Indonesia (ID)	8	4	3	2	2	2	1	1
Iran, Islamic Republic (IR)	1	0	0	0	0	0	0	0
Iraq (IQ)	1	2	1	1	0	0	0	1
Ireland (IE)	12	7	6	11	8	11	5	4
Israel (IL)	3	1	2	2	1	1	1	1
Italy (IT)	6	5	4	4	3	5	2	4
Jamaica (JM)	11	7	7	7	6	5	5	5
Japan (JP)	1	0	0	0	2	1	1	1
Jordan (JO)	9	5	4	4	4	2	2	2
Kazakhstan (KZ)	4	3	2	4	3	3	2	2
Kenya (KE)	14	9	7	6	6	6	5	6
Kuwait (KW)	2	2	3	3	2	2	2	2
Kyrgyzstan (KG)	1	1	1	1	0	0	0	0
Latvia (LV)	1	0	0	0	1	0	0	0
Lebanon (LB)	3	3	3	3	3	3	2	2
Lithuania (LT)	1	0	0	0	0	0	0	0
Macedonia (MK)	2	1	1	0	0	0	0	0
Madagascar (MG)	1	1	1	1	1	1	1	1
Malawi (MW)	3	1	1	1	0	0	0	0
Malaysia (MY)	6	4	1	1	1	1	2	1
Malta (MT)	2	1	1	1	0	0	0	0
Mexico (MX)	3	1	1	2	2	1	1	1
Morocco (MA)	0	1	0	0	0	0	0	0
Myanmar (MM)	12	7	8	4	5	3	2	4
Namibia (NA)	2	1	1	2	2	2	1	2
Netherlands (NL)	11	7	10	10	11	7	7	5
New Zealand (NZ)	6	4	3	2	1	1	2	1
Niger (NE)	1	1	1	1	1	1	1	1
Nigeria (NG)	130	99	74	65	55	61	49	52
Oman (OM)	1	1	1	1	1	1	1	1
Pakistan (PK)	46	28	18	20	16	16	12	12
Papua New Guinea (PG)	1	1	0	0	0	0	0	0
Peru (PE)	2	2	2	2	2	2	1	1
Philippines (PH)	10	9	7	6	4	5	7	3
Poland (PL)	4	4	4	3	4	4	2	2
Portugal (PT)	4	2	2	3	3	3	3	3
Qatar (QA)	10	9	7	9	6	6	5	5
Romania (RO)	2	1	1	1	0	0	0	1
Russian Federation (RU)	3	0	0	0	0	0	0	1
Rwanda (RW)	14	13	11	9	10	7	6	7
Saint Lucia (LC)	1	1	1	0	0	0	0	0
Saudi Arabia (SA)	11	7	3	2	3	2	2	2
Serbia (RS)	2	2	3	1	1	2	1	0
Singapore (SG)	11	3	4	4	4	2	2	0
Slovenia (SI)	3	1	1	1	0	1	0	0
Somalia (SO)	6	3	3	2	2	2	2	2
South Africa (ZA)	52	41	35	29	28	30	28	26

Spain (ES)	1	1	1	0	0	0	0	0
Sri Lanka (LK)	9	7	6	6	5	4	6	6
Sudan (SD)	2	3	3	3	3	3	3	3
Swaziland (SZ)	1	1	0	0	0	0	0	0
Sweden (SE)	0	0	0	0	0	2	0	0
Switzerland (CH)	2	2	2	2	3	4	2	3
Syrian Arab Republic (SY)	5	5	3	2	2	2	2	2
Tanzania (TZ)	3	2	1	0	0	0	0	1
Thailand (TH)	0	0	1	0	0	0	0	0
Timor-Leste (TL)	1	1	1	1	1	0	0	0
Trinidad And Tobago (TT)	3	1	1	2	1	1	0	1
Turkey (TR)	9	7	7	4	3	5	1	2
Uganda (UG)	13	11	10	8	7	7	4	3
Ukraine (UA)	28	13	17	5	7	7	8	7
United Arab Emirates (AE)	16	14	8	9	3	8	2	5
United Kingdom (GB)	114	71	70	47	45	58	33	35
United States (US)	33	18	17	10	10	12	14	11
Uzbekistan (UZ)	0	0	0	0	0	1	0	0
Venezuela (VE)	2	1	1	0	0	0	0	0
Viet Nam (VN)	0	0	1	2	0	0	0	0
Virgin Islands, British (VG)	1	1	1	1	1	1	1	1
Yemen (YE)	8	5	4	4	4	4	3	3
Zambia (ZM)	6	6	3	3	3	3	2	1
Zimbabwe (ZW)	4	4	3	1	1	1	1	1

Data represent the number (n) of participants that started each individual course of the Understanding Basic Rehabilitation Techniques MOOC from that particular country.

Table 18: Number of Participants' from Each Professional Background

Profession	Course 1 n (%)	Course 2 n (%)	Course 3 n (%)	Course 4 n (%)	Course 5 n (%)	Course 6 n (%)	Course 7 n (%)	Program n (%)
Physiotherapist / Physical Therapist including DPT	722	512	436	359	310	332	263	278
Student	59	38	36	31	27	29	19	20
Occupational Therapy Assistant	27	0	1	0	0	0	0	0
Occupational Therapist	26	20	16	15	13	15	14	13
Physiotherapy / Physical Therapy Assistant	16	11	11	8	9	9	10	7
Physical Rehabilitation Doctor	11	5	4	3	1	3	2	1
Massage Therapist	8	4	5	3	2	2	2	3
Chiropractor	5	2	2	1	2	2	2	2
Osteopath	4	2	0	0	0	0	0	0
Personal Trainer	4	3	1	2	0	0	0	0
Educator	4	3	2	0	1	2	0	1
Doctor of Medicine	3	1	1	1	1	2	1	1
Sports Therapist	3	1	0	0	0	0	0	0
Biokineticist	3	2	2	1	2	2	2	2
Kinesiologist	3	1	1	0	1	1	1	0
Prosthetist	2	3	2	2	1	1	1	1
Exercise Therapist	2	2	2	1	2	1	1	1
Physician	2	0	0	0	0	0	0	0
Nurse	1	0	0	0	0	0	0	0
Orthotist	1	1	1	0	1	1	0	0
Auditory Therapist	1	1	1	0	0	0	0	0
Athletic Trainer	1	1	2	1	1	1	1	1
Carer	1	1	0	0	0	0	0	0
Myotherapist	1	0	0	0	0	0	0	0
Clinical Exercise Physiologist	1	1	0	1	0	0	0	0
Physiotherapy Technician	1	2	1	1	2	0	0	0
Social Worker	1	1	1	1	1	1	1	1
Allied Health Assistant (AHA)	1	1	1	2	1	1	1	1
P&O Technician	1	0	0	1	0	0	0	0
Certified Prosthetist & Orthotist	1	0	0	0	0	0	0	0
Podiatrist	0	0	0	1	0	0	0	0
Speech Therapist	0	0	0	0	0	2	0	0

Data are numbers (n) from each profession and percentage of total participants (%)

Appendix 2 Physiopedia Platform

Table 19: Physiopedia Articles Page Views

Physiopedia Article	Total Page Views
Dermatomes	38,403
Myotomes	36,281
Reflexes	20,019
Range of Motion Normative Values	16,939
Sensation	9,015
Assessing Range of Motion	6,471
Pulse Rate	5,675
Vital Signs	4,795
Assessing Muscle Strength	4,464
Blood Pressure	3,806
Pulse Oximeter	3,181
Breathing Patterns -	3,140
Assessing Muscle Length	3,072
Neurological Screen -	2,192
Introduction to Rehabilitation Techniques	2,671
Assessment Before Moving and Handling	2,107
Heart Rate	1,212
Respiratory Rate	2,910
Positioning -	1,646
Daniels and Worthingham's Muscle Testing	858
Assistive Technology for Positioning -	789
Muscle Length Normative Values	200

Table 20: Physiopedia Categories Reviewed

Physiopedia Categories	Number of Articles Review
Category:Goniometry	31
Category:Manual Muscle Testing	26
Category:Positioning	19
Category:Transfers	4

Appendix 3 Required Learning Activities

3.1 Course 1: Introduction to Rehabilitation Interventions

	Learning Activity	Delivery Medium
1	Introduction to Rehabilitation Interventions	Video
2	Introduction to Basic Rehabilitation Techniques	Reading
3	Introduction to Basic Rehabilitation Techniques Quiz	Quiz

3.2 Course 2: Assessment Before Moving and Handling

	Learning Activity	Delivery Medium
1	Assessment Before Moving and Handling	Video
2	Assessment Before Moving and Handling	Reading
3	Assessment Before Moving and Handling Quiz	Quiz

3.3 Course 3: Assessing Range of Motion

	Learning Activity	Delivery Medium
1	Assessing Range of Motion	Video
2	Assessing Range of Motion	Reading
3	Assessing Range of Motion Quiz	Quiz

3.4 Course 4: Assessing Muscle Strength

	Learning Activity	Delivery Medium
1	Assessing Muscle Strength	Video
2	Assessing Muscle Strength	Reading
3	Assessing Muscle Strength Quiz	Quiz

3.5 Course 5: Assessing Muscle Length

	Learning Activity	Delivery Medium
1	Assessing Muscle Length	Video
2	Assessing Muscle Length	Reading
3	Assessing Muscle Length Quiz	Quiz

3.6 Course 6: Neurological Screening

Learning Activity		Delivery Medium
1	Neurological Screening	Video
2	Neurological Screen	Reading
3	Neurological Screen Quiz	Quiz

3.7 Course 7: Exploring Positioning

Learning Activity		Delivery Medium
1	Exploring Positioning	Video
2	Positioning	Reading
3	Exploring Positioning Quiz	Quiz

3.8 Course 8: Exploring Transfers

Learning Activity		Delivery Medium
1	Exploring Transfers	Reading
2	Transfers	Reading
3	Exploring Quiz	Quiz

3.9 Course Programme

Learning Activity		Delivery Medium
1	How to Perform a Simple Literature Search	Reading
2	Academic Integrity	Reading
3	Referencing	Reading
4	Clinical Reflection	Reading
5	Assignment	Assignment

Appendix 4 Optional Learning Activities

4.1 Course 1: Introduction to Rehabilitation Interventions

Discussion Forums

1. Tell us a little bit more about where you are from, where you work, your experience of working in rehabilitation and what you would like to get out of the courses.
2. Consider the context you currently work in and your role. What does rehabilitation mean to you within that context? What are some of the challenges you currently face in providing rehabilitation services?
3. Consider the type of rehabilitation setting you work in when answering the following question: What do you use to support your selection of rehabilitation techniques and interventions in your clinical assessment?

4.2 Course 2: Assessment Before Moving and Handling

Discussion Forums

1. Considering the assessments that were discussed in the course, which of these assessments do you regularly perform in the setting you work in? Is there a protocol in your setting for assessing patients before moving and handling?

Case Studies

2. Jim is a 72 year old man who lives alone in a two storey house. Jim has a history of COPD, with decreased exercise tolerance over the last two months with a history of two recent falls at home. Jim has no access to any support in the home, and prior to the falls was managing all his activities of daily living independently and was driving a car to go shopping and out to meet friends. Since the falls Jim has become increasingly isolated and is having difficulties completing day to day tasks. What assessments do you think you need to consider when assessing Jim at home? What other information do you think you would need prior to completing any moving and handling tasks?
3. Louise is a 17 year old girl who is attending Primary Care Health Centre following a recent diagnosis of Juvenile Idiopathic Arthritis with reports of pain and early morning stiffness in her knees and ankles bilaterally and increased difficulty in getting out of bed and walking. What factors do you think are most important to assess within their primary care setting and why? Would you need to consider any further assessments to ensure that Louise can also manage mobility tasks within her home and school environment?
4. Karen is a 48 year old woman who is day 1 post an ORIF for a Type C Danis-Weber Classification following an ankle fracture while skiing. Prior to her accident Karen mobilised independently, and was very active. She works as a Secondary School English teacher, cycles to work everyday and typically goes to the gym 3 days a week. Karen is going to transfer out of bed for the first time following her surgery. Do you think it is safe to encourage her to transfer independently? What assessments would you complete to help you in making this decision and why? What other information do you think you would need prior to completing any moving and handling tasks?

4.3 Course 3: Assessing Range of Motion

Discussion Forums

1. Does your clinic have standardised methods for range of motion testing? Is an objective range of motion measurement required for all patients?

Case Studies

2. Ann is a 26 year old woman who had a fall while biking 2 days ago and landed on her left shoulder and arm. She presented to A & E with complaints of limited range of motion in the left shoulder secondary to pain. This pain typically occurs with shoulder flexion and abduction and is causing difficulty with activities of daily living including brushing her hair and lifting objects overhead. X-rays showed no evidence of fracture. You are reviewing Ann in the A & E Department. What range of movement assessments would you complete and why? What challenges might be present during your assessment and what could you do to minimise the impact of these on your assessment?
3. James is a 64 year old man with a history of inflammatory arthritis that was diagnosed when he was 39 years old, and was well controlled until recently when he experienced a flare in his condition. James is reporting early morning stiffness affecting his ankles and knees, which can take up to 30 minutes to settle. James also reports catching his foot intermittently when walking longer distances or stepping up curbs with his main difficulty currently walking up and down stairs, particularly in the morning or after being in the car for long periods of time. What range of movement testing would you complete during his initial assessment and why? Are there any factors that might impact on your range of movement assessment? What type of end feel might you feel during this assessment and why?
4. Sarah is a 52 year old woman who has just been discharged home after removal of an external fixation device for the tibia and fibula that had been in place for 5 months after a complex tibia and fibular fracture sustained in a car accident. Sarah was using elbow crutches prior to having the external fixation device removed but was discharged from hospital mobilising on a frame. Sarah is having difficulty manoeuvring within the bathroom in her house with this device and you have been asked to complete an assessment in her home environment to explore alternatives to support her mobility. Prior to doing any mobility assessment what range of movement testing would you complete and why? What areas do you think might have reduced range of movement ? What type of end feel might you expect?

Practical Activities

The following videos demonstrate range of motion assessment techniques for specific joints

5. Range of Motion Technique Videos

After watching the technique videos you can practise the techniques in predictable and straightforward contexts to develop your skills and confidence using this workbook.

6. Assessing Range of Motion Practical Workbook

4.4 Course 4: Assessing Muscle Strength

Discussion Forums

1. Does your clinic have standardised method for assessing muscle strength? Is an objective strength measurement required for patients? Which Muscle Grading Scale is used and why?

Case Studies

2. John is a 21 year old man who presented for elective total right left hip replacement following a history of septic arthritis of the hip when 4 years old as a result of Staphylococcus Aureus infection, which led to septicaemia. John has had ongoing issues with the hip as a result of early closure of the epiphyseal plates (growth plates) in the hip, which has resulted in a shorter leg on the left with ongoing reduced movement in the hip. John has also previously had a femur lengthening procedure when he was 12 years old. You are seeing John on the ward prior to his surgery to complete a pre-surgical assessment. What manual muscle testing would you complete prior to surgery and why? Why would assessment prior to surgery be beneficial in planning his future rehabilitation?
3. Peter is a 24 year old man with a history of an incomplete T5 spinal cord injury 5 years ago following a motorbike accident. Peter can walk with crutches for short distances and uses a wheelchair for longer mobility and to play sports. Peter was referred to his local Primary Care Centre to see Occupational Therapy and Physiotherapy following an elbow injury while playing tennis. Currently Peter reports pain and weakness in his elbow which has stopped him playing tennis and is causing difficulties when using his crutches and pushing his wheelchair. What manual muscle testing would you complete on his initial testing and why? What functional tests could you complete that might provide an idea of gross strength in the upper limbs? Are there any other tests you would consider to get an understanding of Peter's muscle strength?
4. Sarah is a 54 year old lady who recently had a fall at home. Julie has a history of a right knee replacement 1 years ago after a number of years of knee pain secondary to osteoarthritis. Prior to the fall Julie had started to have some left knee pain intermittently when walking up and down stairs and when walking long distances, with decreased activity tolerance. When you go to assess Sarah in her home she reports that the fall happened when she caught her foot on the rug and fell forward landing on an outstretched arm. Sarah reports that she had x-rays completed following the fall with no fractures evident but she reports some ongoing bruising and discomfort in her right wrist, hip and both knees. What manual muscle testing would you include in your initial assessment of muscle strength and why? What functional testing might you also include to get an indication of global gross muscle strength?

Practical Activities

The following videos demonstrate manual muscle testing of specific muscles.

5. Muscle Strength Technique Videos

After watching the technique videos you can practise the techniques in predictable and straightforward contexts to develop your skills and confidence using this workbook.

6. Assessing Muscle Strength Practical Workbook

4.5 Course 5: Assessing Muscle Length

Discussion Forums

1. Muscle length assessment can include direct and indirect measurement methods. In your setting what muscle length tests do you commonly use and why? What are the primary challenges you find with completing muscle length assessment?

Case Studies

2. Rachael is a 24 year old soccer player who has presented for elective ACL repair following failed conservative treatment. Rachael had a Grade 2 ACL injury on her left knee 5 months ago when losing her balance after changing direction to clear the ball during a soccer game. The surgical plan is for Rachael to have a hamstring autograft. You are seeing Rachael on the ward prior to her surgery to complete a pre-surgical assessment. What muscle length assessment would you include in your assessment and why?
3. Sam is a 14 year old football player who presented with a history of anterior knee pain that is triggered by sitting for long periods of time with his knee bent and kicking a ball. Range of movement at the knee and hip were all within normal limits with a slight reduction seen in ankle dorsiflexion. What muscles may be tight and aggravating the knee a) during sitting and b) kicking a ball. What muscles may be impacting on ankle dorsiflexion? What muscle length tests would you use to assess these muscles? Describe the best testing position to complete these tests. Are there any specific challenges with testing these muscles?
4. Alan is a 81 year old man who lives with his wife in a two storey house. Alan has a history of Rheumatoid Arthritis, which is relatively well controlled with some early morning stiffness that lasts for only 5 minutes until he gets moving around. Alan has recently complained of catching his foot frequently, with no falls but a number of near misses. He complains of some tightness and discomfort in the calf and at the back of his knee. What muscle length tests might you consider as part of your assessment when seeing Alan at home and why?

Practical Activities

The following videos demonstrate how to assess the length of specific muscles.

5. Muscle Length Technique Videos

After watching the technique videos you can practise the techniques in predictable and straightforward contexts to develop your skills and confidence using this workbook.

6. Assessing Muscle Length Practical Workbook

4.6 Course 6: Neurological Screening

Discussion Forums

1. Does your clinic have standardised methods for neurological screening? What do you typically include in your neurological screen and why? What challenges have you found when completing a neurological screen?

Case Studies

2. Harry is a 49 year old engineer with a history of Type 1 diabetes who was admitted to hospital 4 days ago following a one week episode of severe gastroenteritis with possible dehydration that had been ongoing for one week. Harry's gastroenteritis is now resolving and his blood sugars and his diabetes stabilised but you have been asked to review Harry to assess his mobility following a near miss fall on the ward. During your subjective assessment Harry reports that he is very fatigued and has spent most of the last week in bed so he feels this may have been what caused him to trip and almost fall. After further questions Harry does also report some new tingling in his feet and sometimes his hands. He reports that he just feels like his legs are weaker than normal and that this is causing him to catch his feet on the ground at times when he is walking. Given Harry's description of his condition, would you complete a neurological screen and why? What structures do you think may be implicated in this situation?
3. Myra is a 31 year old bus driver who is referred to the Primary Care Centre by her General Practitioner with worsening bilateral distal leg pain aggravated by sitting for long periods of time that is now beginning to impact her when driving. During the subjective assessment Myra also reports that she has had some intermittent tingling in her feet also which only started after her shift at work yesterday. Planning your objective assessment what neurological deficits might you see in this situation and what elements of the neurological screen would you complete and why?
4. Sharon is a 72 year old woman who underwent total left hip replacement for primary osteoarthritis of left hip 5 weeks ago. Sharon was initially discharged to a rehabilitation centre from the hospital 6 days post surgery on low molecular weight heparin for 6 weeks for thromboprophylaxis as per hospital protocol. Sharon spent 3 weeks in the rehabilitation centre for some respite and daily rehabilitation prior to discharge home 1 week ago. The community intervention team including nursing, occupational therapy and physiotherapy have been supporting Sharon's transition to home. One of the team visits Sharon at home today and she is complaining of new onset pain in the left inguinal region, with bruising over the left inguinal region. Sharon also complains of more difficulty with getting in and out of bed and mobilising with some weakness of the left lower limb and numbness over the medial aspect of thigh and knee. Given these new changes Sharon is experiencing what neurological assessment would you complete during this visit and why? Are there any factors that might impact your assessment? Given her numbness over the medial aspect of thigh and knee, what structures may be implicated in this change in condition?

Practical Activities

The following videos demonstrate how to do a neurological screen.

5. Neurological Technique Videos

After watching the technique videos you can practise the techniques in predictable and straightforward contexts to develop your skills and confidence using this workbook.

6. Neurological Screening Practical Workbook

4.7 Course 7: Exploring Positioning

Discussion Forums

1. A major challenge to positioning is placing a dynamic body into a prolonged static position. Assistive devices are commonly used to support and improve positioning. In your setting, what assistive devices are commonly used to support patient positioning. In your setting is there a protocol in place that ensures all health and social care professionals are aware of positioning requirements?

Case Studies

2. Claire is a 71 year old woman day one post op following partial hip replacement via an anterior surgical technique. Claire is complaining of significant pain around her surgical hip and requires repositioning in bed for comfort. After your assessment, you determine she is cooperative and predictable, can move her upper and lower limbs, but is unable to sit up unassisted. What are your two options to reposition Claire to a sitting position in bed and why?

3. Shane is a 11 year old boy with cerebral palsy who uses a manual wheelchair for mobility who you are seeing in his classroom based setting. Shane has recently gone through a growth spurt, and has grown 2 cm in the past 3 months and now has decreased bilateral gastrocnemius and hamstring length. Prior to his growth spurt Shane typically transferred with a standing transfer with assistance of one person, which he is currently unable to perform. What positioning options could you utilise in school for Shane to help him adapt to these changes in muscle length, while still being able to participate within the classroom environment with his peers. What benefits do you think these positioning options might have for Shane outside of improvement in muscle length and why?

4. Kurt is a 34 year old male who you are seeing at home after discharge from the hospital two days following placement of an external fixation device for left leg limb reconstruction of the tibia and fibula after a serious car accident 7 weeks ago. Kurt is complaining of some increased pain in the limb since returning home, in particular during the night when sleeping and difficulties with some activities of daily living as he is still non weight bearing on his left leg. What positioning options would you consider for Kurt within his home environment and why?

4.8 Course 8: Exploring Transfers

Discussion Forums

1. Transfer techniques vary depending on a wide range of factors including but not limited to the environment, the person being transferred and the therapists providing assistance with the transfer. Consider your own work setting, what are some of the challenges that you come across when planning transfers? Is there a policy for moving and handling patients in your setting?

Case Studies

2. Claire is a 71 year old woman and is now day 2 post op following partial hip replacement via an anterior surgical technique. Claire has been managing repositioning in bed with some support and is now ready to transfer out of bed to a chair. After your assessment, you determine she is cooperative and predictable, can move her upper and lower limbs, but needs some assistance to sit up in bed but can sit unassisted without back support once sitting. What are your two options to transfer Claire out of bed to sit into a chair and why?
3. Shane is a 11 year old boy with cerebral palsy who uses a manual wheelchair for mobility who you are seeing in his classroom based setting. Shane has completed a block of rehabilitation to improve his hamstring and gastrocnemius length following a recent growth spurt, which had an impact on his ability to complete transfers. After your assessment you determine that Shane's hamstring and gastrocnemius length has improved and with his new Ankle Foot Orthotics he is now able to stand with feet flat on the floor with slight flexion at the knees. You are ready to start transfer training with Shane. What transfer options could you utilise in school for Shane to help him transfer between his manual wheelchair and his activity chair and why?
4. Kurt is a 34 year old male who you are seeing at home following placement of an external fixation device for left leg limb reconstruction of the tibia and fibula after a serious car accident 10 weeks ago. Kurt has been at home for 2 weeks and his pain is now well controlled and he has been managing independent positioning at home and sliding board transfers with assistance. Kurt has been advised by his orthopaedic team that he can now start to put partial weight through the left leg and can start to work on standing and standing transfers. After your assessment, you determine he is cooperative and predictable, has full strength in his upper limbs and the right leg. On the left leg he has full hip flexion, 0 - 45 degrees knee flexion and 5 degrees dorsiflexion. What transfer options would you consider for Kurt within his home environment and why?

Practical Activities

The following videos demonstrate specific transfer techniques.

5. Transfer Technique Videos

After watching the technique videos you can practise the techniques in predictable and straightforward contexts to develop your skills and confidence using this workbook.

6. Transfers Practical Workbook

4.9 Course Reflection

It's good professional practice for learners to reflect on the course so all learners were provided with the opportunity to complete a course reflection at the end of each individual course and on completion of the course programme.

Take some time and reflect on the following: 1) why did you do this course?, 2) what have you learned in this course?, 3) are you already implementing some or all of what you have learned?, if no, why not?, and 4) how will this course influence your practice in the future? You could choose to use a framework to structure this reflection (e.g. this simple three step model) and/or discuss what you have learned with your colleagues. Share your conclusions with the Plus community in the discussion forum and/or record a private reflection in your Plus activity log (Plus ePortfolio).

Appendix 5: Illustrative Testimonial Examples

5.1 Introduction to Basic Rehabilitation Techniques

1. This course is excellent! Personally it provided a big review of basic Rehabilitation techniques for me and more importantly it has reinforced my determination to incorporate the concept of ICF in the course of my practice in patient care.
2. This could help me to revise my foundational knowledge, it's so simple and they are doing it in a simple way.
3. I think it is an eye opener to rehabilitation intervention in layman terms. It is very interesting.
4. Great course. It gives basic yet extensive knowledge to rehabilitation.
5. We often take for granted the basics so this course is a great way to refresh and be up-to-date about the foundations of what we do.
6. I thought I was having understanding issues because even after years of graduation, I didn't understand the ICF as I do now. Thank you very much.
7. This course is very beneficial if you want to gain or refresh your knowledge about ICF and how it works in Rehabilitation. It's a great refresher for me during my RTP journey.
8. Understanding the Biopsychosocial model of Health well-being was useful in these courses of Understanding Basic Rehabilitation.
9. I have a clear understanding of what rehabilitation is and what it's not, A good understanding of the relationship between ICF and rehabilitation Factors to consider while selecting rehabilitation techniques and interventions.
10. "One cannot change what one cannot measure " it's a very basic and logical thinking that we need to remind ourselves with in every rehab session.
11. This course provided basic yet very important information about rehabilitation in view of the ICF model, which is relevant in our daily practice as clinicians. I loved it as it was quite interesting to read/complete. Well done Physiopedia team!
12. It's an excellent entry point for one to work according to international standards, to have evidence-based management to achieve the ultimate goals of rehabilitation.
13. Good introduction and/or refresher for those involved in either utilising or explaining/teaching the holistic aspects of rehabilitation.
14. I am a special Education teacher working in an Inclusive setting; supporting learners with impairments, their mainstream teachers and parents. I also teach the education component of the CBR course to CBR students. I am a novice in healthcare rehabilitation matters and very interested in gaining expert knowledge in CBR. After the course, I realized that I have been providing some healthcare rehabilitation services unconsciously without some very important considerations. Now I fully understand the key elements of ICF, Disability and health model and its role in rehabilitation and am very anxious to implement them as soon as schools begin. These will greatly impact my work as CBR Teacher and Special Education Teacher.

5.2 Assessment Before Moving and Handling

1. I think that my going through this course and applying the knowledge acquired is definitely going to improve my service delivery to my teeming patients whose service experience would be improved and a 'win-win and all happy' situation achieved.
2. It was very informative and good revision also got some small things to be kept in mind while mobilizing assessment.
3. This course really helped me to know better the basic things to know while moving or preparing to move a patient.
4. It is a great refresher as well as additional knowledge when it comes to handling patients. Timely and always relevant to PT, I enjoyed the concise delivery and the reading materials provided.
5. It is a very good course for people in rehabilitation no matter what level they are on. it will definitely improve our understanding of the assessments and transfers.
6. This course is a useful tool to remind me to focus on what should always be considered during manual handling.
7. I love that the course is very easy to understand and well detailed.
8. The moving and handling course will be really useful not only for rehab professions but also for similar staff working in areas including nurses, physicians and supporting staff.
9. I recently completed the Assessment Before Moving and Handling course, and I highly recommend it to anyone who works with individuals who require assistance with mobility. The course covered the essential factors we need to consider before attempting to move or handle someone, providing me with a solid foundation for safe and effective handling techniques. The information was presented clearly and concisely, making it easy to follow and understand. Overall, an excellent course that I feel more confident in utilizing in my work as a healthcare professional.
10. This course taught me to consider the status of the patient and his condition in order to choose the most important assessment tools to properly deliver safe and effective transfer, moving and handling tasks.
11. I have really enjoyed this course having brought out all the safety assessments to critically consider before manual handling, for I knew only more about vital signs only thanks very much I'm grateful.
12. I loved this course, it made the assessment process seem way less intimidating! I learnt a lot of things.
13. Assessment Before Moving and Handling a must for knowledge update from Vidju, and to Naomi O'Reilly and her team amazing tutors,thanks for your unrelenting efforts.
14. It's a great pleasure for me to be part of this program. I have significantly improved in knowledge and skills which can guide me to effective service delivery to My patients. I recommend anyone coming across this program to quickly join and enjoy the benefits.

5.3 Assessing Range of Motion

1. Because of its simplicity, we often take ROM assessment for granted. I, myself, tend to forget to update my knowledge about this, but after the course, I am more reminded of subtle things to look out for, such as the difference in dominant and non-dominant ROM differences.
2. This module really explains one of the core aspects of physical therapist assessment areas: range of motion.
3. The course for me, was an excellent one to expand my knowledge in this area and factors to consider while assessing the ROM of different joints.
4. Course was so informative for me knowing ranges and factors affecting ranges.
5. I truly learnt a lot from this course.How to position the goniometer during range of motion assessment has always been a challenge to me,but I have gained an insight on how to overcome this.Thank you very much for this course.
6. I was lucky to have this chance to be involved in this course which is a lot of my skills and it will be recommended for any therapist to take a view of this course. It will make a baseline for a range of motion assessment for all beginner, intermediate and professional therapists.
7. I did not know that much about the assessment of range of motion, but this course is excellent. It literally enhanced my knowledge regarding assessment of range of motion. It covered all the basic and important components that every practitioner should know before the assessment of range of motion of a patient.
8. Assessing the Range of Motion course is a good way to review basic assessment tools.
9. Great refresher course w/ added current evidence very useful for our clinical practice.
10. More courses of this type should be brought and more professionals should enroll.
11. This is excellent especially in pictorial views on how to measure ROM of different joints.
12. This course has really advanced My knowledge and skills about assessment of the ROM having known the purpose of ROM assessment, factors, indications and contraindications and how to use a goniometer and documentation of the results. I'm grateful.
13. Clear concise content that was well presented.
14. Don't shy away, refresh your memory on assessing range of motion, practice it for a better and efficient way to handle patients.
15. I recommend everyone to join this program because of the endless benefits and knowledge that can be derived from it.
16. Very helpful with practical tips.
17. Course is seriously a mind opener and memory refresher.

5.4 Assessing Muscle Strength

1. The course was very excellent, professional, and an introduction to everything upcoming in medical rehabilitation.
2. This course was very helpful for me as I am a student. All of the positions and techniques and the grading systems explained in this course would help me in my practice of assessing muscle strength.
3. Excellent teamwork! Kudos.
4. The whole course was so good I really learnt very much about mmt.
5. This was a good refresher course especially as a PT clinician.
6. Excellent for new graduates.
7. This course is very rich.
8. This course is a good review and reminder that manual muscle testing is a skill that needs to be practiced again and again
9. Assessing muscle strength will be a good introductory course for beginners good course
10. Excellent course for basic levels and fantastic revision for advanced levels!
11. The patient's muscle strength is vital part to be considered and factors regarding to strengthening or reduce its strength for producing good results
12. Time to go back to the classroom not to feel rusty,consider physio- pedia with the excellent instructors.
13. Most information or virtually every information needed for muscle strength assessment in rehabilitation are supplied
14. This course is well equipped with necessary information and knowledge and it is very important for all aspiring physiotherapist and even experienced physiotherapist to go through it
15. Clear concise content and well presented. Good job. Thank you.
16. This course I have enjoyed very much, and it has helped me to review my skeletal muscle Physiology and also the biomechanics and has also made me learn how to use different assessment methods of muscle strength.
17. A very interesting and knowledge gaining program which I recommend anyone to per take.
18. Its interesting learning new things from you that will improve our way of treating patient
19. Very insightful. I will recommend this course.
20. Informative course for not only a beginner but also for those looking to refresh and learn something new about strengthening.
21. Very enjoyable and informative
22. Great job by the trainer, the material was very advanced.

5.5 Assessing Muscle Length

1. The course is good enough for the intended purpose of improving professional knowledge.
2. The course clears the basic concepts of muscle length assessment and is worth attending. Recommended.
3. As a Student I did not know how to assess muscle length before taking up this course, but now I am very well aware about it, It enhanced my knowledge that would be helpful in my clinical practice.
4. This course was very thorough and refreshed my theory and taught me valuable information that I can use in the clinical setting.
5. I really enjoyed learning the course
6. An eye opening course that shows the need/importance for regular knowledge update
7. Excellent presentation that made everything shared easy to understand
8. The course is beautiful.
9. Muscle length assessment is really a basic assessment tool for beginners
10. This is an excellent course and all aspiring and experienced physiotherapist should check it out.
11. Clear concise content and well presented. Good job.
12. The course is so impactful, more professionals should enroll for the benefit of their clients.
13. Continuing professional development is a must, looking to acquire or refresh knowledge on Muscle Length Assessment ? Look no further just in the right arena.
14. Totally recommend, It's really helpful. Thanks for your efforts.
15. the good positioning will allow practitioner to do good measurements and knowing principles of muscle lengthening will allow professional to know accurate results our hands are the best weapon
16. This course is highly educational, detailed and well presented. It is a must for every neuro rehab team member.
17. The exercise was very rich and well packaged in a simple way for clinicians to augment their practice. I learn alot and my practice has changed from the first course I went through. Thank you so much and the gestures were appreciated.
18. This course has been so helpful to me having learnt the different muscle length assessment techniques, and also attempted some clinical questions in different settings.
19. Measuring muscle length will enable one to determine the impaired muscles.
20. Great course to improve our rehabilitation technique.
21. Recommended for students preparing for MSK OSCES.
22. Very enjoyable and informative.

5.6 Neurological Screening

1. My overall experience was really good with this course.
2. A very good course into the basics of nerve examination.
3. A concise and clear overview of the basic neurological screening.
4. Excellent course that guides you step by step on neuro testing with a fast practical and organized approach so you don't miss any hints that can help you with diagnostic impressions
5. This course enhanced my knowledge about neurological assessment of a patient that would help me out in my clinical practice.
6. Comprehensive neurological discussion and demonstration.
7. Very detailed and eye opening with respect to how dermatome testing is done.
8. Great course, it helped refresh my memory on neurological assessment.
9. The lecture was excellent with lots of practicals to help understand it more.
10. Excellent teamwork! Kudos.
11. Excellent presentation with easy to read and understand materials and great videos to make learning more fun and more understandable.
12. This course is an amazing one and I implore all intending physiotherapist and experienced professionals should also check it out
13. The neurological screening is essential part of basic rehabilitation assessment
14. Need to be back in class to remind yourself of clinical reasoning, physiopedia got what it takes in few hours with seasoned instructors and videos to practice what is being taught, then you are on course!
15. Clear concise content and well presented. Good job.
16. Very educational and insightful teaching.
17. Nice presentation, more rehabilitation professionals should eagerly enroll for the course
18. The course is an eye opener for clinicians to improve in their clinical practice.
19. The exercise and content were astonishing. Don't know when I've started making use of what I learn; perhaps passion plays a role. My clinical practice has improved indeed. Thank you
20. This course has been so good that it has brought out and explained the various components of the neurological screen and the purpose of the screen plus videos and a workbook. Thanks very much I have learnt skills and advanced my knowledge.
21. I love the simplicity of the course.
22. Get confused with neurological testing? Can you see the point? After this course you will be much happier conducting one.

5.7 Exploring Positioning

1. A must read for any clinical professional and rehabilitation professionals.
2. An excellent look at how certain positions can be used to help a patient's recovery and improve quality of life.
3. Nice course. I think every therapist should do it.
4. Very accessible course and useful resources.
5. This course provided much information about the importance of different positions, their contraindications and indications in certain type of abnormalities or pathologies.
6. This is an excellent course that all healthcare providers should go through.
7. Basic info but thorough.
8. Excellent course, I am now richer in knowledge on positioning.
9. Very interesting and insightful topic.Positioning is one of the basic elements in rehabilitation technique. This course will surely help to meet the objective.
10. Thanks for the detailed reading and for the links for further read.
11. This is an amazing course. All aspiring physiotherapist and experienced professionals should check it out.
12. Excellent for beginners and superb revision with attention to details for people who are already practicing in a clinical setup.
13. Clear concise content and well presented. Good job. Thank you.
14. Exploring positioning in rehabilitation ? Then avail yourself of this great and awesome opportunity with seasoned instructors on Physiopedia.
15. The online courses are very essential to clinical practice with a lot of skills.
16. The best of a physio is in his hands and his mind all the best be in our hand.
17. The course is so impactful to the career development journey hence more professionals should enroll for the benefit of clients.
18. It's well thought out and commendable.
19. Although I have already been working as a physiotherapist for several years prior to having my daughter, I have found that there is always something new to learn with each of these rehabilitation courses including this one.
20. Honestly this course has been wow so educative and skilling full of new things such as the different positions and their therapeutic importances explained in details thanks very much I highly encourage people to study this course for it's vast benefits
21. Very fantastic exercise and I have learned a lot. Engaging it into my practice is another huge milestone to my career and health promotion in general. Thank you

5.8 Exploring Transfers

1. This course enhanced my knowledge about how to transfer patients. This information would help me out in my clinical practice.
2. VERY INFORMATIVE ! I WILL NOW BE MORE CAREFUL KEEPING SOME REALLY IMPORTANT CUES IN MIND WHILE TRANSFERING PATIENT SAFE.
3. Excellent course from Physiopedia, thanks for adding to my knowledge and skills
4. Exploring transfers is one of the important components in basic rehabilitation courses. Learning is mandatory to protect yourself from injuries.
5. Explore transfer of patients to better be prepared how to go about it to be a Win-Win for the rehabilitation team and the patient,then consider this course available readily on Physiopedia with their team of excellent instructors.
6. The course on Transfer is comprehensive yet understandable.
7. Clear concise content and well presented. Good job. Thank you.
8. Thank you for the opportunity to learn from your vast knowledge
9. The whole section of transfers seems to me more on a nursing level. As long as the transfer is done, we are satisfied. I am missing the physio-therapeutic context. Transfers are exercise tools to increase independence over an increase of strength, coordination, endurance etc. building confidence in one's own abilities. Aiming for activity level within the ICF and aiming for participation in at least these basic ADL's. For me this view on how to facilitate the muscle work, how to facilitate coordination in for example eccentric- concentric sequences of the various components form a transfer and required muscle activation or even muscle recruitment. That would be for me the aim of rehabilitation. My recommendation would be to integrate that for PT courses for rehabilitation using transfers/ aiming for independent transfers.
10. This is a very insightful and knowledge base.
11. Good course more professionals should enroll for their professional development and benefits of their clients.
12. In our hands is our best weapon.
13. This course has equipped me with knowledge and skills about different transfers, indications and clinical considerations, assistive devices thanks very much
14. Very informative course, although I used to teach manual handling to care staff in NZ I still learnt something new from doing this course.
15. IT WAS AN AWeSOME COURSE, REALLY HELPED ME IN POLISHING MY CLINICAL SKILLS. THANK YOU

Appendix 6: Illustrative Impact on Clinical Practice Examples

6.1 Introduction to Basic Rehabilitation Techniques

1. How to select appropriate intervention
2. I will focus more on drawing up the ICF for each patient in order to ensure that Treatment is tailored to them
3. Use of ICF model Changing perspectives on definition of rehab- patient-centred
4. I intend to use the knowledge of this course to help equip my students to build/improve on their knowledge of required basic skills in rehabilitation techniques. It has also helped to review my knowledge on basic rehabilitation techniques.
5. Implement the ICF framework in my clinical assessment and selecting interventions in the management of my patients.
6. Be more intentional about the use of ICF in my clinical practice
7. Recognizing the individual from a biopsychosocial model has allowed me to establish achievable objectives for the patient.
8. To increase the involvement of patients in their care.
9. I will use the ICF terms when referring to how the condition impacts the patient's ability to interact with the environment.
10. I intend on making use of the ICS model more when I plan rehabilitation sessions. This will aid me in focusing on specific aspects at every stage of rehabilitation related to the patient's personal and environmental factors.
11. It will help me to classify using ICF in rehabilitation. This will in turn help my patients to understand their role in rehabilitation too.
12. To improve the outcome of any intervention I use on a patient. I now understand that anything that I cannot measure, I cannot change. I now understand that the thorough the assessment, the more comprehensive the plan of care will be and the better the outcome.
13. I now understand that for rehabilitation to be effective, patients' goals has to be considered, evidence based practice is important, and the cost of your intervention also has to be affordable.
14. Reason by implementing a more biopsychosocial approach and considering more personal and environmental factors that influence my patients.
15. Reinforced the importance of the fundamentals of basic rehabilitation principles. Refresh and reminder of the back to basics. Focus on patient-centred care throughout.
16. I didn't pay much attention to the ICF because I didn't understand it in simple words as if you were explaining to the patient and now I feel that since I understand it better, I can now classify and personalize my treatment with people better
17. Being mindful to try to use assessment tools at the start and before discharge to tract pts progress.
18. Looking at my assessments I intend to review the outcomes that I use and ensure the use of these are evidenced and suitable for the patient group to make my assessments more objective and measurable, helping to monitor progress.
19. Considering the aspects important when choosing intervention & technique (benefits to patients, cost-effectiveness for both recipient and service; feasibility; stability of intervention and Adverse effects.

6.2 Assessment Before Moving and Handling

1. Understanding the mechanism behind patient's presentation & reflecting in action during practice whether to stop, or pause activity
2. Basic assessment to note while moving a patient is enhanced.
3. It has reminded me to be always diligent about reading the notes even if you are familiar with the patient as parameters can change.
4. Has allowed me to better equip the students allocated to me,how they can go about assessing and how to clinically reason.
5. I have started asking more questions during the history taking when seeing parents to better understand the patient's need and align them with the patient goals to determine the best intervention method.
6. Now, I know how to better ensure the safety of my patients when moving and handling. The truth is I'm very familiar with some of the fundamentals involved before moving and handling. I just wasn't aware of the impact and significant difference it makes in ensuring patient's safety.
7. Paying more attention to vitals when mobilising patients.
8. Paying more attention to things to look out for during assessment and during treatment procedures.
9. I consider a lot of the patient's assessment more critically.
10. They were certain things I gained on assessing a patient before handling. In my clinical practice I only used to assess the physical status, vital signs and the medical status. There are other factors that this course explained that I never considered on assessment
11. Diligent and thorough assessment on the patient and their condition will greatly help me in my clinical reasoning in choosing proper techniques in doing my tasks as a PT. Assessment is always on going, it is not done only before but also during moving and handling tasks.
12. I intend to take all precautionary measures to ensure my patient's safety and mine too, whilst managing my time appropriately.
13. I intend to ask more pertinent questions to assess vision and hearing.
14. Vitals assessment and vigilance in manual handling.
15. Applying appropriate screening tools more consistently.
16. To always consider vital signs before moving patients especially with those in wards or with other associated conditions.
17. I am more intentional about the assessments I make with my patients and I have a better understanding of why the assessments are necessary and how to do them.
18. I have a better understanding of how and when to monitor vital signs and what to do if they are out of average ranges.
19. Critical numbers for different vital signs.
20. Keep in mind the emotional status of the patient.
21. I intend to search for and introduce the use of non verbal communication tools-charts, boards for patients with speech impediments as discussed in this course.
22. I have learned that it is essential for us to consider the patient's condition and emotions before handling or moving as if we don't do that we might also face difficulties.
23. Remember to monitor vitals post and during mobilization.
24. Assessment of cognitive and vision for me has been an eye opener.

6.3 Assessing Range of Motion

1. Better knowledge on evaluating end-feel - standardise test procedures on assessing joint range of motion.
2. End-feels have never been something I routinely check for, I will do so for now on. I also have little experience in recording ROM assessments, I might do so when the situation calls for it.
3. Learnt useful ways of explaining concepts to students. The videos and workbook are very useful tools.
4. Explanation of capsular VS non-capsular.
5. Use of end-feel & hypothesizing reason behind patient's deficits in ROM.
6. I will be able to describe and assess end-feel better in ROM assessments.
7. Diagnosis and protocol development.
8. Before attending this course , ROM is not as important assessment tool for me ...but now, i feel the importance of this tool n learn alot about the correct method of performing that changes my way of assessment in a good manner.
9. More careful attention to patient positioning when measuring ROM.
10. Better able to identify indications and contraindications of measuring ROM. got a better knowledge about end feel.
11. I am a student of Doctor of Physical Therapy but still I did not know all these factors that how to asses range of motion of a patient, but this course helped me a lot and definitely enhanced my knowledge regarding this topic. Now I would apply all of these techniques in my practice.
12. In assessment of ROM I have to plan carefully the flow of my tasks because testing position does not only affect the result of my data but it might also aggravate painful symptoms of the joints involved.
13. Be sure of a good starting position when assessing a ROM test.
14. Will try to perform a standardized method in assessing rom with patients.
15. Greater consideration of passive insufficiency and how this affects positioning for assessment.
16. Increase knowledge of capsular patterns and be more aware of passive insufficiency.
17. Being more aware of starting positions and precise locations for goniometer parts (arms and axis point) to accurately assess joint motion.
18. Skills in Clinical reasoning and management guidelines in relation to understanding of the dysfunction of the neural and musculoskeletal system.
19. Not significantly with ROM because I was already performing regular measurements.

6.4 Assessing Muscle Strength

1. Proper testing of muscle strength on patients with diverse conditions taking into consideration the proper position as well as precautions and contraindications
2. Mindful of testing position considerations.
3. Move more towards dynamometry.
4. Age related impact on muscle strength will assist to set realistic goals.
5. Different scales available for muscle testing.
6. Clarifications on how to do MMT properly, especially correction on proper positioning & not using gravity-eliminated term, but rather gravity-minimized & learning about two-joint muscles to be assessed in mid-range which is something that I am not aware of.
7. Previously mmt is not as important assessment tool for me ...but now i focus on this practice and the documentation also.
8. Adjust testing positions better to certain circumstances.
9. Better attention to patient position when testing muscle strength.
10. Avoid taking short cuts Be more precise with documentation even though I am a single therapist practise.
11. By including the patient position when assessing muscle strength and to critically think about how positioning will affect the result.
12. I intend to utilize the knowledge gotten from this course to be able to modify muscle testing positions to get best results whilst testing my patients.
13. I will be better be able to describe the the working of muscle testing to my patient and will be better able to educate the patients on muscle physiology and movements. I will also be more aware of contra-indications of MMT so as not to cause harm to the patient. By revising my knowledge of this testing my clinical reasoning skills will be enhanced as i will be more aware of the different factors that may affect the test such as age, gender, pain and inflammation.
14. Documentation of muscle testing for consistency and identification of possible influencing factors identified.
15. Better documenting what is limiting strength like pain or other medical conditions.
16. Being more precise in my testing procedure and documenting more information about positions and range, etc.
17. Ensure I assess strength through range. Thorough documentation to allow accurate replication of strength measurements.
18. I will use some of the information to explain things to patients e.g. Analogy of a 'Fuel tank' and importance of doing a strengthening programme to 'top-up' the fuel tank.
19. Integrating inner and out range.

6.5 Assessing Muscle Length

1. I have never measured the muscle length of my patients before now. But from now on, I will implement it and train my interns.
2. I now have a better understanding of joint starting positions for specific muscle length testing.
3. Explore the possibility of using the inclinometer.
4. Be more consistent in patient positioning, document test positions and maintain the same positions each time muscles are tested.
5. I did not know what passive insufficiency meant. Will definitely practice various muscle length assessments to become familiar with them.
6. Testing position - some new ideas.
7. Yup .. before attending that course i didn't consider muscle length as part of assessment tool...now it is added to my assessment.
8. Confidence in how to measure muscle length in practice.
9. More attention to patient position when assessing muscle length.
10. I intend to incorporate the new knowledge about muscle length testing especially the considerations for two-joint and multi-joint areas. Much practice is still needed with the goniometer.
11. I will definitely pay more attention to documenting muscle length findings as an integral part of the assessment and link it to the treatment plan. Stop using the SLR test as an indication of hamstring length.
12. To be more precise with landmark use when using a goniometer.
13. I intend to use the knowledge acquired through reflective practice ,to upgrade my assessment protocols.
14. Will assess muscle length more frequently.
15. Better documentation of how muscle length limits affect patients.
16. I shall be more mindful of testing positions while evaluating length of two joint or multi joint muscles.
17. More thought to positioning prior to testing
18. Better positioning and more exact measurement techniques.
19. Greater consideration for the use of muscle length testing in my assessments and focusing on more accurate patient positioning to fully assess muscle length.
20. I am going to be mindful of passive insufficiency in muscle length testing. Also, I have learnt how to test some muscles in isolation.

6.6 Neurological Screening

1. Using proper neurological testing procedures depending on what my client is presenting with and also clinical reasoning for proper diagnosis and treatment of conditions.
2. Firstly I will talk about the peripheral cutaneous innervation and dermatome as I do not separately differentiate between these two .This is the new addition in my knowledge as well as the videos help me a lot to handle the patients during my assessment.
3. Implement a more thorough neuro assessment with my hand therapy patients helping me to pinpoint radicular vs upper or lower neuron problems to make additional referrals to other healthcare providers.
4. By applying the knowledge in the day to day screening and assessment of my patients. Using it as a basis to inform various clinical decisions I'd make after an elaborate clinical reasoning. Utilize this knowledge in training my juniors and students.
5. Jendrassik manoeuvre.
6. Increased understanding of neurological testing and their interpretation making it easier to incorporate into my assessments.
7. I learnt new things such as circumferential pin prick test for peripheral neuropathy.
8. Do improved Dermatome & Myotome testing.
9. I intend to use the same dermatomal map for tests and communicate appropriately to my colleagues to encourage better patient care and follow up.
10. It was great to learn about following dermal mapping for consistency. I hadn't learnt that before, or If I had, I definitely needed a refresher for it! Thanks.
11. I believe circumferential sensory testing shall be part of my practice now onwards.
12. I revised my knowledge of neurological screening and special tests to the same. I will have an increased awareness of subjective statements that will indicate the need for a neurological screening such as pins and needles, dizziness and decreased sensation. I will also look to employ the same dermatome map going forward as this will allow for consistency across treatments and for other clinicians to better use my note taking. I have revised the techniques used to test for the different senses such as pain, light touch and temperature, as well as how I test tendon reflexes and myotomes. This will give me more confidence as a first contact clinician going forward. I will also be able to better describe my tests to any patient that requires a screen, which will allow for decreased fear or worry and improve rapport during the session.
13. Differentiate between upper motor neurone lesion and lower motor neuron lesion.
14. Always consider the purpose of each neurological test and select the most appropriate tests in clinical practice.
15. I learned how to differentiate between a nerve root and peripheral lesion.
16. Neurological assessments in relation to ruling in/out pathologies.

6.7 Exploring Positioning

1. I can more accurately pinpoint indications of certain positions for patients
2. Be more mindful of proper positioning and documenting everything related to positioning Be aware of more positioning options to treat various different patient populations
3. I admit that my knowledge of this topic has improved after attending the course. I got more confidence in positioning my patients in treatment. To increase their well being, to improve their confidence, and avoid secondary complications ,positioning is really helpful. And I'm really gonna apply these positioning methods in future interventions.
4. The name of some of the positions
5. In my clinical practice this information would help me about proper positioning of the patients.
6. Improve on documentation of positioning intervention done for patients to ensure carryover.
7. Surgery and injury related precautions.
8. More detailed documentation of patient positioning in their chart.
9. Different positions and what they are indicated/contraindicated for i e trendelenburg ,reverse trendelenburg, prone ,sims.
10. Better understanding of various positions that can be used to manage patients and better understanding of contraindicated positions for various conditions.
11. Reflect on my positioning techniques when attending to a patient in the inpatients set up.
12. A more comprehensive justification/ clinical reasoning for use of positioning techniques.
13. Combine use of the clinical terms for positioning, along with the layman's terms.
14. Different assistive devices and how to use them.
15. Focus on documentation when applying positioning techniques.
16. Better clinical approach to positioning.

6.8 Exploring Transfers

1. I can transfer patient more easily
2. Teach these techniques with confidence to my assistance.
3. Use the type of transfers more appropriately after seeing diagnosis and assessing situation.
4. Understanding the different types of transfers.
5. I am now more aware of additional strategies that can be used to transfer patients.
6. Assistive devices to use for different transfers.
7. Better documenting of transfer technique used.
8. Names and indication of different transfers.
9. More accurate documentation of level of assistance required for transfers.
10. This has deepens my knowledge in transferring patient and also help to protect the Physiotherapist.
11. How to assess the patients correctly , with a profound knowledge regarding rehabilitation.
12. Helps to verify indications for specific types of transfers, leading to confidence in application in patients.
13. Being more aware of my own positioning when performing special musculoskeletal tests on patients.
14. Consolidating basics with students.
15. It's basically a refresher of important points to consider before transferring a patient.
16. Apply different transfer techniques in rehabilitation of my patients.
17. How to assess the level of assistance required for a transfer. I.e. Minimal, moderate, maximal etc.
18. Good refresher for those of us that do no practice in this area of Physiotherapy.
19. Own body mechanics.
20. I will ensure proper transfer measures in handling patients at all times with the knowledge acquired.
21. Ensure application of ergonomics and proper body mechanics.
22. Now I can do my work with confidence than previous status.
23. How to explain the client and care Staff to perform safe transfers.
24. Reminded me of varsity knowledge and experience in hospital.
25. Better clinical thinking and approach to transfer.
26. I think this would be a useful way to teach new staff or students in a clinical setting as it goes into a bit more detail than the usual manual handling courses I've done.

Appendix 7: References

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