



Competencies for physiotherapists and occupational therapists working with people with multiple sclerosis

Therapists in MS (TiMS) – February 2018

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What is this document for?

This document provides a comprehensive list of competencies (skills and knowledge) required by physiotherapists (PTs) and occupational therapists (OTs), at all levels of expertise, who are working with people with multiple sclerosis (MS). They have been compiled by the Therapists in MS (TiMS) Working Group: twenty-five specialist Allied Health Professionals (AHPs) from around the UK who have many years of experience working with people with MS. They are based on current evidence, expert opinion and best practice (see Appendix 1 for development decisions).

Competence is the ability to do something successfully and efficiently and requires appropriate knowledge, behaviour, attitude and skill.

Competency is acquired through experience and learning. This document cannot provide clinical experience, but it can list the skills and knowledge that are needed when working with people with MS so that they get the interventions they need, in a timely and appropriate way, to live their lives to their maximum potential.

Competence is not just about knowledge and skills, it is also about attitude and behaviour i.e. what we do to understand people and their situation. It is about how we connect with people and listen to them in order to build interpersonal relationships which, in turn, can inspire motivation, give hope and help people to take on board the advice we give them. It is about our judgement: what to do in any given situation and how we collaborate with other professionals. That all comes with experience, but a less experienced practitioner needs to know when they have reached the limit of their competency and how to access the information they need to resolve the problem posed by the person with MS or people significant to them.

One of the main aims of this document, therefore, is to help you identify what it is you *don't* know i.e. the gaps in your knowledge and skills. It will also help you identify the level of expertise you have achieved to date and the target level you need to do your job effectively.

The sections are detailed because our aim was to produce a document that can be used by PTs and OTs, at all levels, to increase their effectiveness when managing people with MS. Our overriding aim is to improve the lives of people living with MS in the UK.

We hope you find them useful.

TiMS Working Group

Who is this document intended for?

- For PTs and OTs, at all career levels, who work with people with MS – the competencies have been combined as there is so much overlap between the professions and roles vary across the UK; it is also important that we understand each other's roles
- AHP managers (or anyone who develops services for people with MS)
- Ultimately, people with multiple sclerosis

What is the aim?

- To provide comprehensive underpinning knowledge and skills for PTs and OTs so that they can effectively manage people with MS
- To help PTs and OTs identify the gaps in their knowledge and skills
- To help PTs and OTs define the level of their knowledge and skills to date
- To standardise knowledge and skills to improve the management of MS by PTs and OTs
- To ensure that knowledge and skills are linked to evidence, expert opinion and best practice

Why do PTs and OTs need these competencies?

- PTs and OTs need a profession-specific, peer-reviewed, evidenced-based document so that they are aware of the knowledge and skills they need to manage people with MS optimally
- To identify gaps in their knowledge and skills to guide constructive and appropriate professional development
- To develop the knowledge and skills needed when working with people with MS
- People with MS and the people significant to them deserve the best, wherever they live in the UK

How to use the document

1. There are 20 sections covering all aspects of PT and OT practice when managing a person with MS
2. Initially, you may want to consider each section title and use the table on Page 8 to set the 'level' of competence you have reached at this point in your career and the target level you aspire to; you may want to do this with your manager
3. You may wish to indicate your current level of knowledge and skills (C) and your target level (T) against each competency. You may also wish to indicate how you intend to reach your target in the right-hand column
4. Use the tool to identify gaps in your knowledge and skills – it can be used as part of your CPD documentation or when discussing learning and training needs with managers
5. As you acquire knowledge and skills, you can enter the date and how they were gained in the right-hand column
6. This is a Word document so you can change the method of recording your achievements to suit your needs and area of work

Recording evidence of competency

When you have achieved your target level, enter the date and write the method using the key below (if you wish) in the right-hand column:

1. Observation and critical analysis of everyday clinical practice by therapists or other health and social care professionals who are specialists in MS or neurological conditions
2. Critical appraisal of journal articles/literature
3. Case presentations
4. Certificate of attendance to study days/post-graduate courses
5. Demonstration of evidenced-based practice with supporting literature
6. Active involvement with clinical supervision, mentorship, peer review and multidisciplinary meetings
7. Demonstration of ability to liaise with the MDT and external agencies
8. Contribution to local and/or national documents, journals and websites
9. Leading or contributing to teaching and learning sessions
10. Research involvement

Should you aim to complete the whole thing?

Not necessarily - the contents are aspirational as they cover many areas and list many things which could help your practice when working with people with MS.

The knowledge and skills requirements of each PT or OT, however, will vary according to their work setting. The depth and breadth of knowledge and skills correlate with experience, time spent in the job and how much learning takes place. It would be expected that AHPs working at a higher level or grade (i.e. specialist) would have spent many years working with people with MS and would, therefore, be able to effectively manage people with very complex presentations.

It is important, however, that more inexperienced staff know that interventions exist to help people with MS even if they cannot implement these themselves and that specialists continue to teach and support more junior staff and provide advice about more complex issues.

Levels of competency in MS management

Four levels of competency have been used:

- Nil – (e.g. Band 5)
- Basic – (e.g. Band 5 or 6)
- Good – (e.g. Band 6 or 7)
- Expert – (e.g. Band 7 or 8)

The use of the word 'Band' may not reflect current grading in all organisations, but the levels should resonate with most work settings and hierarchies. The term 'consultant' has not been used but most consultant practices will fall under the 'Expert' level.

Judging the depth of your knowledge and skills

Four words have been used to describe the **depth** of knowledge and skills expected at each level. This depth is described *in relation to PT and OT peers* as opposed to other professions who are experts in MS or in a specific field.

1. **Nil** – this means having no knowledge or skills concerning this area of practice. This may be acceptable to you and your job role and you may not wish to extend your knowledge or skills in this area. You may, however, identify a gap in your knowledge and skills and, as a result, want to find out more about this area of MS management. What is important is that you are aware of the breadth of knowledge and skills that specialist MS PTs and OTs have acquired and, if necessary, you may need to refer your patient to a specialist in order that they receive the level of intervention required to solve their problem.

2. **Basic** – this means knowing that something exists without necessarily having a full understanding of it or experience of using it. Basic understanding implies rudimentary knowledge and skills (e.g. degree level) about essential work procedures and practices, underpinned by basic theoretical knowledge and/or limited practical experience.
 - a. **Case management** – basic understanding of some aspects of the condition; has ability to carry out a basic neurological assessment, set basic goals and deliver basic interventions and advice but will need supervision, support and training to ensure that people with MS receive the management they need, especially people with more complex needs or at the moderate/severe stage

3. **Good** – this means having reasonable knowledge and skills of a wider range of work procedures and practices underpinned by good theoretical knowledge and improving skills gained post-registration as well as relevant practical experience. At this level, PTs and OTs could instruct more junior staff and teach at team level but would also need access to more experienced clinicians for help with complex clients.
 - a. **Case management** – good understanding of many aspects of the condition; has ability to carry out a good neurological assessment, set goals and deliver interventions and advice but may need supervision, support and training to ensure that

people with MS receive the management they need (rather than treatment alone), especially people with more complex needs or at the moderate/severe stage

4. **Expert** – this means having very comprehensive and holistic knowledge and skills across the range of work procedures and practices, underpinned by expert theoretical knowledge and extensive, relevant practical experience in the field. At this level, PTs and OTs can manage complex clients and demonstrate a critical awareness of current problems and new insights through application of research or advanced techniques in neurology practice. They may be contributing to the evidence base as well as local and national guidelines. They can instruct at team, national and international level. They may be managing a MS/neurology service.
 - a. **Case management** – expert understanding of all aspects of condition. Has the ability to carry out expert neurological assessment, set goals and deliver extended scope interventions and advice; may be managing a service; will be supervising and supporting junior staff to ensure that people with MS receive the management they need (rather than treatment alone). May also manage people with more complex needs at all stages of the condition, especially the moderate/severe stage. May be working strategically to ensure that staff are delivering a service where people with MS receive the management they need

These definitions are problematic at many levels and can only give an overview of each level of attainment. It is, therefore, up to each person, with their supervisors and managers, to interpret these descriptors according to the requirements of the job and the expectations of the team. Expert status does not always correlate with time spent in the job; it is dependent not only on experience but also on continual development and updating of knowledge and skills.

NB. This framework focuses on knowledge and skills at clinical practice level. It does not include work or institution-related behaviours such as communication between professionals, health and safety issues, equality and diversity, inclusion, information governance, the breadth of managerial responsibilities or specific work-related values. These are covered by the professional bodies in their Codes of Conduct, other guidelines and individual employing-organisation's specific protocols and training.

Setting targets and identifying learning needs for your job role

You may find it useful to consider each section and try and identify your current and target level of competency to suit your role.

SECTION	CURRENT LEVEL OF COMPETENCY	TARGET LEVEL OF COMPETENCY	MEANS OF ACHIEVING TARGET
1. Multiple sclerosis			
2. Disease modifying treatment			
3. Nutrition and hydration			
4. Respiratory			
5. Swallowing and communication			
6. Balance, mobility and upper limb function			
7. Posture and skin integrity			
8. Spasticity and ataxia			
9. Fatigue and sleep			
10. Pain and sensation			

11. Continence and sexual health			
12. Cognition			
13. Palliative care			
14. Activities of daily living and social care			
15. Roles and relationships			
16. Vocation and participation			
17. Self-management			
18. Education and research			
19. Service management			
20. National guidelines and legislation			

We want this framework to be useful for PTs and OTs.

Please let us know whether you have found them useful, whether there are any gaps and how we can improve them by contacting the TiMS Working Group at the following address:

therapistsinms@mstrust.org.uk

(N.B. A list of general competencies for MS, Parkinson's and motor neurone disease can be found in the document - *Allied Health Professionals Competency Framework for Progressive Neurological Conditions* - this is available on the MS Trust website: <https://mstrust.org.uk/health-professionals/resources/professional-development/competencies-health-professionals/allied>)

Glossary of acronyms

ABG – arterial blood gases

ACPIN – Association of Chartered Physiotherapists with and interest in Neurology

ACPRC – Association of Chartered Physiotherapists in Respiratory Care

ADL – activities of daily living

AFO – ankle foot orthosis

BPPV – benign paroxysmal positional vertigo

BTS – British Thoracic Society

CBG – capillary blood gases

CBT – cognitive behavioural therapy

CNS – central nervous system

DMT – disease modifying treatments

EDSS – Extended Disability Status Scale

FACETS – a group-based fatigue management programme

FAM – Functional Assessment Measure

FES – functional electrical stimulation

FEV – forced expiratory volume

FIM – Functional Independence Measure

GP – general practitioner

HBO – hyperbaric oxygen

LVR – lung volume recruitment (bag)
MAC – manually assisted cough
MIE – mechanical insufflation –exsufflation
MRI – magnetic resonance imaging (type of scan)
MSIS-29 – multiple sclerosis impact scale
MUST – Malnutrition Universal Screening Tool
NICE – National Institute for Health and Care Excellence
NIPPY – non-invasive positive pressure ventilation
NIV – non-invasive ventilation
PEG – percutaneous endoscopic gastrostomy
RADAR – Royal Association for Disability Rights
RIG – radiologically inserted gastrostomy
SpO2 – peripheral capillary oxygen saturation
SOB – shortness of breath
SOT – Sensory Orientation Test
TENS – Transcutaneous Electrical Nerve Stimulation
TUG – timed up and go
UTI – urinary tract infection
VAS – visual analogue scale
WOB – worsening of breath

COMPETENCY 1
Knowledge of MS

Sub-sections	Skills and knowledge	Understanding (C=current and T=target)				Learning requirements/ evidence of learning/ completion dates
		Nil	Basic	Good	Expert	
6.2 Understanding the nervous system and related structures	<p>Understanding of the structure and function of the:</p> <ul style="list-style-type: none"> • brain and spinal cord (central nervous system) • neurons • peripheral nerves • brain stem • cerebellum • cranial nerves • motor (efferent) nerves • sensory (afferent) nerves • nerve conduction • neurotransmitters • autonomic nervous system • myelin (including formation and role) • reflex arc <p>Understanding of the following:</p> <ul style="list-style-type: none"> • blood-brain barrier • neuroplasticity mechanisms • immune system and normal neuro-immunology • immune response in MS including the role of lymphocytes, macrophages and microglia • myotomes and dermatomes 					

<p>1.2 Aetiology of MS</p>	<p>Understanding of the prevalence and incidence of MS</p> <p>Understanding of the possible causes of MS:</p> <ul style="list-style-type: none"> • genetic predisposition • environmental factors • viruses including the Epstein-Barr virus (EBV) <p>Understanding of the influence on MS of:</p> <ul style="list-style-type: none"> • gender • ethnicity • geography and latitude • vitamin D • smoking • exercise • diet • obesity • pregnancy • co-morbidities • general health and well-being including vaccinations and screening tests 					
<p>1.3 Pathophysiology of MS and some secondary complications</p>	<p>Understanding of the mechanisms of condition-specific inflammation and progression:</p> <ul style="list-style-type: none"> • blood-brain barrier role • acute and chronic inflammation • T cells • macrophages and microglia • plaque formation • axonal loss • disruption or cessation of nerve conduction • brain atrophy 					

	<p>Understanding that inflammation can occur without clinical signs and symptoms</p> <p>Understanding of neurological reserve (brain reserve): the brain's ability to compensate for damage</p> <p>Understanding of the pathophysiology of some secondary complications which can arise from having MS:</p> <ul style="list-style-type: none"> • soft tissue changes following non-use • soft tissue changes due to abnormal tone • osteoporosis • contracture formation • pressure ulcers • neurogenic continence 					
1.4 Symptoms	<p>Understanding of the common and uncommon symptoms of MS including:</p> <ul style="list-style-type: none"> • optic neuritis • fatigue • motor weakness • bladder and bowel disturbance • sensory disturbance • neuropathic pain • changes in muscle tone • ataxia and tremor • cognitive issues including memory loss • L'Hermitte's sign • trigeminal neuralgia • word finding difficulties • sexual dysfunction 					

	<p>Understanding of the signs and symptoms of a relapse and pseudo-relapse</p> <p>Understanding of the role of infection and other triggers in pseudo-relapse</p> <p>Understanding how MS symptoms can vary day-to-day and across a day, month (hormonal impact) and year (temperature impact)</p> <p>Understanding of Functional Neurological Disorder and how people with MS may present with symptoms or unusual 'neurological' symptoms which do not match lesion sites</p>					
<p>1.5 Diagnosis and course of MS</p>	<p>Knowledge and understanding of the MacDonal Criteria for MS diagnosis (2024)</p> <p>Understanding the concept of dissemination in time and space in the diagnosis of MS</p> <p>Understanding of diagnostic tests including:</p> <ul style="list-style-type: none"> • Magnetic Resonance Imaging (MRI) • bio-markers (including CSF from lumbar puncture, neurofilament and kappa free light chain) • visual evoked response/potential (VER/VEP) <p>Understanding of the different types of MS:</p> <ul style="list-style-type: none"> • relapsing/remitting • progressive MS including secondary and primary progressive 					

	<ul style="list-style-type: none"> • active, not active, with progression, without progression and combinations of these (e.g. active with progression) • radiologically isolated syndrome (RIS) • clinically isolated syndrome (CIS) <p>Understanding of the features and course of progressive MS</p> <p>Understanding of relapse associated worsening (RAW) and progression independent of relapse activity (PIRA)</p> <p>Understanding of clinical and subclinical activity/CNS changes in MS</p> <p>Understanding of how age-related worsening impacts overall disability in MS</p> <p>Understanding of the use of the Extended Disability Status Scale (EDSS) for monitoring change in MS</p> <p>Understanding how other conditions (physical and mental health) can impact on MS and its management including the need to adapt approaches and interventions to the needs of the individual and in the context in which they and people significant to them live their lives</p>					
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COMPETENCY 2
Disease Modifying Treatments (DMTs)

Sub-sections	Skills and knowledge	Understanding (C=current and T=target)				Learning requirements/ evidence of learning/ completion dates
		Nil	Basic	Good	Expert	
2.1 Knowledge of disease modifying treatments (DMTs)	<p>Understanding of the different types of DMTs used to treat relapsing/remitting and progressive MS and their means of administration:</p> <ul style="list-style-type: none"> • injectable • tablet • infusion <p>Understanding of the mode of action, effectiveness and efficacy of different DMTs and their effect on the immune system</p> <p>Understanding of the potential need for switching of DMTs according to response or side-effects (e.g. break through disease activity/relapse/intolerable side-effects)</p> <p>Understanding of the criteria for DMT prescription for the country you work in (e.g. England, Scotland, Wales, Northern Ireland)</p> <p>Understanding of the pathways for DMT prescribing in the area that you work</p> <p>Understanding the potential side-effects of DMTs</p> <p>Understanding of immunosuppressive nature of specific DMTs and potential impact of this on person with MS</p>					

	<p>Understanding of referral pathways for patients experiencing adverse effects with DMTs</p> <p>Understanding of the effectiveness of DMTs on relapse rate and disease progression and of the ultimate goal of 'no evidence of disease activity' (NEDA) in relapsing/remitting MS and 'no evidence of progression or active disease' (NEPAD) in progressive MS measured by:</p> <ul style="list-style-type: none"> • no relapses • no increase in EDSS • no new or active MRI lesions • no reduction in brain volume <p>Understanding of DMTs on family planning (including men), pregnancy and breast feeding</p> <p>Understanding the distinctions between active planning of pregnancy versus the potential for pregnancy and the need for dialogue</p> <p>Understanding of DMTs effect on vaccination effectiveness i.e. may reduce immune response to vaccines</p> <p>Understanding of DMTs effect on ability to have live vaccinations</p> <p>Understanding of the use of HSCT (autologous hematopoietic stem cell transplantation) treatment in MS, where this sits with treatment options in MS, and where the evidence shows this is effective in MS</p>					
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2.2 Knowledge of MS specific treatments	Understanding the use of steroids in relapse management, NICE Guideline recommendations and local referral pathways and the importance of a rapid response					
2.3 Use of unproven interventions	<p>Understanding of the use by people with MS of unproven or controversial interventions for disease modulation and symptom management e.g.:</p> <ul style="list-style-type: none"> • hyperbaric oxygen (HBO) • modified diets e.g. hot-nature diets, gluten free • vitamin supplements e.g. linoleic acid via evening primrose oil, vitamin D and B12 • dietary supplements e.g. CBD • use of street drugs including cannabis in all its forms • use of reiki, acupuncture, reflexology and other complementary medicines 					

COMPETENCY 3
Nutrition and hydration

Sub-sections	Skills and knowledge	Understanding (C=current and T=target)				Learning requirements/ evidence of learning/ completion dates
		Nil	Basic	Good	Expert	
3.1 Anatomy and physiology of affected structures	Understanding of the structure and function of: <u>Digestive system:</u> <ul style="list-style-type: none"> • oral cavity (including teeth and tongue) • pharynx • oesophagus • stomach • small intestine • large intestine and its accessory organs • salivary glands • liver • gall bladder • bile duct • pancreas <u>Urinary system</u> <ul style="list-style-type: none"> • kidneys • bladder 					
3.2 Normal function	Understanding of: <ul style="list-style-type: none"> • digestion and elimination • nutritional and hydration requirements to maintain health • normal swallow mechanisms • metabolism and homeostasis • the role of the gut microbiome in maintaining health 					

<p>3.3 MS specific issues</p>	<p>Understanding of how MS can cause:</p> <ul style="list-style-type: none"> • dysphagia • loss of swallow coordination • coughing and choking on foods, fluids and saliva • drooling or excess saliva • sensory changes in the throat • reflux symptoms (use the Reflux Index Scale) • constipation • diarrhoea • bladder and bowel dysfunction • lack of independence with eating and drinking • lack of independence with food purchasing and preparation • difficulty maintaining oral hygiene <p>Understanding of how MS symptoms can impact on nutrition/hydration due to:</p> <ul style="list-style-type: none"> • pain • fatigue • cognitive issues • vertigo • ataxia • depression/low mood/anxiety • lack of independence with toileting • reduced activity/mobility/activities of daily living • reduced independence • reduced intake due to mucous and phlegm 					
<p>3.4 Secondary complications</p>	<p>Understanding of possible complications of poor nutrition/hydration:</p> <ul style="list-style-type: none"> • weight loss • weight gain 					

	<ul style="list-style-type: none"> • muscle loss • aspiration pneumonia • dehydration • reduced energy • pressure ulcers • delayed wound healing • urinary tract infection • constipation/diarrhoea (including overflow) • reduced resistance to infection <p>Understanding of the potential impact of weight gain or loss on disability, general health and relapse rate</p>					
3.5 Symptom specific drugs and side effects	<p>Understanding of the use of:</p> <ul style="list-style-type: none"> • anti-emetics • prokinetics • laxatives • saliva management medications <p>Understanding of how side-effects of medication can impact on swallowing/gut motility and how this may affect nutrition/hydration e.g. weakening effect of anti-spasticity drugs, constipation caused by some painkillers</p>					
3.6 Surgery/invasive procedures	<p>Understanding of the use and potential secondary complications of:</p> <ul style="list-style-type: none"> • nasogastric tube • gastrostomy (PEG, RIG, PIG) • intravenous drip • surgical jejunostomy • intermittent self-catheterisation • indwelling catheterisation 					

	<ul style="list-style-type: none"> • bowel irrigation systems 					
3.7 Assessment and goal planning	<p>Understanding of how to assess:</p> <ul style="list-style-type: none"> • low or high body mass Index • weight history • pressure ulcers • swallowing difficulties • quality of diet and fibre intake (ideal is 30g perday) • respiration • reflux (Reflux Index Scale) • secretion changes (use the Drooling/secretion Management Scale) • social situation • level of assistance needed with food and drink provision and preparation • catering arrangements • cognitive issues • method of communications • bowel/bladder management • dietary supplements or change in diet <p>Understanding of how to set person-centred goals and action plans, possibly in collaboration with family/carers/MDT</p>					
3.8 Outcome measures/ monitoring tools	<p>Understanding of how and when to use:</p> <ul style="list-style-type: none"> • malnutrition scales (e.g. MUST) • Body Mass Index (BMI) • nutrition/hydration diaries • Videofluoroscopy (VFS) 					

	<ul style="list-style-type: none"> • Flexible endoscopic Evaluation of Swallowing (FEES) • Barium swallow • Reflux index Scale (RSI) • Swallow PROM – EAT-10 (quick and easy) 					
3.9 Knowledge of red flags	<p>Understanding of signs/symptoms and reporting of:</p> <ul style="list-style-type: none"> • dysphagia • malnutrition • weight gain or loss • infection • pressure ulcers • infection 					
3.10 PT and OT treatment and management interventions	<p>Understanding of how to deliver evidence-based, pragmatic and person-centred interventions and advice to improve nutrition/hydration:</p> <ul style="list-style-type: none"> • mobility issues • upper limb function • pressure relieving devices e.g. wheelchair seating • pressure area care • respiratory interventions • positions for safe swallowing • postures to facilitate eating • assistive equipment for eating and drinking • assistive equipment for food and drink preparation • reduction in ultra-processed food intake <p>Understanding of how inadequate nutrition/ hydration can impact on:</p> <ul style="list-style-type: none"> • exercise • activity • stamina • fatigue 					

	<ul style="list-style-type: none"> • bladder and bowel function • skin condition 					
3.11 Progression of interventions	Understanding of how to evaluate interventions especially with complex cases and how to proceed if ineffective, if condition changes or at palliative care stage					
3.12 Other professions	Understanding of role of other professions and referral pathways so that referrals are timely and appropriate and joint working with the multi-disciplinary team (MDT), especially dieticians and speech and language therapists					

**COMPETENCY 4
Respiratory**

Sub-sections	Skills and knowledge	Understanding (C=current and T=target)				Learning requirements/ evidence of learning/ completion dates
		Nil	Basic	Good	Expert	
4.1 Anatomy and physiology of affected structures	Understanding of the structure and/or function of: <ul style="list-style-type: none"> • central nervous system involved in respiration • upper respiratory tract • thorax • trachea • bronchi • lungs • muscles of respiration including diaphragm • respiratory cycle • cough mechanisms • physiology of gaseous exchange 					
4.2 Normal function	Understanding of: <ul style="list-style-type: none"> • normal respiratory cycle and basic lung function values • central processes driving respiration • how respiratory muscles and chest wall range of movement provide adequate ventilation and effective cough • normal cough mechanisms for airway clearance • phases of an effective swallow • phases of sleep and the effects of sleep on ventilation • the role of posture in ventilation 					

4.3 MS specific issues	Understanding of how MS can cause: <ul style="list-style-type: none"> • central control disturbances in respiration • thoracic and abdominal muscle weakness • bulbar muscle weakness • postural abnormalities • impaired cough and cough flow caused by inspiratory, expiratory and/or bulbar muscle weakness leading to ineffective airway clearance • nocturnal hypoventilation 					
4.4 Secondary complications	Understanding possible complications: <ul style="list-style-type: none"> • reduced lung volumes • aspiration of fluid/food/vomit • chest infection • pneumonia • reduced speech quality • dyspnoea/shortness of breath • respiratory failure • reduced activity • increased fatigue 					
4.5 Symptom specific drugs and side effects	Understanding of drugs used to: <ul style="list-style-type: none"> • loosen secretions • dilate airways • manage excessive oral secretions • ease shortness of breath (palliation) 					
4.7 Surgery/ invasive procedures	Understanding of: <ul style="list-style-type: none"> • naso/pharyngeal suction • tracheostomy 					

	<ul style="list-style-type: none"> • supplementary oxygen • nebulisers • humidification • hydration and oral care • arterial blood gases (ABGs) • capillary blood gases (CBGs) • role of positive pressure ventilation (eg Continued Positive Airway Pressure (CPAP) or Non-Invasive Ventilation (NIV) 					
4.8 Assessment and goal planning	<p>Understanding of how to assess in different care settings:</p> <ul style="list-style-type: none"> • effectiveness of swallowing • level of secretions • cough effectiveness • upper airway function • ventilatory function <p>Understanding of how to set person-centred goals and action plans, possibly in collaboration with family/carers/MDT</p>					
4.9 Outcome measures/ monitoring tools	<p>Understanding of how and when to use:</p> <ul style="list-style-type: none"> • respiratory rate • observation of depth/ pattern • thoracic expansion • observation of accessory muscle use • respiratory function tests • Peak Cough Flow (PCF) threshold values for deciding on cough augmentation techniques and interventions (i.e. >270 = able to clear own secretions; <270 litres/minute = introduce strategies for assisted 					

	<p>airway clearance; <160 litres/minute = additional assisted airway clearance strategies)</p> <ul style="list-style-type: none"> • shortness of breath (Visual Analogue Scale) • SpO2 (oxygen saturation level) • ABG/CBGs • auscultation • chest x-ray • Epworth Scale • frequency of chest infections 					
4.10 Knowledge of red flags	<p>Understanding of the signs/symptoms and reporting of:</p> <ul style="list-style-type: none"> • acute and chronic aspiration • cyanosis • dyspnoea /increased SOB or WOB • fever and signs of chest infection • nocturnal hypoventilation (or any changes in sleep pattern/quality) • ineffective cough • increased volume or viscosity of secretions • change in colour of secretions • decreased SpO2 					
4.11 PT and OT treatment and management interventions	<p>Understanding of how to deliver evidence-based, pragmatic and person-centred interventions and advice on:</p> <ul style="list-style-type: none"> • diaphragmatic breathing • autogenic breathing • breathing exercises to increase lung volume • (modified) postural drainage • manual techniques e.g percussion • unassisted breath stacking 					

	<ul style="list-style-type: none"> • cough augmentation techniques e.g. MAC, MIE, LVR bags if conventional airway clearance techniques are not effective • when a cough-assist machine may be indicated • use of suction machine • postural management and positioning aids • specialist seating • specialist bed/profiling bed • obstructive sleep apnoea and need for CPAP • nocturnal hypoventilation and need for NIV • secretion management e.g. with hyoscine patch 					
4.12 Progression of interventions	Understanding of how to evaluate interventions and how to proceed if ineffective, if condition changes or at palliative care stage					
4.13 Other professions	<p>Understanding of role, referral pathways and joint working with MDT</p> <p>Understanding the role of the respiratory team and when to refer</p>					

COMPETENCY 5
Swallowing and communication

Sub-sections	Skills and knowledge	Understanding (C=current and T=target)				Learning requirements/ evidence of learning/ completion dates
		Nil	Basic	Good	Expert	
5.1 Anatomy and physiology of affected structures	Understanding of the structure and/or function of: <ul style="list-style-type: none"> • lips • dentition • mandible • tongue • soft palate • epiglottis • pharynx • larynx • oesophagus • speech centres • hearing • respiration 					
5.2 Normal function	Understanding of: <ul style="list-style-type: none"> • swallow mechanisms • hearing • articulation of speech • voice generation • language use • cognition • role of communication in recreation, employment social relationships and social participation • comprehension (reading, writing, gesture and others) 					

	<ul style="list-style-type: none"> • expression (e.g. reading, writing, gesture) 					
5.3 MS specific issues	<p>Understanding of how MS can cause:</p> <ul style="list-style-type: none"> • weakness of muscles used for communication • weakness of muscles used for swallowing • coordination impairments and ataxia • dysphagia • spasticity impacting on breathing for voice, speech and swallowing <p>Understanding of how other MS symptoms can impact on swallowing and communication:</p> <ul style="list-style-type: none"> • weakness • postural abnormalities • respiratory impairments • spasticity • cognitive issues • fatigue • depression 					
5.4 Secondary complications	<p>Understanding of the possible complications:</p> <ul style="list-style-type: none"> • chest infection due to dysphagia • malnutrition/dehydration • increase likelihood of infection • pressure ulcers due to weight loss • isolation because of poor communication • decrease/loss of education • reduction in social life • fatigue • negative impact on work and relationships • decrease in physical and emotional well-being 					

	<ul style="list-style-type: none"> withdrawing from social interactions related to eating and drinking loss of pleasure eating and drinking reduced appetite 					
5.5 Symptom specific drugs and side effects	<p>Understanding of drugs used to control excessive salivation and dry mouth</p> <p>Understanding of the impact of drugs (e.g. anti-spasticity drugs) on:</p> <ul style="list-style-type: none"> swallowing communication (e.g. motor speech control) cognition dryness of mouth 					
5.6 Surgery/ invasive procedures	<p>Understanding of impact of:</p> <ul style="list-style-type: none"> tracheostomy assisted ventilation 					
5.7 Assessment and goal planning	<p>Understanding of how to assess for the following and when referral to a speech and language therapist (SALT) or further diagnostic interventions is required:</p> <ul style="list-style-type: none"> quality of speech (SALT – motor speech assessment) volume of speech (SALT- voice assessment with or without the use of nasendoscopy or videostroboscopy) content of speech (SALT – language assessment) complications of reduced swallow/dysphagia/ aspiration/secretions Videofluoroscopy (VFS) – referral by SALT Flexible Endoscopic Evaluation of Swallowing (FEES) barium swallow Reflux Index Scale (RSI) 					

	<ul style="list-style-type: none"> Swallow PROM – EAT-10 (quick and easy) <p>Understanding of how to set person-centred PT goals and action plans, possibly in collaboration with family/carers/MDT</p>					
5.8 Outcome measures/ monitoring tools	<p>Understanding of how and when to use:</p> <ul style="list-style-type: none"> respiratory measures (see Competency 4) 					
5.9 Knowledge of red flags	<p>Understanding of the signs/symptoms and reporting of:</p> <ul style="list-style-type: none"> poor cough respiratory condition chest infection depression dysphagia (coughing/ spluttering or choking after eating and/or drinking) and reflux dehydration weight loss/malnutrition difficulty controlling food/ fluid in the mouth drooling gurgly or altered voice after eating and drinking inability to communicate effectively 					
5.10 PT and OT treatment and management interventions	<p>Understanding of how to deliver evidence-based, pragmatic and person-centred intervention and advice on:</p> <ul style="list-style-type: none"> respiratory care postural adaptations to facilitate communication and swallowing assistive equipment to aid swallowing assistive equipment to aid food/drink preparation 					

	<ul style="list-style-type: none"> • assistive equipment to aid communication • high and low technology communication aids and environmental controls 					
5.11 Progression of interventions	Understanding of how to evaluate interventions and how to proceed if ineffective, if condition changes or at palliative care stage					
5.12 Other professions	Understanding of role, referral pathways and joint working with MDT, especially speech and language therapists and dieticians					

COMPETENCY 6
Balance, mobility and upper limb function

Sub-sections	Skills and knowledge	Understanding (C=current and T=target)				Learning requirements/ evidence of learning/ completion dates
		Nil	Basic	Good	Expert	
6.3 Anatomy and physiology of affected structures	Understanding of the structure and/or function of: <ul style="list-style-type: none"> • motor pathways • motor control • sensory pathways including proprioception • vision • vestibular system • cerebellum • brain stem • basal ganglia • balance reactions • righting reflexes 					
6.4 Normal function	Understanding of: <ul style="list-style-type: none"> • components and phases of normal gait patterns • cadence • base of support • the role of the vestibular, visual and proprioceptive systems in balance and mobility • cognitive role • normal function of upper limb: <ul style="list-style-type: none"> ○ joints and mobility ○ power ○ dexterity ○ sensation ○ coordination 					

	<ul style="list-style-type: none"> ○ function (activities) 					
6.3 MS specific issues	<p>Understanding of how MS can cause the following and how these impact balance, mobility and upper limb function:</p> <ul style="list-style-type: none"> ● impaired gait ● spasticity and spasms ● ataxia and tremor ● sensory dysfunction ● vestibular dysfunction ● stiffness/contracture ● foot drop ● muscle weakness and deconditioning ● pain ● impairment of fine motor skills/dexterity ● impaired grip ● impaired hand-eye coordination ● dual-task issues ● general fatigue ● impaired vision ● impaired eye movements ● impaired balance ● neuropathic pain ● cognitive dysfunction ● muscle fatigability ● heat sensitivity with corresponding slowing of nerve impulses ● a loss of functional activities 					

6.4 Secondary complications	<p>Understanding of possible complications of reduced mobility and/or balance and upper limb function:</p> <ul style="list-style-type: none"> • postural abnormalities • deconditioning • overuse of contralateral limb • musculoskeletal pain • pressure ulcers • contracture • swelling/oedema • constipation • poor respiratory function • reduced activity and participation • trips, stumbles and falls • reduced well-being • reduced confidence • weight gain or loss • incontinence • isolation and negative impact on mental health • reduced participation and social isolation • reduced hygiene and self-care • risk of burns, scalds, injury, and entrapment 					
6.5 Symptom specific drugs and side effects	<p>Understanding of drugs (and their potential side effects) used for the management of:</p> <ul style="list-style-type: none"> • spasticity • pain • fatigue • ataxia and tremor • nerve conduction • dizziness/vertigo/nausea • neuropathic pain 					

	<ul style="list-style-type: none"> acquired nystagmus (e.g. oscillopsia treated with gabapentin) <p>Understanding that some allied health professionals can become supplementary or full prescribers for specific medications e.g. anti-spasticity drugs</p>					
6.6 Surgery/ invasive procedures	<p>Understanding of:</p> <ul style="list-style-type: none"> brain interventions for ataxia and tremor use of tenotomy botulinum toxin phenol baclofen pump trans magnetic stimulus (non-invasive) 					
6.7 Assessment and goal planning	<p>Understanding of how to assess:</p> <ul style="list-style-type: none"> deviations from normal posture (i.e. symmetry) and balance in sitting, standing and lying need for postural aids balance in sitting balance in standing foot and ankle weakness functional reach vestibular dysfunction deviations from normal gait - pattern/coordination, speed/rhythm coordination, pattern and speed of movement of upper limb sensory assessment (light touch, pressure, pain, temperature, proprioception, vibration) turning and transfers use of walking aids 					

	<ul style="list-style-type: none"> • use of Functional Electrical Stimulation (FES) • use of splints/orthotics for lower limb and their potential negative impact on balance and gait • use of splints (including functional splints) for upper limb • balance and gait during functional tasks e.g. stairs • risk of falls and falls confidence • functional use of upper limb • bilateral upper limb tasks/activities • indoor/outdoor gait • dual-tasking • stamina/endurance • for wheelchair provision • impact of infection • impact on quality of life • impact on safety • impact on family/carers • impact on activities/participation/occupation • impact of medication/polypharmacy • use of wheelchair • need for assistive equipment • access to public and private transport <p>Understanding of how to work collaboratively with people to negotiate person-centred goals and make action plans involving family/carers/MDT as relevant</p> <p>Understanding of the importance of assessing the potential need for Acceptance and Commitment Therapy, CBT, Health Coaching, Bridges training</p>					
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	Understanding the need to explore with the person the ways they can explore their potential and find their way of living the best life possible with MS					
6.8 Outcome measures/ monitoring tools	<p>Understanding of how and when to use outcome measures/monitoring tools which might include:</p> <ul style="list-style-type: none"> • Nine-hole peg test • Timed Up and Go (TUG) • timed distance walks (e.g.10 metre; 2 minute and 6 minute walk tests) • Berg Balance Assessment • backward walking (falls risk indicator) • functional gait • Functional Reach Test • 5 times sit to stand test • Modified Clinical Test of Sensory Interaction in Balance (CTSIB-M) • Patient reported outcome measures of balance and mobility • Pedometers and accelerometers <p>Understanding of normative values for key outcome measures</p> <p>Understanding of the tests which can be delivered in different settings (including remotely) and situations ((time demands/fatigue etc)</p>					
6.9 Knowledge of red flags	<p>Understanding of the signs/symptoms and reporting of:</p> <ul style="list-style-type: none"> • falls • injury danger (e.g. tissue damage with footwear, orthotic use, entrapment or injury to upper limb) 					

	<ul style="list-style-type: none"> • injury danger (e.g. tissue damage with footwear or orthotic use) • postural hypotension • ability to use manual/powerd wheelchair • visual problems e.g. cataracts • driving (if appropriate): the need to inform DVLA and insurance companies about MS diagnosis and the need for periodic review of ability to drive from physical and cognitive perspectives 					
6.10 PT and OT treatment and management interventions	<p>Understanding of how to deliver person-centred, evidence-based and pragmatic interventions and advice in a range of settings, including remotely, on:</p> <ul style="list-style-type: none"> • upper limb: <ul style="list-style-type: none"> ○ sensory re-education ○ repetitive sensory stimulation ○ mirror therapy ○ task specific training (including bilateral and functional tasks) • sit-to-stand without using arms • balance retraining • standing programmes including use of standing frames • gait re-education • foot and ankle strengthening including barefoot walking and barefoot shoes • exercise programme • reconditioning • treadmill training • progressive resistance training • ataxia strategies • vestibular rehabilitation 					

	<ul style="list-style-type: none"> • yoga and Pilates • task orientated and dual task training • awareness of falls risks • provision of mobility aids • provision of splints and orthotics (including functional splints) • education for patient and carer on safe stretching and safe splint use • type and provision of orthotics • Functional Electrical Stimulation (FES) • education for patient and carer on condition and management of falls, balance and gait • Tele-rehabilitation • Virtual Reality (VR) and VR-based environments (VREs) • 24-hour postural management and advice • wheelchair prescription and use • provision of appropriate assistive equipment • vocation • occupation • fatigue/sleep • mood/depression • cognition <p>Understanding of how to refer to community based physical activity programmes / exercise prescription schemes / leisure centres to enhance engagement with long term physical activity</p> <p>Knowledge of (and how to refer to) specific intensive upper limb rehabilitation programmes</p>					
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<p>6.11 Progression of interventions</p>	<p>Understanding of how to evaluate interventions for progression and regression and how to proceed if ineffective, if condition changes, safety concerns or at palliative care stage</p> <p>Understanding of how to educate the person with MS about when to seek advice or modify their programme to optimise effectiveness</p> <p>Understanding of the importance of tailoring advice to the character and lifestyle of the person with MS</p> <p>Understanding of how to educate the person with MS about how to maximise independence through functional use of upper limbs, including bilateral use where able</p> <p>Understanding of how to support person to engage with physical activities over the long-term. Support transition between hospital and community (supportive/independence) based activity/exercise</p>					
<p>6.12 Other professions</p>	<p>Understanding of role, referral pathways and joint working with MDT</p> <p>Understanding of other resources: patient forums, web-based resources that can help people to maintain an active lifestyle</p>					

COMPETENCY 7
Posture and skin integrity

Sub-sections	Skills and knowledge	Understanding (C=current and T=target)				Learning requirements/ evidence of learning/ completion dates
		Nil	Basic	Good	Expert	
7.1 Anatomy and physiology of affected structures	Understanding of the structure and/or function of: <ul style="list-style-type: none"> • sensory nervous system • postural control systems • skeleton • muscles • tendons • ligaments • fascia • skin • epidermis • dermis 					
7.2 Normal function	Understanding of: <ul style="list-style-type: none"> • normal bodily alignment • sensory, motor control and reflexes associated with body position including head position • function of the skin 					
7.3 MS specific issues	Understanding of how MS can cause: <ul style="list-style-type: none"> • weakness • fatigue • altered sensation • poor righting reactions • inactivity 					

	<ul style="list-style-type: none"> • spasticity/flaccidity • tremor • ataxia • vestibular impairment • impaired sitting balance • poor posture <p>Understanding of the effects of the following on posture and skin integrity:</p> <ul style="list-style-type: none"> • body weight • asymmetry • shear • friction • incontinence • oedema • continuous external pressure in one area of the body 					
<p>7.4 Secondary complications</p>	<p>Understanding of possible complications of poor posture:</p> <ul style="list-style-type: none"> • nociceptive pain • increased tone/spasms • changes in soft-tissue lengths • changes in muscle due to thixotropy • contracture • reduced digestion • constipation • reduced speech • reduced respiration • pressure ulcers • reduced function • reduced balance in sitting and standing 					

	<ul style="list-style-type: none"> • reduced quality of life • increased burden of care • change in weight • injury and entrapment risk due to impaired sensation <p>Understanding of the possible complications of loss of skin integrity:</p> <ul style="list-style-type: none"> • pain • increased tone/spasms • infection • reduced mobility during healing phase • reduced quality of life • increased burden of care • reduced activity, participation and occupation 					
7.5 Symptom specific drugs and side effects	<p>Understanding of:</p> <ul style="list-style-type: none"> • the role of anti-spasticity medication to reduce tone and prevent excessive and repetitive movement of the body against surfaces • the generalised and unwanted weakening effects of anti-spasticity drugs and how this can affect posture and skin integrity 					
7.6 Surgery/ invasive procedures	<p>Understanding of how the following can be used to impact positively on posture and skin integrity:</p> <ul style="list-style-type: none"> • botulinum toxin • phenol • baclofen pumps • tenotomy • intermittent self-catheterisation • indwelling catheter 					

	<ul style="list-style-type: none"> • supra-pubic catheter • bowel irrigation • anal plugs 					
7.7 Assessment and goal planning	<p>Understanding of how to assess:</p> <ul style="list-style-type: none"> • posture in sitting, lying and standing • impact of gravity on posture • impact of spasticity and spasms on posture • trigger factors (e.g. constipation) • skin integrity including signs of skin damage due to pressure/excessive moisture • potential skin damage from pressure, shear and friction • potential skin damage from splints/orthoses • pressure ulcer grades • impact of posture/skin integrity on ADL, activities and participation • hand and nail condition • assistive equipment and its role in posture and skin integrity including beds, chairs and wheelchairs • for equipment to assist with transfers • for equipment to maintain correct posture (24/7) to maximise function and prevent the development of secondary complications • dietary and fluid intake <p>Understanding of how to set person-centred goals and action plans, possibly in collaboration with family/carers/MDT</p>					

7.8 Outcome measures/ monitoring tools	Understanding of how and when to use: <ul style="list-style-type: none"> • joint range of movement • spasticity/spasm scale • pelvic position and obliquity • complex postural assessment • VAS e.g. for pain related to poor posture • pressure sore risk –e.g. Waterlow score and grading system (1-4) for pressure ulcers • Body Mass Index (BMI) 					
7.9 Knowledge of red flags	Understanding of the signs/symptoms and reporting of: <ul style="list-style-type: none"> • loss of skin integrity or injury to tissues • contracture • deviation of body position 					
7.10 PT and OT treatment and management interventions	Understanding how deliver evidence-based, pragmatic and person-centred interventions and advice on: <p><u>Postural issues:</u></p> <ul style="list-style-type: none"> • postural support in sitting and lying to achieve correct alignment • correct standing posture • stretch positions • regular change of position • 24/7 approach to posture management • adapting posture to function e.g. forward lean sitting for eating • splinting and orthotics • posture to reflect activity (e.g. forward lean over table for eating) • wheelchair adaptations to gain good alignment in sitting 					

	<ul style="list-style-type: none"> • bed position • seating/sleep systems for more complex postural needs • use of standing frames to ensure correct alignment • exercise regimes including core exercises to improve postural alignment <p><u>Skin integrity interventions/ advice:</u></p> <ul style="list-style-type: none"> • provision of palm protectors/splints • regular position change/pressure relieving techniques • regular observation of susceptible areas • pressure relieving wheelchair cushions • standing frames • body symmetry and correct weight distribution in standing, sitting and lying • pressure relieving assistive equipment e.g. mattresses, slide sheets 					
7.11 Progression of interventions	Understanding of how to evaluate interventions and how to proceed if ineffective, if condition changes or at palliative care stage					
7.12 Other professions	<p>Understanding of role, referral pathways and joint working with MDT</p> <p>Understanding of the importance of working with wheelchair services</p> <p>Understanding of the importance of working with district nurses and tissue viability health professionals</p>					

	Understanding of the importance of working with social care services to ensure care plan addresses management of posture and skin integrity					
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COMPETENCY 8
Spasticity, ataxia and tremor

Sub-sections	Skills and knowledge	Understanding (C=current and T=target)				Learning requirements/ evidence of learning/ completion dates
		Nil	Basic	Good	Expert	
8.1 Anatomy and physiology of affected structures	Understanding of the structure and function of the: <ul style="list-style-type: none"> • sensory and motor cortex and pathways • cerebellum • basal ganglia • vestibular system • reflex arc • stretch reflex • visual systems • muscles, tendons and ligaments 					
8.2 Normal function	Understanding the systems involved in maintaining normal: <ul style="list-style-type: none"> • movement • modulation of tone • co-ordination • balance • sensation 					
8.3 MS specific issues	Understanding of how MS can cause: <u>Tone change</u> <ul style="list-style-type: none"> • high tone • low tone (rare) • typical tonal patterns (e.g. flexor, extensor or mixed) • spasms (sometimes painful) 					

	<ul style="list-style-type: none"> • non-neural changes which can mask as increased tone (e.g. when muscle tissue has been replaced with connective tissue in a paralysed limb) • contracture • fluctuating tone during the day, month (hormonal influences), year (temperature influences) <p>Understanding of how high tone/spasms can assist standing, walking, transfers, circulation and maintenance of muscle bulk</p> <p>Understanding of how other factors can trigger or exacerbate spasticity and spasms (e.g. constipation, pain from any cause, stress, pressure ulcers, infection, tight/uncomfortable clothing, poor seating or posture, splints or catheter bags)</p> <p>Understanding of how spasticity/spasms can be part of a complex/cyclical presentation e.g. spasms can lead to a pressure ulcer which can increase spasticity/spasms</p> <p>Understanding of how MS can cause: <u>Ataxia/Tremor</u></p> <ul style="list-style-type: none"> • intention tremor • postural tremor • reduced coordination • ataxic gait • uncoordinated swallow • uncoordinated respiration • changes in the articulation of speech • gaze dysfunction (e.g. oscillopsia) 					
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	<p>Understanding of how any of the above can lead to problems with function, increased dependence and diminished quality of life</p> <p>Understanding of how ataxia can be part of a complex presentation with many trigger factors contributing to the person's experience of their symptoms e.g. stress, poor postural control, inadequate mobility aids, lack of proprioception through the legs when walking with aids</p>					
8.4 Secondary complications	<p>Understanding the possible complications that can arise from problems with spasticity and ataxia:</p> <ul style="list-style-type: none"> • reduced activities of daily living (ADL) • reduced fine motor tasks, e.g. writing, eating and drinking • loss of weight • reduced mobility • reduced balance • falls • deconditioning because of inactivity • poor posture • increased dependence • reduced quality of life • pain (nociceptive) • increased fatigue • respiratory problems • pressure ulcers • contractures • reduced ability to communicate • isolation and depression • altered sense of self-image and loss of confidence 					

<p>8.5 Symptom specific drugs and side effects</p>	<p>Understanding the drugs used in the management of spasticity, doses and timing of doses</p> <p>Understanding that anti-spasticity medication should be gradually titrated until the optimal dose is achieved</p> <p>Understanding that people with MS should be educated on the use of anti-spasticity medication so that they can tailor the dose and timing of dose to their needs (e.g. taking baclofen before carers help a person with morning spasticity to get up in the morning rather than taking the morning dose once the person is up). Understanding that therapists should take an active role in monitoring the effects of anti-spasticity medication as part of their rehabilitation management</p> <p>Understanding that anti-spasticity drugs need to be reviewed regularly as taking too much can lead to generalised weakness which can impact negatively on functional skills and rehabilitation interventions</p> <p>Understanding that anti-spasticity drugs play a part in reducing tone which interferes with function</p> <p>Understanding how drugs act either centrally or peripherally to reduce tone and how this can be beneficial or detrimental to the person</p> <p>Understanding of the side effects of anti-spasticity drugs including:</p> <ul style="list-style-type: none"> • tiredness • disorientation • generalised weakness 					
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	<p>Understanding that beta blockers and other medications can be used for tremor</p> <p>Understanding of the use of fampridine and its role in improving muscle contraction</p> <p>Understanding of PT's role as supplementary or full prescribers for specific medications e.g. anti-spasticity drugs</p> <p>Understanding of PT's extended scope role of injecting botulinum toxin</p> <p>Understanding the importance of including an assessment of symptom specific drugs and their impact when considering the management of spasticity, spasms and ataxia</p> <p>Understanding when to refer for medication review or consideration for other medical interventions (e.g. botulinum toxin) to manage problems with global or focal spasticity</p> <p>Understanding the need to ask the person with MS to complete a week-long, spasticity/spasm diary so that patterns of tonal changes and drug timings can be identified</p> <p>Understanding that it is within the scope of practice that PTs can change the timing of anti-spasticity medication but not the dose unless they are prescribers</p>					
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8.6 Surgery / invasive procedures	<p>Understanding of use of:</p> <ul style="list-style-type: none"> • brain interventions for upper limb ataxic/intention tremor (e.g. deep brain stimulation, stereotactic surgery) • botulinum toxin • phenol • baclofen pumps • phenol pumps • tenotomy <p>Understanding when to refer people with MS for these interventions</p>					
8.7 Assessment and goal planning	<p>Understanding of how to assess:</p> <ul style="list-style-type: none"> • abnormal tone • high tone / low tone • patterns of tone (use of a spasm/spasticity diary) • spasms • ataxia and tremor • coordination • sensation/pain • vision • gait • posture and balance • range of movement • transfers • stairs • ADL including use of equipment • aggravating factors on tone, tremor and ataxia (i.e. triggers) 					

	<ul style="list-style-type: none"> • impact on ADL/function including use of assistive equipment • speech and swallow • respiratory function (including cough) <p>Understanding of how to interpret assessment findings and set person-centred goals and action plans, possibly in collaboration with family/carers/MDT</p> <p>Understanding of how assessment of complex issues is often best carried out in the context of the person’s life in the community and in their home or work setting</p>					
<p>8.8 Outcome measures / monitoring tools</p>	<p>Understanding of how and when to use outcome measures including:</p> <ul style="list-style-type: none"> • Ashworth Scale • Modified Ashworth Scale • Tardieu Scale • spasm frequency (PENN) • SARA scale (Scale for the Assessment and Rating of Ataxia) • 9-hole peg test • Visual Analogue Scale (VAS) • Canadian Occupational Performance Measure (COPM) <p>Understanding the importance of using functional scales and patient reported outcome scales to assess improvement in ADL (e.g. Visual Analogue Scales or the Canadian Occupational Performance Measure – COPM)</p>					

8.9 Red flags	<p>Understanding of the signs/symptoms and reporting (if appropriate) of:</p> <ul style="list-style-type: none"> • falls • spillage of hot liquids • burns/fire risk from dropping cigarettes • choking/aspiration • pressure sores • contracture • inability to call for help • inability to feed/hydrate self/administer medication 					
8.10 PT and OT treatment and management interventions	<p>Understanding of how to deliver evidence-based, pragmatic and person-centred interventions and advice on:</p> <p><u>Spasticity and spasms</u></p> <ul style="list-style-type: none"> • identifying and minimising the impact of aggravating factors which can increase spasticity/spasms • stretching • weightbearing • standing including the use of equipment (e.g. standing frames in the home) • posture and positioning to decrease/change or influence tone (including sleep systems) • seating and wheelchairs • gait rehabilitation for spastic gait • transfer strategies to minimise spasticity and spasms • splinting and orthotics • reconditioning exercises • Functional Electrical Stimulation (FES) • vocation/occupation 					

	<p><u>Ataxia and tremor</u></p> <ul style="list-style-type: none"> • identifying and minimising the impact of aggravating factors which can increase ataxia • ADL compensation techniques for tremor and ataxia for upper limb, gait and balance • the use of postural stability to decrease ataxia and tremor • gait rehabilitation for ataxic gait • use of body weights including weighted wrist supports and vests • balance exercises • coordination exercises • reconditioning exercises especially core strength • appropriate trial of walking aids –including rollator frames and importance of increasing proprioception through trunk and legs to improve ataxia e.g. with use of trekking poles rather than walking sticks • use of active/passive trainers • seating and wheelchairs • use of weighted ADL equipment e.g. weighted cutlery • use of pressure garments • appropriate assistive equipment to increase independence in ADL • surgical/other interventions • vestibular rehabilitation • vocation/occupation <p>For spasticity and ataxia:</p> <ul style="list-style-type: none"> • medication review • self-management advice • advice for family/carers 					
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	<ul style="list-style-type: none"> • advice on fatigue, mood, sleep, cognition <p>Understanding that short-term treatment interventions (e.g. passive stretching by the therapist) may not have a long carry-over effect</p> <p>Understanding that interventions should always focus on helping the person with MS and their family/carers understand and be able to self-manage their problematic symptoms on a 24/7 basis</p> <p>Understanding of the psychological changes which can occur with spasticity, tremor and ataxia, and when to seek additional support for specific mental health issues</p>					
8.11 Progression of interventions	<p>Understanding how to evaluate interventions and how to proceed if intervention is ineffective, if the condition changes or at palliative care stage</p> <p>Understanding that symptoms are often part of a complex presentation where one condition may exacerbate another and the importance of looking holistically at the person</p>					
8.11 Role of other professions	<p>Understanding of role, referral pathways and joint working with MDT including specialist tone clinics and appropriate referrals for trigger factors e.g. continence services or district nurses for constipation</p>					

COMPETENCY 9
Fatigue and sleep

Sub-sections	Skills and knowledge	Understanding (C=current and T=target)				Learning requirements/ evidence of learning/ completion dates
		Nil	Basic	Good	Expert	
9.1 Anatomy and physiology of affected structures	Understanding of the structure and/or function of: <ul style="list-style-type: none"> • nerve impulse transmission in the central and peripheral nervous system • muscle • sleep physiology • role of the hypothalamus and brain stem 					
9.2 Normal function	Understanding of: <ul style="list-style-type: none"> • normal patterns of fatigue occurring with activity and diminishing with rest • effect of temperature on nerve conduction • restorative power of sleep • circadian rhythms and sleep/wake cycles 					
9.3 MS specific issues	Understanding of how MS can cause: <ul style="list-style-type: none"> • an overwhelming sense of tiredness that is not relieved by rest • fatigueability of muscles where power is lost quickly with repetitive muscle usage • short circuiting in nerve conduction • cognitive fatigue • sleep disorders in people with MS - 50% experience sleep disorders with insomnia being the most common symptom followed by obstructive sleep apnoea 					

	<p>Understanding of how MS symptoms can cause loss of sleep due to:</p> <ul style="list-style-type: none"> • spasticity and spasms • contracture • postural discomfort • bladder and bowel dysfunction • inability to change position in bed • neuropathic pain • nociceptive pain • depression • anxiety <p>Understanding of:</p> <ul style="list-style-type: none"> • the difference between primary and secondary fatigue • impact of poor sleep on fatigue • how temperature can impact on fatigue including raising body temperature with exercise <p>Understanding the impact of poor sleep quality on fatigue and cognitive function (specifically attention, memory and executive function) and how this may impact on rehabilitation strategies</p>					
<p>9.4 Secondary complications</p>	<p>Understanding of how the fatigue can impact on:</p> <ul style="list-style-type: none"> • cognitive function/concentration • motor function • activity/participation/ occupation • interaction/relationships • quality of life • carer burden 					

	<ul style="list-style-type: none"> • other MS symptoms • mood <p>Understanding how poor sleep can exacerbate or be mistaken for MS fatigue</p>					
9.5 Symptom specific drugs and side effects	<p>Understanding of:</p> <ul style="list-style-type: none"> • drugs used in the management of fatigue • drug used to improve nerve conduction e.g. fampridine • how drugs can relieve symptoms which may be impacting on sleep and/or fatigue • how some drugs used commonly to manage symptoms may increase fatigue e.g. anti-spasticity drugs, neuropathic pain drugs <p>Understanding how the use of sleeping tablets impact on length and quality of sleep</p>					
9.6 Assessment and goal planning	<p>Understanding of how to assess:</p> <ul style="list-style-type: none"> • level of fatigue • impact of fatigue on quality of life • impact on motor skills • causes of fatigue • sleep hygiene • environmental factors which can impact on sleep quality • impact of fatigue on ADL • impact on cognition • impact on activities/participation and occupation • impact on roles and relationships 					

	<ul style="list-style-type: none"> • impact on productivity/work • impact on occupational performance including self-care <p>Understanding of how to set person-centred goals and action plans, possibly in collaboration with family/carers/MDT</p>					
9.7 Outcome measures/ monitoring tools	<p>Understanding of how and when to use:</p> <ul style="list-style-type: none"> • Modified Fatigue Impact Scale (MFIS) • Fatigue Severity Scale (FSS) • Fatigue Scale for Motor and Cognitive Functions (FSMC) • cognitive scales • functional scales where appropriate • self-efficacy • impact of fatigue • severity of fatigue • quality of life • ADL • mood 					
9.8 Knowledge of red flags	<p>Understanding of the signs/symptoms and reporting of:</p> <ul style="list-style-type: none"> • fatigue that could be a symptom of another serious health conditions 					
9.9 PT and OT treatment and management interventions	<p>Understanding of how to deliver evidence-based, pragmatic and person-centred interventions and advice on:</p> <ul style="list-style-type: none"> • importance of general exercise and activity in reducing fatigue and deconditioning 					

	<ul style="list-style-type: none"> • building a mixed exercise block (over 8-12 weeks), which includes: elements of aerobic and resistance exercise, balance and motor control and mind/body/(Yoga/Pilates) • regular monitoring of exercise programmes (using MS fatigue assessments), titrating volume before intensity • holistic and personalised management • the role of exercise and behavioural interventions including cognitive behavioural therapy-based interventions • moderate, progressive, resistance exercise • vestibular rehabilitation • balance and aerobic exercises • Yoga/Pilates • maintaining usual/preferred activity • appropriate mobility aids • correct transfer techniques • strategies for managing ataxia • strategies for reducing effort in ADLs • the management of symptoms impacting on fatigue/inability to sleep e.g. pain/spasms • improved 24-hour positioning/posture • increased lighting • keeping cool e.g. during exercise • reducing stress • relaxation techniques • activity analysis and prioritisation techniques • sleep hygiene education • grading activities to preserve energy 					
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	<ul style="list-style-type: none"> • Cognitive Behavioural Therapy techniques to support day-to-day activities • mindfulness and other third-wave psychological approaches • anxiety and stress management • activity analysis • improving any symptom impacting on fatigue/inability to sleep e.g. pain/spasms • improved environment including noise, lighting and temperature • adaptations in the workplace including micro-breaks, task rotation and environmental modifications (fatigue is the most common reason that people with MS take early retirement) • regular routine • fatigue management strategies e.g. exercise, rest, prioritisation, pacing, planning and organisation • ergonomics • diet and nutrition • energy conservation including energy saving devices and equipment <p>Understand:</p> <ul style="list-style-type: none"> • the delivery of Cognitive Behavioural Based Fatigue Management Programmes which include: activity analysis, energy conservation, cognitive reframing, sleep routines, relapse planning and integrating graded activity targets • the use of Telehealth formats to deliver fatigue management interventions/maintain momentum, which include: <ul style="list-style-type: none"> ○ video check-ins 					
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	<ul style="list-style-type: none"> ○ e-learning modules ○ wearable prompts (e.g. for counting steps/measuring relative moderate intensity of activity) ○ group booster sessions to refresh fatigue management strategies ● how sleep quality affects partners and relationships: address sleep as a shared behaviour not only as an individual issue <p>Understanding of:</p> <ul style="list-style-type: none"> ● fatigue management programmes available to people with MS e.g. FACETS (now available on-line as a self-study course via the MS Society) ● written/online information/apps 					
9.10 Progression of interventions	Understanding of how to evaluate interventions and how to proceed if intervention is ineffective, if condition changes or at palliative care stage					
9.11 Role of other professions	Understanding of role, referral pathways and joint working with MDT					

COMPETENCY 10
Pain and sensation

Sub-sections	Skills and knowledge	Understanding (C=current and T=target)				Learning requirements/ evidence of learning/ completion dates
		Nil	Basic	Good	Expert	
10.1 Anatomy and physiology of affected structures	Understanding of the structure and/or function of: <ul style="list-style-type: none"> • ascending and descending tracts • mechanisms of pain perception and modulation • mechanisms of sensory perception 					
10.2 Normal function	Understanding of: <ul style="list-style-type: none"> • perception of pain • response to pain • perception of sensations 					
10.3 MS specific issues	Understanding of how MS can cause: <ul style="list-style-type: none"> • alterations to sensory perception including proprioception • neuropathic/neurogenic pain and/or abnormal sensations (dysesthesia) • pain associated with altered tone • L'Hermitte's sign • MS 'hug' also known as 'banding' or 'girdling' (the sensation of tightness or pressure around the chest or stomach which may be painful) 					

<p>10.4 Secondary complications</p>	<p>Understanding of possible complications:</p> <ul style="list-style-type: none"> • nociceptive pain as a result of poor posture, deconditioning or from another cause e.g. arthritis • loss of physical and emotional well-being/ social life/work and relationships • loss of function • soft tissue damage because of diminished or absent sensation including proprioception • pressure ulcers • falls due to a loss of proprioception or sensation • burning of skin due to loss of sensation • fear and/or avoidance of movement 					
<p>10.5 Symptom specific drugs and side effects</p>	<p>Understanding of:</p> <ul style="list-style-type: none"> • analgesic ladder • common medications used to help manage nociceptive and neuropathic pain • titration of neuropathic pain drugs • potential side effects of neuropathic and nociceptive pain medication e.g. weakness/confusion/drowsiness/constipation/dependency • risks associated with overdose of analgesia • risks of establishing pain-cycles associated with long-term painkiller use <p>Understanding the extended scope practice of PT's role as supplementary or full prescribers for neuropathic pain medication</p>					

10.6 Surgery/ invasive procedures	<p>Understanding of interventions which can be used to manage pain and other MS symptoms:</p> <ul style="list-style-type: none"> • botulinum toxin • phenol injections for tonal management • baclofen pump (e.g. severe painful spasms) 					
10.7 Assessment and goal planning	<p>Understanding of how to assess:</p> <ul style="list-style-type: none"> • history of the pain • causes of the pain • pain levels • the difference between neuropathic and nociceptive pain • sensory changes (subjectively and objectively) • impact of pain/loss of sensation on ADL and function • psychological impact of pain/loss of sensation • impact of pain on sleep <p>Understanding of how to set person-centred goals and action plans possibly in collaboration with family/carers/MDT</p>					
10.8 Outcome measures/ monitoring tools	<p>Understanding of how and when to use:</p> <ul style="list-style-type: none"> • VAS to measure pain level • body charts to accurately depict sensory changes • pain belief questionnaires • functional scales • neuropathic pain screening questionnaires such as: <ul style="list-style-type: none"> ○ The Leeds Assessment of Neuropathic Symptoms and Signs Pain Scale ○ Pain DETECT 					

10.9 Knowledge of red flags	<p>Understanding of the signs/symptoms and reporting of:</p> <ul style="list-style-type: none"> • sudden sensory changes especially in the saddle area (e.g. spinal red flags) • depression because of intractable pain (e.g. trigeminal neuralgia) • falls • burns • pressure ulcers 					
10.10 PT and OT treatment and management interventions	<p>Understanding of how to deliver evidence-based, pragmatic and person-centred interventions and advice on:</p> <ul style="list-style-type: none"> • positioning/support • heat/ice • TENS • pacing • movement/exercise/hydrotherapy • orthotics/strapping • sensory reintegration • compensatory strategies e.g. distraction • pressure care • use of medication • identification of triggers for neuropathic pain • management of nociceptive pain • equipment • specialist seating • splinting • wheelchair provision and use • fatigue management • CBT • Relaxation 					

	<ul style="list-style-type: none"> • mindfulness • advice on functional tasks and safety e.g. risk of tissue damage e.g. burns • long-term pain management strategies • education aimed at encouraging people to continue with normal activities 					
10.10 Progression of interventions	Understanding of how to evaluate interventions and how to proceed if intervention is ineffective, if condition changes or at palliative care stage					
10.11 Other professions	<p>Understanding of role of other professionals, referral pathways and joint working with MDT</p> <p>Understanding of when to refer to a pain clinic</p>					

COMPETENCY 11
Continence and sexual health

Sub-sections	Skills and knowledge	Understanding (C=current and T=target)				Learning requirements/ evidence of learning/ completion dates
		Nil	Basic	Good	Expert	
11.1 Anatomy and physiology of affected structures	Understanding of the structure and/or function of: <ul style="list-style-type: none"> • urinary system: kidney, bladder • digestive system: oesophagus, stomach, small and large intestine, gastrocolic reflex • neurological control of bladder, bowel function and sexual function: autonomic control (sympathetic /parasympathetic) • understanding of autonomic dysreflexia • pudendal nerve, sphincter control • pelvic floor • sexual organs 					
11.2 Normal function	Understanding of: <ul style="list-style-type: none"> • urine production • urine storage • timely emptying of urine • food digestion and nutrient absorption • timely elimination of waste products/stool • role of pelvic floor in continence • sexual function 					
11.3 MS specific issues	Understanding of how MS can cause: <ul style="list-style-type: none"> • neurogenic bladder • bladder storage problems • bladder emptying problems 					

	<ul style="list-style-type: none"> • bladder overflow • urgency • frequency • retention • weakness of pelvic floor • altered sensation of genital area which can impact on sexual gratification and relationships • impotence • neurogenic bowel • constipation • faecal incontinence <p>Understanding of how:</p> <ul style="list-style-type: none"> • motor impairment can impact on continence, especially upper limb impairment • cognitive impairment can impact on continence • continence issues impact on sexual relationships • mood and altered body image can impact on sexual relationships • pregnancy and childbirth can impact on bladder and bowel function including continence status 					
11.4 Secondary complications	<p>Understanding of possible complications:</p> <ul style="list-style-type: none"> • urinary tract infection (UTI) • faecal overflow secondary to chronic constipation • reduced physical and emotional well-being, social life, work, and relationships • reduced tissue viability • increased spasticity, fatigue, ataxia confusion 					

	<ul style="list-style-type: none"> relationship and identity issues following inability to engage in sexual activities 					
11.5 Symptom specific drugs and side effects	<p>Understanding of drugs used for:</p> <ul style="list-style-type: none"> urinary urgency and frequency and their side-effects (e.g. dry mouth, constipation) laxatives: bulk-forming; stimulants; softeners; osmotics suppositories enemas loose stool and their possible side effects impotence or sexual dysfunction e.g. Viagra <p>Understanding of how other medications may affect bladder and bowel symptoms e.g. anti-spasticity drugs, diuretics, diabetes medications</p> <p>Understanding how other medications may affect sexual drive and function e.g. anti-depressants, blood pressure medication</p>					
11.6 Surgery/ invasive procedures	<p>Understanding of:</p> <ul style="list-style-type: none"> clean intermittent self-catheterisation techniques for people with impaired voiding indwelling catheter suprapubic catheter ileostomy anal insert bowel irrigation systems 					

	<ul style="list-style-type: none"> • botulinum toxin Type A into the bladder wall for neurogenic detrusor overactivity • colostomy 					
11.7 Assessment and goal planning	<p>Understanding of how to assess:</p> <ul style="list-style-type: none"> • degree of bladder/bowel continence • fluid intake/output and diet • signs of neurogenic bladder/bowel dysfunction • impact on quality of life • impact on relationships including sexual • risks related to incontinence • motor function • cognitive function • medication • impact on other symptoms especially spasticity • impact on mobility/activity/ participation/vocation • impact of MS on sexual function and relationships <p>Understanding of how to set person-centred goals, possibly in collaboration with family/carers/MDT</p>					
11.8 Outcome measures/ monitoring tools	<p>Understanding of how and when to use:</p> <ul style="list-style-type: none"> • fluid balance chart • frequency diary • Bristol Stool Chart • bowel frequency diary/food diary 					
11.9 Knowledge of red flags	<p>Understanding of the signs/symptoms and reporting of:</p> <ul style="list-style-type: none"> • recurrent urinary tract infection (UTI) • frequent catheter by-passing • inability to empty bladder • suspected/known severe constipation 					

	<ul style="list-style-type: none"> • passing of blood (via urethra or anus) • mental health issues associated with loss of sexual function 					
11.10 PT and OT treatment and management interventions	<p>Understanding of how to deliver evidence-based, pragmatic and person-centred interventions and advice on:</p> <ul style="list-style-type: none"> • motor function issues which are impacting on continence e.g. manual dexterity, mobility • ataxia strategies to help with self-catheterisation e.g. handled and/or rigid catheter, weighted wrist cuffs, Lycra garments, stable sitting posture on toilet or commode • appropriate mobility equipment • pelvic floor exercises for stress incontinence • interventions for managing incontinence • general exercise • education for patient/carer on aggravating factors • basic self- management strategies (e.g. diet, fluid intake, elimination posture, double voiding, bladder retraining) • RADAR National key scheme • adaptive equipment to support toileting • 'Just can't wait' or 'no waiting' card • advice concerning general exercise and pelvic floor exercises during pregnancy and post-partum • adapting sexual positions to accommodate spasticity or other MS symptoms • use of sex toys e.g. vibrators to enhance sexual activity 					

11.11 Progression of interventions	Understanding of how to evaluate interventions and how to proceed if intervention is ineffective, if condition changes or at palliative care stage					
11.12 Other professions	<p>Understanding of role, referral pathways and joint working with MDT</p> <p>Understanding the role of the bladder and bowel services, MS specialist nurses and referral pathways</p> <p>Understanding the role of urinary tract infection home-testing kits to rapidly identify infection</p>					

COMPETENCY 12
Cognition, behaviour and mental health

Sub-sections	Skills and knowledge	Understanding (C=current and T=target)				Learning requirements/ evidence of learning/ completion dates
		Nil	Basic	Good	Expert	
12.1 Anatomy and physiology of affected structures	Understanding of the structure and/or function areas of the brain involved in: <ul style="list-style-type: none"> • cognition • behaviour • personality • executive functions • emotions 					
12.2 Normal function	Understanding of normal age-related parameters of: <ul style="list-style-type: none"> • cognition • behaviour • mental health • emotions • personality traits 					
12.3 MS specific issues	Understanding of how, from diagnosis, MS can cause: <ul style="list-style-type: none"> • memory loss • cognitive issues • attention deficit • executive function deficit • depression/anxiety • mood change • fatigue induced loss of concentration • loss of a sense of control 					

	<ul style="list-style-type: none"> • loss of hope • loss of purpose • loss of life roles and how this can impact of one's sense of being, becoming and belonging <p>Understanding of how these symptoms can be inter-related</p>					
12.4 Secondary complications	<p>Understanding of possible complications:</p> <ul style="list-style-type: none"> • mental health issues • loss of job • reduction in quality of life • reduced exercise and activity • alienation of family and friends • loss of participation • financial concerns 					
12.5 Symptom specific drugs and side effects	<p>Understanding of:</p> <ul style="list-style-type: none"> • antidepressant use and overuse • side-effects of anti-depressants e.g. blunting of all emotions including happiness, low sex drive, heart rhythm problems, difficulty sleeping, blurred vision • suicidal or self-harm ideation as rare a side effect of anti-depressants • drugs used for mental health conditions • possible impact on cognition and mental health of anti-spasticity, anti-epilepsy and anti-muscarinic drugs • awareness of potential benefit of the use of disease modifying drugs on cognitive function 					

12.6 Surgery/ invasive procedures	Understanding of possible impact on mental health of surgery/invasive procedures					
12.7 Assessment and goal planning	<p>Understanding of how to assess as part of a holistic functional assessment:</p> <ul style="list-style-type: none"> • cognitive function • behaviour • mental health • executive function • memory <p>Understanding of how to assist the person to set person-centred goals and action plans, possibly in collaboration with family/carers/MDT</p>					
12.8 Outcome measures/ monitoring tools	<p>Understanding of how and when to use:</p> <ul style="list-style-type: none"> • MOCA (Montreal Cognitive Assessment) • Beck's Inventory • memory tests • MSIS 29 (MS Impact Scale – 29) • quality of life measures • carer burden scales • ACE 3 (Addenbrooke's Cognitive Examination) • BICAMS (Brief International Cognitive Assessment for MS) • BCCAMS (Brief Computerised Cognitive Assessment in MS) • TOMS (Therapy Outcome Measure) 					

<p>12.9 PT and OT treatment and management interventions</p>	<p>Understanding of how to deliver evidence-based, pragmatic and person-centred interventions and advice:</p> <ul style="list-style-type: none"> • design management programmes (aligned with function) based on assessment tool findings • adapt interventions to accommodate problems with cognition, mental health or behaviour • initiate cognitive strategies early into vocational rehabilitation • be aware of how behaviour change interventions can sustain physical activity and engagement in healthy behaviours • understand the potentially positive interrelationship of physical activity on cognitive function • include family and carers in the person’s management • provide education and advice to the person, their family and carers to improve understanding and engagement in self -management • use a holistic approach to the management of cognition, memory, behaviour and mental health • tailor interventions to person’s personality, lifestyle and values/beliefs to ensure adherence • understand how specific computerised programmes may improve cognitive functioning • understand the potential positive effects of group-based cognitive rehabilitation programmes and on working memory <p>Understanding the importance of connection and communication with the person with MS and people significant to them in order to work with them in a</p>					
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	<p>partnership of 'experts': the 'expert' therapist and the person with MS who is an 'expert' in their own condition</p> <p>The importance of helping the person with MS maintain hope and control by using a positive, collaborative approach and without making false promises</p>					
12.10 Progression of interventions	<p>Understanding of how to evaluate interventions and how to proceed if intervention is ineffective, if condition changes or at palliative care stage</p> <p>Understanding of how age, disease progression and other socio-economic factors are predictors of worsening cognition</p>					
12.11 Other professions	<p>Understanding of role, referral pathways and joint working with MDT</p> <p>Understanding of interdisciplinary roles and boundaries</p>					

COMPETENCY 13

Palliative care

Sub-sections	Skills and knowledge	Understanding <i>(date these columns)</i>				Learning requirements and evidence of learning
		Nil	Basic	Good	Expert	
13.1 Anatomy and physiology of affected structures	Understanding of the structure and/or function of: <ul style="list-style-type: none"> • respiratory system • musculoskeletal system • skin • speech and swallowing mechanisms • gastrointestinal system • nociceptive pain systems 					
13.2 Normal function	Understanding of: <ul style="list-style-type: none"> • process of aging and death • psychological impact of illness, aging and dying 					
13.3 MS specific issues	Understanding of how MS symptoms can accelerate death or impact on end-of-life (EOL) stage: <ul style="list-style-type: none"> • fatigue • muscle weakness • immobility • sensory disturbance • neuropathic pain • nociceptive pain • spasticity • ataxia • cognitive impairment 					

	<ul style="list-style-type: none"> • respiratory problems • bladder and bowel dysfunction • dysphagia • dysarthria 					
13.4 Secondary complications	<p>Understanding of possible complications:</p> <ul style="list-style-type: none"> • contractures • pain • nociceptive pain because of poor posture/positioning • pressure ulcer formation • respiratory distress • reduced lung volume • impaired cognition associated with changes in respiratory gases • infections (UTI, pressure ulcer) • food/drink/saliva inhalation leading to chest infection/pneumonia • communication difficulties • psychological distress 					
13.5 Symptom specific drugs and side-effects	<p>Understanding of the drugs used for:</p> <ul style="list-style-type: none"> • symptom management and common side effects • pain • respiratory problems • sialorrhoea <p>Understanding of methods of delivery of drugs</p> <ul style="list-style-type: none"> • oral • intramuscular • intravenous 					

	<ul style="list-style-type: none"> • pump drive <p>Understanding of the use of complementary medicines/interventions for specific symptoms in the context of palliative care</p>					
13.6 Surgery/ invasive procedures	<p>Understanding of:</p> <ul style="list-style-type: none"> • naso-gastric and PEG/RIG feeding • pump drive • alternative feeding with awareness of ethical and complex quality of life issues associated with this 					
13.7 Assessment and goal planning	<p>Understanding of how to assess:</p> <ul style="list-style-type: none"> • pain • posture and positioning needs • skin care • range of movement • mobility needs • transfers • respiratory function • cognition • mobility needs • nutrition and hydration • psychological needs • impact on person with MS/family/carers <p>Understanding of how to set person-centred goals and action plans, possibly in collaboration with family/carers/MDT</p>					

13.8 Outcome measures/ monitoring tools	Understanding of how and when to use: <ul style="list-style-type: none"> • pain scale • range of movement • cognition scale • Quality of Life scale • Patient Related Outcome Measures • Palliative Care Outcome Scale 					
13.9 Knowledge of red flags	Understanding of the signs/symptoms and reporting of : <ul style="list-style-type: none"> • choking/stridor • pain • signs of infection • cognitive changes • psychological distress 					
13.10 PT and OT treatment and management interventions	Understanding of how to deliver evidence-based, pragmatic and person-centred interventions and advice on: <ul style="list-style-type: none"> • 24/7 posture and positioning • pain relief • spasticity management • ataxia strategies • mobility levels • weakness and balance issues • transfers • skin patency • respiration • emotional support • patient education, advice and support • carer education, advice and support 					

	<ul style="list-style-type: none"> • wheelchairs • specialist seating • specialist feeding equipment • environmental modifications including high and low tech equipment and temporary/permanent modifications to property • management of anxiety and fatigue <p>Understanding of the:</p> <ul style="list-style-type: none"> • need to tailor interventions according to the specific needs of the individual and their family/carers • importance of advance care planning and the ethical and legal elements and the correct registration of an individual's EOL decisions locally • timeliness for referral for respiratory support – e.g. non-invasive ventilation/cough assist, including conversations about future withdrawal of such equipment • need for careful planning of alternative feeding with awareness of the ethical and quality of life issues associated with this • NICE Guidelines - End of Life Care for Adults • emotional, spiritual and psychological support needed as well as support with end-of-life planning • use of complementary medicines and interventions 					
13.11 Progression of interventions	Understanding of how to evaluate interventions and how to proceed if intervention is ineffective or if condition changes					

13.12 Other professions	Understanding of the role of other health and social care professionals in the management of palliative care, referral pathways and joint working with MDT					
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COMPETENCY 14
Activities of daily living (ADL) and Social Care

Sub-sections	Skills and knowledge	Understanding <i>(date these columns)</i>				Learning requirements and evidence of learning
		Nil	Basic	Good	Expert	
14.1 Understanding the area	<p>Understanding of the:</p> <ul style="list-style-type: none"> • importance of meaningful activities (activities that people want or need to do) • need for assessment of all ADL • services available for assessment and provision of equipment to assist ADL • role of Social Services and Community Rehabilitation Teams • use of environmental adaptations (home/work) • provision of care or equipment to assist ADL • process for ordering basic equipment for assisting ADL • legislation that supports engagement in ADL including employment • legislation around moving and handling to facilitate care, and the safe use of equipment e.g moving and handling and care plans, Lifting Operations and Lifting Equipment Regulations (LOLER) 2021, awareness of government medical devices reports and reporting procedure <p>Understanding of how self-care, work and leisure ADL can be affected by:</p>					

	<ul style="list-style-type: none"> • motor impairment • sensory impairment • pain • cognitive impairment • psychological, emotional and behavioural difficulties • environment (social, cultural, physical and institutional) • spirituality • personal values and beliefs 					
14.2 Assessment	<p>Understanding of the need:</p> <ul style="list-style-type: none"> • to assess impact of MS symptoms on ADL • to set mutually agreed, person-centred goals around ADL • to assess impact of MS on activities, participation and vocation • to use validated assessment tools (e.g. COPM – Canadian Occupational Performance Measure, FIM/FAM – Functional Independence Measure /Functional Assessment Measure) 					
14.3 Management of condition	<p>Understanding of how to deliver evidence-based, pragmatic and person-centred interventions and advice to enhance engagement in ADL and evidence for progression of therapy using outcome measures</p>					
14.4 Referral pathways	<p>Understanding of the role, referral pathways and joint working with:</p> <ul style="list-style-type: none"> • other members of the MDT • statutory agencies available to enhance engagement in ADL 					

	<ul style="list-style-type: none">• non-statutory agencies and charitable organisations available to enhance engagement in ADL and how to refer to them• Online and digital resources to support engagement in ADL					
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COMPETENCY 15
Roles and relationships

Sub-sections	Skills and knowledge	Understanding <i>(date these columns)</i>				Learning requirements and evidence of learning
		Nil	Basic	Good	Expert	
15.1 Understanding the area	<p>Understanding of the concepts of 'role' and 'relationships' and their importance in different settings:</p> <ul style="list-style-type: none"> • family • community • at work • during hobbies • friends/social groups <p>Understanding of how impairments in the following can affect a person's role and normal responsibilities:</p> <ul style="list-style-type: none"> • motor function • sensory function • cognitive function • communication • psychological function <p>Understanding of the impact of MS on:</p> <ul style="list-style-type: none"> • normal roles and relationships • personal and intimate relationships and the need to discuss this • family relationships and roles including childcare • relationships and roles with friends in the community • relationships and roles with work colleagues • relationships with professionals 					

	<p>Understanding that the person, their family/ carers may need:</p> <ul style="list-style-type: none"> • education to help them understand the condition • advice on specific problems and practical solutions • emotional/psychological support • referrals to other professionals and support networks as appropriate • financial, legal, housing, adaptations and equipment advice • rehabilitation • referral to mental health team, neuropsychologist, counsellor or support groups <p>Understanding of the effects of some medication on female menstruation and male impotence/ejaculatory function and interference with conception</p> <p>Understanding of the impact on sexual relationships and the need to sensitively initiate a discussion on the subject</p>					
15.2 Assessment	<p>Understanding of how to assess:</p> <ul style="list-style-type: none"> • which roles, responsibilities and relationships are important to a person • impact of MS on roles, responsibilities and relationships in all areas of life • environmental needs (social, cultural, physical and institutional) • spiritual needs and routines • how any interventions or advice could impact on their roles, responsibilities or relationships with others e.g. time-consuming or tiring exercise regimes may interfere with roles 					

15.3 Management	<p>Understanding of how to deliver evidence-based, pragmatic and person centred interventions and advice to maintain roles and relationships:</p> <ul style="list-style-type: none"> • fatigue management to continue participation in family activities/ responsibilities • spasticity/tremor/ataxia management strategies • different methods of sexual expression/intimacy • mobility aids • wheelchairs • strategies to maximise independence in personal care and domestic responsibilities • maximise strength • maximise upper limb function 					
15.4 Referral pathways	<p>Understanding of roles, referral pathway and joint working with:</p> <ul style="list-style-type: none"> • neurologist/GP • MS nurse/nurse • OT • Speech and Language Therapist • wheelchair clinic • pain clinic • midwife and health visitor • continence nurse • social care and housing team • sensory support team • community mental health team • spiritual/counsellor • sexual/relationship counsellor • benefits advice team • job centre plus 					

COMPETENCY 16
Vocation and participation

Sub-sections	Skills and knowledge	Understanding (C=current and T=target)				Learning requirements/ evidence of learning/ completion dates
		Nil	Basic	Good	Expert	
16.1 Understanding the area	Understanding of the: <ul style="list-style-type: none"> • benefits of participation and work on a person's health and wellbeing • ways in which work can have a detrimental effect on a person • importance of work/life balance • importance of purpose • ways in which MS can impact on vocation and participation • possibility of developing psychological problems if unable to work or participate • need to help people make the right decisions regarding their employment • duty upon employers to consider reasonable adjustments to maximise a person's performance • issues concerning consent and disclosure of information between and across agencies and employers • Equality Act (HMSO 2010) • need for alternative occupational and educational opportunities • need for financial/welfare advice • need for social participation 					

	<ul style="list-style-type: none"> • impact of individuals symptoms on vocation and participation • way the choices we make related to our occupations are directly associated with our personal values and beliefs 					
16.2 Assessment	<p>Understanding of how to assess:</p> <ul style="list-style-type: none"> • the impact of MS on vocation and participation • motivations • other contributing factors e.g. co-morbidities, home circumstances, environmental constraints 					
16.3 Management interventions	<p>Understanding of how to deliver evidence-based, pragmatic and person-centred interventions and advice on:</p> <ul style="list-style-type: none"> • transport and access to work • work environments and work related tasks • remaining at work • alternatives to work • access to community activities/social groups <p>Understanding of the various support and resources available to help people participate and remain at work e.g. access to work schemes, financial support and benefits, MS Society legal advice support line, transport</p> <p>Understanding of how to write work related reports</p> <p>Understanding of how to communicate effectively with work related agencies, Occupational Health Services, managers, Human Resources</p>					

16.4 Referral pathways	Understanding of the roles, referral pathways and joint working with: <ul style="list-style-type: none"> • neurologist/GP • MS nurse • OT/PT • psychologists • social services • welfare advisors • Job Centre • Third Sector 					
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COMPETENCY 17
Self-management

Sub-sections	Skills and knowledge	Understanding <i>(date these columns)</i>				Learning requirements and evidence of learning
		Nil	Basic	Good	Expert	
17.1 Self-management	<p>Understanding that self-management refers to the ability to:</p> <ul style="list-style-type: none"> • take responsibility for own overall health and well-being • take responsibility for own actions and life direction • set goals and have a plan on how to achieve them • understand own limitations, and have knowledge and understanding on when and how to request advice/assistance • taking ownership of own healthcare and making healthy lifestyle choices • striving to maintain daily occupations (personal care/leisure/work/social activities) • engage in activities to enable a sense of happiness and personal fulfilment • adhere to agreed treatments • adopt coping strategies to deal with the psychological and emotional changes a diagnosis of MS can bring • form an equal partnership between the person with MS and health care professionals in planning care • understand when changes in health occur and how and when to request advice/assistance 					

	<p>Understanding of:</p> <ul style="list-style-type: none"> • the term 'supported self-management' and how a service dependency and patient self-management needs to be individually considered and balanced • how to include self-management advice in every intervention • the evidence-base for self-management strategies and courses e.g. FACETS • patient activation measures and strategies • the barriers and facilitators to self-management • different learning styles and how to deliver and tailor advice accordingly • how self-management can be used in different areas in condition management • how to support and empower people in self-management • motivational interviewing • the factors that contribute to non-adherence to medical/ AHP interventions/advice • respect for the person's individual autonomy and choice e.g. views, needs, wishes and decisions • respect for the person's knowledge about their unique lived experience of living with MS • consideration of the person in context • facilitating shared decisions about future treatment goals • encouraging and supporting the person 					
<p>17.2 Person-centred approach</p>	<p>Understanding of a person-centred approach and the various concepts this encompasses:</p> <ul style="list-style-type: none"> • respect for the person's individual autonomy and choice e.g. views, needs, wishes and decisions 					

	<ul style="list-style-type: none"> • respect for the person’s knowledge about their unique lived-experience of living with MS • consideration of the person in context • facilitating shared decisions about future treatment goals • encouraging and supporting the person to actively participate in health care decisions 					
17.3 Readiness for self-management	Understanding that not all people are ready, willing or able to embrace the concept of self-management and that assessment is required to establish a person’s ability, desire and choice to autonomously manage their own condition, whilst being mindful not to foster dependency on services					
17.4 Supporting self-management	Understanding of strategies and interventions which can support a person to become more actively engaged with health care including: <ul style="list-style-type: none"> • motivational interviewing • mindfulness • CBT • readiness to change techniques • patient activation measures 					
17.5 Evidence base and legislation	Understanding of the evidence base and legislation for self-management strategies					
17.6 Barriers and facilitators	Understanding of the barriers and facilitators to self-management from both client and professional perspectives including: <ul style="list-style-type: none"> • balance of power in therapeutic relationships 					

	<ul style="list-style-type: none"> • individual knowledge • time to practice a person-centred approach • peer support • clinical reflection • environmental/ organisational influences and restraints • desire to engage in self-management approach 					
17.7 Other self-management issues	<p>Understanding of how own professional priorities can influence concepts of self-management</p> <p>Understanding of different learning styles and how to deliver and tailor advice accordingly</p> <p>Understanding that the concept of self-management should be considered in every intervention</p> <p>Understanding of the need to constantly review, adapt and support and information needs for each person and foster an environment which supports empowerment e.g.:</p> <ul style="list-style-type: none"> • tailored advice • lifestyle/personality considerations • person centred approach • involvement of family/ friends/carers • timely support/ intervention • ease of access to MDT • single point of contact • non-discharge from service <p>Understanding of the factors that contribute to non-adherence to medical/ AHP intervention advice</p>					

	<p>Understanding of the evidence based self-management courses available for people with MS e.g. FACETS</p> <p>Understanding of how to deliver a self-management course</p> <p>Understanding of how to deliver self-management advice:</p> <ul style="list-style-type: none"> • verbally • written • course • electronically 					
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COMPETENCY 18
Education and research

Sub-sections	Skills and knowledge	Understanding <i>(date these columns)</i>				Learning requirements and evidence of learning
		Nil	Basic	Good	Expert	
18.1 Education	<p>Understanding of how to identify own educational needs through:</p> <ul style="list-style-type: none"> critical self-reflection performance appraisal skills and knowledge frameworks competency frameworks learning styles questionnaires <p>Understanding of how to identify team’s educational needs</p> <p>Understanding of:</p> <ul style="list-style-type: none"> how to access appropriate educational resources e.g. journal articles, local, national and profession-specific library facilities and post-graduate courses how people learn and how to tailor education to own and other’s learning styles how to prepare, resource and deliver education to patients on all aspects of their condition how to prepare and deliver education to other professionals/unqualified staff <p><u>Clinical leads and managers</u></p> <p>Understanding of:</p>					

	<ul style="list-style-type: none"> • how to prepare and deliver expert level education to a variety of audiences at local, national and international level • how to deliver and evaluate education to team 					
18.2 Research	<p>Understanding of:</p> <ul style="list-style-type: none"> • full spectrum of research methodologies • how to instigate/participate in research activities including evaluation and audit • how to access a broad range of information related to evidence-based approaches • how to critically appraise research • how to apply research findings to practice • evidence hierarchy and ability to weigh the evidence • the evidence for own profession's clinical interventions • why people with MS and health care professionals use may use some interventions which are not evidence-based in the management of MS (absence of evidence is not evidence of absence) – healthcare professionals should use these interventions backed up by assessment and clinical judgement • how to ensure a personal continuing professional development approach to keeping up-to-date with relevant information associated with the condition, client group and professional practice 					

COMPETENCY 19
Service management and development

Sub-sections	Skills and knowledge	Understanding (C=current and T=target)				Learning requirements/ evidence of learning/ completion dates
		Nil	Basic	Good	Expert	
19.1 Service management	<p>Within the context of your role, understand:</p> <ul style="list-style-type: none"> management structures across health and social care in primary, secondary, community and tertiary settings, and at local, regional and national levels and have knowledge of NHS policies and plans for your country of work work- related policies and procedures hierarchy of own workforce and how it is managed how to manage, support and develop workforce and where to find support how to take significant managerial responsibility for the work and development of others how to demonstrate and implement managerial techniques and leadership skills how to implement change effectively <p>Understanding of the differences that occur in health management structures, policies and laws between countries and how this affects neurological service provision within:</p> <ul style="list-style-type: none"> England Scotland Wales Northern Ireland 					

<p>19.2 Service development</p>	<p>Understanding of how to evaluate, redesign or develop a service</p> <p>Understanding of how to select and apply measures to evaluate a service</p> <p>Understanding of the requirements of the code of conduct, legal and policy frameworks governing professional practice and able to promote and ensure best practice</p> <p>Understanding of how to:</p> <ul style="list-style-type: none"> • produce, inform and/or promote legislation, policies and procedures for best practice • recognise where services are compromised and take the lead on reporting, challenging and resolving • critically reflect on own and others performance and actively see and use opportunities for service development or redesign • co-produce service evaluation with service users to support service development and quality improvement • tell the difference between individual and service development structures within local and national policies and guidelines • access and use local and national tools used to improve and develop services (e.g.audit, questionnaires, guidelines, benchmarking) • develop, implement, analyse and use data to demonstrate effectiveness and promote service 					
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	<p>development at individual and local/national service level</p> <ul style="list-style-type: none"> • prepare and deliver in a concise, accurate and effective way, information regarding service development issues at local, national and international level • work with other relevant stakeholders (primary, secondary and tertiary care) to ensure joined up service development and delivery across the system that reflects peoples' needs within their local area <p>Understanding of the use of the consultancy role in your service and other local services who may not have as much expertise in the management of people with MS</p>					
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COMPETENCY 20
National guidelines and legislation

Sub-sections	Skills and knowledge	Understanding <i>(date these columns)</i>				Learning requirements and evidence of learning
		Nil	Basic	Good	Expert	
20.1 National guidelines	<p>Understanding of how to access local and national guidelines on the assessment and management of MS, its secondary complications and symptoms e.g.</p> <ul style="list-style-type: none"> • NICE organisation • Health Improvement Scotland • ACPIN (Association of Chartered Physiotherapists with an Interest in Neurology) • RCOT-SSNP-LTC (Royal College of Occupational Therapists – Specialist Section Neurological Practice – Long Term Conditions) • NHS Guidelines • MS charities • Association of British Neurologists (ABN) • Royal College of Physicians <p>Understanding of how to access symptom or impairment specific guidelines on the management of MS and secondary complications related to MS e.g.:</p> <ul style="list-style-type: none"> • RCOT guidelines • ACPIN guidelines • NICE guidelines • Ataxia UK guidelines • Spasticity Guidelines 					

	<ul style="list-style-type: none"> • Splinting Guidelines • Manual Handling Guidelines • Pressure Ulcer Guidelines • BTS (British Thoracic Society)/ACPRC (Association of Chartered Physiotherapists in Respiratory Care) Guidelines • European Association for Palliative Care 					
<p>20.2 Relevant legislation</p>	<p>Understanding of relevant legislation relevant to the assessment and management of people with MS e.g.:</p> <ul style="list-style-type: none"> • Equality Act 2010 • Mental Capacity Act 2005 including 'Deprivation of Liberties (DOLs) • 'Our health, our care, our say' 2006 • Care Act 2014 • Human Rights Act 1998 • safeguarding adults and children • welfare benefits <p>Understanding of:</p> <ul style="list-style-type: none"> • advanced care planning • Lasting Power of Attorney (LPA) • suicide and assisted suicide legislation 					

Appendix 1 – Competencies development process

These competencies were developed by the Therapists in MS (TiMS) Working Group. This group consists of twenty-five Allied Health Professionals (physiotherapists, occupational therapists and speech and language therapists) who are all specialists in the management of people with MS. The first competency document was made available via the MS Trust in February 2018. This document was reviewed, updated and re-formatted and trialled by the Working Group and was made available via the MS Trust in December 2022. The table below outlines the steps that were undertaken to develop these competencies:

Competencies development process	
1.	2016 – a decision was taken at a TiMS Working Group meeting that a Competency Framework was needed for PTs and OTs
2.	Working Group members agreed that the framework needed to be: <ol style="list-style-type: none"> a. Comprehensive b. Achievable c. Educational d. Related to professional activities e. Holistic f. Relevant to therapists at all levels of expertise g. Able to help therapists identify gaps in their knowledge and skills h. Able to assess the expertise of the therapist working with people with MS i. Relevant in different healthcare setting across the four countries of the UK
3.	2016 – 2018 – TiMS Working Group members (15 PTs; 7 OTs; 1 SLT) undertook a mapping exercise to discuss and agree the following: <ol style="list-style-type: none"> a. The sections of the framework and the model to be used b. The content of each section c. Descriptions of levels of expertise d. Roles at each career level
4.	The framework was not funded by any external organisation
5.	Due to the time commitment, it was decided to produce an evidenced-based but non-referenced document
6.	The document contains information based on evidence, expert opinion and informed judgement of twenty-five MS specialist physiotherapists and occupational therapists from around the UK who have many years of experience in MS management
7.	The first document took two years to complete and emerged after several iterations

8. A method of recording progress and evaluating the usefulness of the document was devised
9. The first Competency Frameworks for PTs and OTs were launched in 2018. TiMS members were informed via the quarterly newsletter and the document was also promoted at the MS Trust conference. Copies were made freely available to therapists via the MS Trust. Interested parties were sent the document in Word format so they could adapt it to their needs
10. In 2020, the TiMS Working Group decided to review and update the document
11. Sections of the document were given to Working Group members. They were asked to review the content against current research and recent advances in the management of people with MS
12. After considering the feedback received, the document was re-formatted to make it more user-friendly
13. The final format was sent to two physiotherapists and two occupational therapists to trial. This final document has been revised following feedback from this trial
14. The document will be reviewed and updated by the TiMS Working Group and invited expert reviewers in 2030 (previous reviews: 2022, 2026)

TiMS Working Group members involved in writing and reviewing the first and second edition of these competencies (2016 - 2022)

Jody Barber, Chris Beach, Darren Beales, Pam Bostock, Suzanne Buckley, Tania Burge, Anne Canby, Heidi Cleary, Helen Conyers, Michelle Davies, Laura Douglas, Catriona Fearn, Rachel Fisher, Jenny Freeman, Gail Griffiths, Wendy Hendrie, Margaret Hewett, Susan Hourihan, Ewa Johnsson-Charles, Michelle Koch, Kay MacDowall, Rhian O'Halloran, Ruth O'Regan, Apeksha Patel, Trudy Pelton, Jane Petty, Freya Powell, Fiona Roberts, Emma Royal, Amy Smissen, Jenny Thain, Sue Wheeler

TiMS Working Group members involved in reviewing the third edition of these competencies (2026)

Jody Barber, Pam Bostock, Heidi Cleary, Helen Cole, Michelle Davies, Laura Douglas, Jenny Freeman, Singhamati Hannah, Wendy Hendrie, Susan Hourihan, Hannah Jackson, Michelle Koch, Rhian O'Halloran, Ruth O'Regan, Kay McDowall, Emma Royal, Amrik Sidhu, Anna Sprigings, Jenny Thain, Emma Tyrell, Emily Wilford

(Thanks to Nicola Shoebottom and Tom Williamson for testing the initial document and commenting on it)

Review 2026

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- Rebecca Kimber – Highly Specialist Speech and Language Therapist, National Hospital for Neurology and Neurosurgery

- Rachel Moses –Consultant Respiratory Physiotherapist, NHS England
- Stephanie Nixon – MS Nurse, North Cumbria Integrated Care