

FOUNDATIONS OF NURSING

PART 2 THE NUTS & BOLTS OF MS



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Course presenters

Sharon Barlow, Registered Nurse - MS Specialist

Nurse Consultant- Multiple Sclerosis, Flinders Medical Centre, South Australia

Sharon is a highly experienced clinician, holding qualifications in both nursing and social work, with a Graduate Certificate in Clinical Rehabilitation from Flinders University.



Her career has focused on improving outcomes for people living with multiple sclerosis, including roles as Senior Nurse Educator and Senior Social Worker at the MS Society, and as an MS Nurse Consultant at Flinders Medical Centre, where she helped establish South Australia's first MS service and one of Australia's pioneering nurse-led MS clinics.

Sharon is widely recognised for her dedication to education, research, and professional development, having presented at MS Nurses Australasia conferences, served extensively on the MSNA Executive Team, and received Life Membership. She has been honoured with the MS Australia 50 Years President's Medal for her outstanding contributions to the field.

Sharon is a member of the MS Australia [MS Nurses Working Group](#)

Imogen Milner, Registered Nurse - MS Specialist

MS/Epilepsy Clinical Nurse Specialist

Imogen is a MS and Epilepsy clinical nurse specialist in Wellington Hospital, New Zealand. She is a strong advocate for education with patients, their supports and other health professionals in order to enable people with MS to live well. She is also passionate about learning from people with MS and health professionals to ensure she is providing best quality person centred care. She loves the heterogeneity of her patient population who always motivate her. She is constantly inspired by the incredible MS nurses nationally and internationally in particular through her MSNA network and is proud to be part of the MS nurse community.



Introduction to Part 2 is provided by Dr Therese Burke, Registered Nurse MS Nurse Specialist & Adjunct Senior Research Fellow, School of Nursing, University of Notre Dame, Sydney Campus

Session overview

In this session you will learn about:

- Symptom assessment
- Types of MS symptoms
- MS relapses
- Symptom management
- The multidisciplinary team
- MS comorbidities

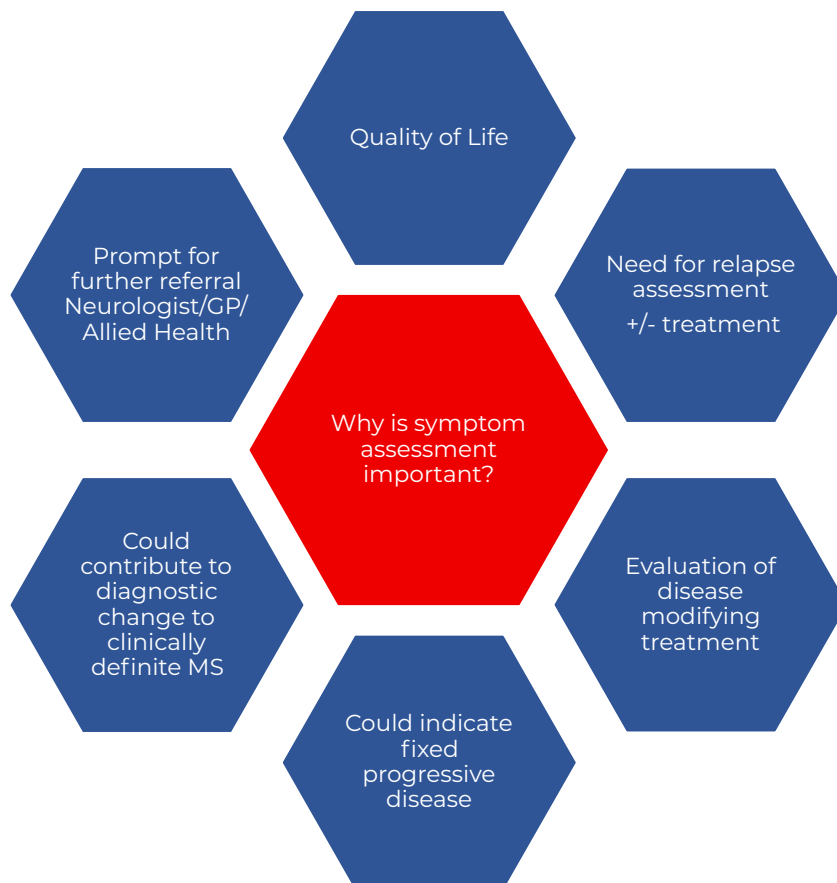
Symptom assessment

Symptom assessment is a fundamental skill that cannot be underestimated in the work that MS Nurses do. MS Nurses help minimise distress and maximise the quality of life of the people they provide care for.

A symptom could represent a relapse of MS, background disease progression and/or an insight into how a disease modifying drug (DMD) is working. It could lead to a change in diagnosis. A symptom could also be non-MS related and identifying this is crucial to the overall health and wellbeing of MS patients.

Frequently, a symptom will require further assessment, testing and management from other health professionals.

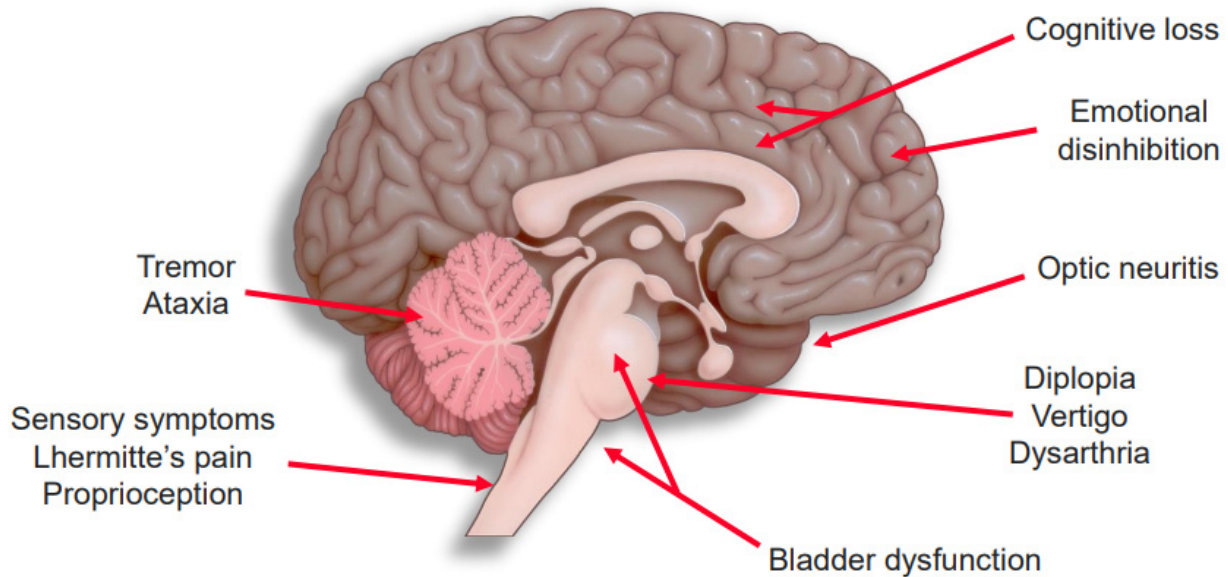
Why is symptom assessment important?



Symptom presentation

People with MS experience a range of symptoms and where a lesion is located can impact what symptoms a person may experience.

Symptom presentation depends on lesion location



Miller AE. In: *Handbook of Multiple Sclerosis*. 2001:213-232. Medical illustration © MCFlynn.

Miller, A.E. (2001). *Handbook of Multiple Sclerosis*, 213-232. Medical Illustration 2

MS symptoms

MS symptoms are wide ranging, and each person will have a unique combination of symptoms over their lifetime. How people with MS are impacted by their MS symptoms also varies.

MS symptoms can include:

- **Fatigue and heat sensitivity** (known as Uhthoff's phenomenon)
- **Cognitive and emotional changes:** cognitive problems ('brain fog'), depression and anxiety
- **Vision issues:** optic neuritis, double vision and eye movement problems
- **Sensory and pain symptoms:** numbness, tingling, itching, pins and needles, MS hug (dysesthesia) and chronic pain
- **Bladder, bowel and sexual issues:** bladder dysfunction, bowel dysfunction and sexual dysfunction
- **Mobility and movement issues:** ataxia, muscle and nerve weakness, spasticity, tremors, balance, dizziness and vertigo, walking (gait) difficulties and tremors

Some people may also experience breathing issues, hearing loss, loss of taste, speech issues and swallowing difficulties.

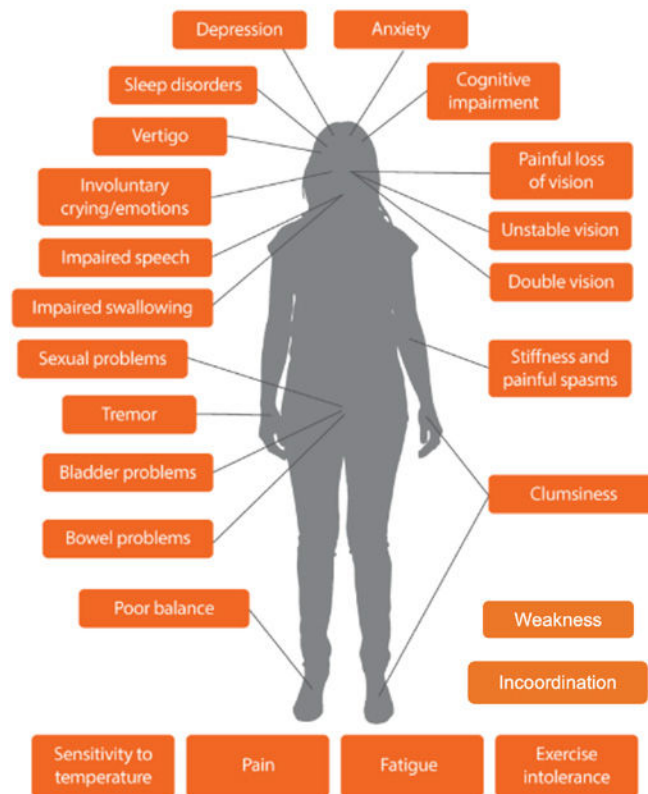
[Learn more about MS symptoms](#)

Uhthoff's phenomenon

is the worsening of MS symptoms when the body gets overheated, whether it be from hot weather, exercise, fever, or saunas and hot tubs.

Brain Fog is a common symptom of MS is brain fog, or brain haze. It is a term used to describe forgetfulness, trouble concentrating, and confusion.

MS hug is a band of tight pain around your torso that can range from dull and achy to sharp and burning. The pain can sometimes make it hard to breathe, giving it the nickname 'MS girdle.'



1

Types of symptoms

MS symptoms can be complex and multifaceted, and it is important to understand how they are impacting the patient. Many MS symptoms are invisible, and each patient may have a different way of describing their symptoms. For example, pain may be described as burning, shooting, pins and needles, the sensation of hot water being poured on them, bone pain or a feeling of electricity when a person moves a certain way.

It is important to understand the primary, secondary and tertiary symptoms that your patients are experiencing and how they interact with each other:

- **Primary symptoms** are the direct result of damage to the central nervous system, for example bladder dysfunction
- **Secondary symptoms** are the complications that arise as a result of these primary symptoms, for example bladder dysfunction can cause repeated urinary tract infections
- **Tertiary symptoms** are the 'trickle down' effects of the disease, for example, problems with bladder control may cause people to withdraw from social interactions leading to isolation, depression and anxiety

Symptoms can have a significant impact on a person's quality of life. Acknowledging and validating MS symptoms is important, including those you cannot be managed or invisible symptoms as they're often hard for others without MS to understand.

Symptom management can include pharmaceutical and non-pharmaceutical strategies. It is important to make sure that symptom management strategies have realistic goals, balance hope and reality, and regular follow up.

[Learn more about MS Treatments in Part 3: The Rescue Mission](#)

[Learn more about Brain Health in Part 4: Regaining Control](#)

Accessing a multidisciplinary team

MS Nurses can do a lot to support their patients, however, even with their knowledge and expertise they are not experts in everything. The focus should be on connecting patients to the right people at the right time to assist with the management of their symptoms.

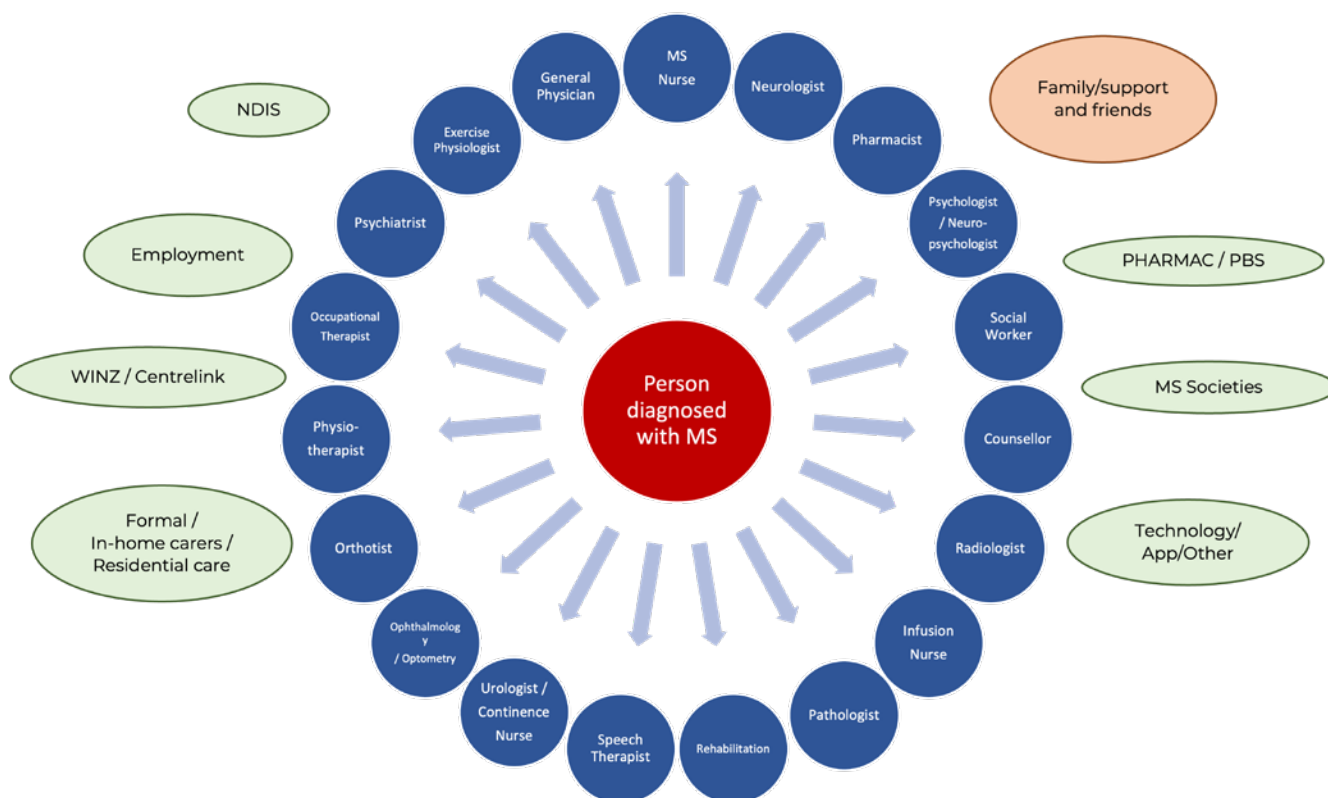
It is important to be aware or look at what are the major issues impacting your patients and what resources or relationships could support them. Symptoms can impact employment, financial security, roles, family and function. You may also need to educate families members on the impact of symptoms so they can better support the person living with MS.

Most nurses should have access to member of a multidisciplinary team including medical, nursing and allied health professionals. There are also other key players that your patients might be interacting with regards to accessing social services, including Centrelink/WINZ (income support services), the NDIS and local MS societies.

People living with MS may also benefit from access to other resources, links and apps that can support them. For example, someone with bladder issues might benefit from access to the national toilet map to help them locate public toilets and reduce their anxiety and stress when outside the home. There are national toilet maps available for [Australia](#) and [New Zealand](#).

Please note: the services and resources referenced above related to Australia and New Zealand. If you are a MS Nurse located in another region you will need to identify your local equivalents

The multidisciplinary team



Ms relapses

Relapse vs pseudo relapse vs progression

When a person living with MS experiences a symptom, it is important to know the difference between whether it is caused by a relapse, pseudo relapse or a progression of symptoms:

- **MS relapse:** is a period of worsening symptoms that can either be new symptoms or the return or worsening of existing ones that last over 24 hours and are usually persistent due to new inflammation. Early identification of a relapse can influence access to treatment and speed up a person's recovery.
 - » **MS pseudo relapse:** (or exacerbation of old symptoms) are symptoms not caused by new inflammation or progression and generally caused by triggers such as illness, infection, stress/depression, heat and sleep deprivation. A pseudo relapse is managed by treating the underlying problem. For example, an antibiotic for a urinary tract infection or rest, hydration and cooling if caused by stress or heat.
- **MS progression:** is the progression of existing MS symptoms due to previous inflammation, nerve damage or brain atrophy. For example, new onset urinary symptoms may be related to an old lesion.
- **Unrelated to MS:** after an MS diagnosis, new symptoms can often be assumed to be related to MS. However, some symptoms may have other causes, even if they mimic MS symptoms.

No matter what the symptom is, it is still an issue for the patient.

Expanded Disability Status Scale

The **Expanded Disability Status Scale** (EDSS) is a standard tool neurologists use to measure how much MS affects a person over time. It scores disability on a scale from 0 (no disability) to 10 (death due to MS), increasing in half-point steps. Higher scores indicate greater disability, with changes at the upper end of the scale reflecting a much bigger impact on daily life than the same change at lower levels.

A person's EDSS score is assigned by a neurologist following a clinical assessment and discussion of how MS affects daily functioning. Scores can increase, remain stable, or in some cases decrease, particularly following effective treatment. Most people with MS do not reach the highest levels of the scale.

The assessment considers several functional systems, including mobility and muscle strength, balance and coordination, vision, speech and swallowing, sensation, bladder and bowel function, and cognition. However, the EDSS strongly emphasises walking ability.

While widely used, the EDSS has limitations. It does not adequately capture symptoms such as fatigue, pain, depression, or changes in arm and hand function, and it does not reflect daytoday fluctuations in MS symptoms. As a result, it may not fully represent a person's overall experience of MS and should be interpreted alongside symptom assessment rather than as a standalone measure of disability.

You can learn more about the EDSS score

Symptom assessment

MS symptoms are complex, and careful assessment is essential, as each symptom helps guide next steps in care.

OLD CARTS

A nursing assessment is very important, including taking a good patient history.

When taking a patient history, you can use a tool like **OLD CARTS**, which is a mnemonic used to systemically gather subjective information about the patient's symptoms.

O	Onset: When the symptom first started, including whether it began suddenly or gradually.
L	Location: The exact place where the symptom is felt, and whether it radiates or spreads to other areas.
D	Duration: How long the symptom lasts and whether it is constant or intermittent.
C	Characteristics: The quality and nature of the symptom (for example: sharp, dull, burning, throbbing).
A	Aggravating factors: Factors that worsen the symptom, such as movement, activity, position, or time of day.
R	Relieving factors: Factors that reduce or relieve the symptom, including rest, medication, or other interventions.
T	Timing: When the symptom occurs, including frequency, pattern, and relationship to daily activities.
S	Severity: The intensity of the symptom, often measured using a numerical rating scale (e.g. 0–10).

MS relapse tools

You can also use a MS relapse tool to help assess the patient:

MS Relapse Assessment Insert Logo / ID Label

Patient's Name _____ or
 DOB _____ Patient ID / UR _____
 MS Nurse _____
 Neurologist / Clinic _____

What are the new or worsening symptoms that you are currently experiencing? (Check all that apply)

<input type="checkbox"/> Vision changes	<input type="checkbox"/> Speech changes	<input type="checkbox"/> Poor Balance
<input type="checkbox"/> Chewing/trawling	<input type="checkbox"/> Numbness / tingling	<input type="checkbox"/> Pain, burning, itching
<input type="checkbox"/> Hand / Arm weakness	<input type="checkbox"/> Leg / Foot weakness	<input type="checkbox"/> Dizziness
<input type="checkbox"/> Shoulder or Breast problems	<input type="checkbox"/> Sexual problems	<input type="checkbox"/> Memory problems
<input type="checkbox"/> Fatigue	<input type="checkbox"/> Muscle tightness or stiffness	<input type="checkbox"/> Thinking problems
<input type="checkbox"/> Difficulty walking	<input type="checkbox"/> Coordination (tripping, dropping things)	
<input type="checkbox"/> Headache		

Current Immunotherapy	When Did it Start?	Type of Treatment - last treatment / dose
None	1st relapse	
Relapses	2nd relapse	
New Symptoms (or Recurrence / Worsening)	3rd relapse	
Duration	Constant or Variable?	
Characteristics	Describe Symptoms	
Aggravating Factors	Does anything make it worse?	
Relieving Factors	Does anything make it better?	
Treatment / Tests	Seen GP / EE? / Test?	

1) How much have these symptoms affected your daily activities or overall function? (Mark ONE)

Not at all A Little Somewhat Very Much Severely

0 1 2 3 4 5 6 7 8 9 10

2) How... _____

Care: Weakness / Mobility / Falls, Vision - reading / work / driving, Pain - function / sleep, Bladder / Bowel - continence

Form Completed by: _____
 Date: _____
 Sign: _____

Multiple Sclerosis
 Recognising a relapse

Occasional Symptoms can be caused by...

Increased body temperature Infection Stress

Watch and wait
 These symptoms come and go and may not require treatment.

Symptoms Lasting more than 48 Hours

Weakness Dizziness Changes in vision Altered sensation

Contact your GP and MS Nurse:
 001 232 4-14
 You may need an appointment with your GP, they can contact your neurology team to discuss your symptoms.

Seek Urgent Advice

Falls with injury Sudden loss of vision Severe balance issues

Problems breathing Inability to walk

Seek urgent medical advice
 In NZ Call 111
 In Aus Call 000

MS Relapse Assessment Insert Logo / ID Label

Patient's Name _____ or
 DOB _____ Patient ID / UR _____
 MS Nurse _____
 Neurologist _____

What are the new or worsening symptoms that you are currently experiencing? (Check all that apply)

<input type="checkbox"/> Vision changes	<input type="checkbox"/> Speech changes	<input type="checkbox"/> Dizziness / poor balance
<input type="checkbox"/> Chewing/trawling	<input type="checkbox"/> Numbness / tingling	<input type="checkbox"/> Pain, burning, itching
<input type="checkbox"/> Hand / Arm weakness	<input type="checkbox"/> Leg / Foot weakness	<input type="checkbox"/> Bladder problems
<input type="checkbox"/> Sexual problems	<input type="checkbox"/> Memory problems	<input type="checkbox"/> Thinking problems
<input type="checkbox"/> Fatigue	<input type="checkbox"/> Muscle tightness or stiffness	<input type="checkbox"/> Coordination (tripping, dropping things)
<input type="checkbox"/> Difficulty walking	<input type="checkbox"/> Other:	

1) When did these symptoms begin? (Check ONE)

Within the last 3 days 4-7 days ago 8-14 days ago 15+ days ago

2) How much have these symptoms affected your daily activities or overall function? (Mark ONE)

Not at all A Little Somewhat Very Much Severely

0 1 2 3 4 5 6 7 8 9 10

3) How... _____

4) How many weeks / months / years ago was your last relapse (attack, exacerbation) prior to this current episode? _____

5) What treatment did you receive for your last relapse (attack, exacerbation)? (Check all that apply)

IV steroid infusion Oral steroid tablets (only) IV and Oral steroid taper

Place No treatment Not sure

6) After treatment for your last relapse (attack, exacerbation), how much did you return to your baseline state of health without any residual relapse symptoms? (Mark ONE)

0 1 2 3 4 5 6 7 8 9 10

7) Have you had any side effects from treatments for previous MS relapses (attacks, exacerbations)? (Check all that apply)

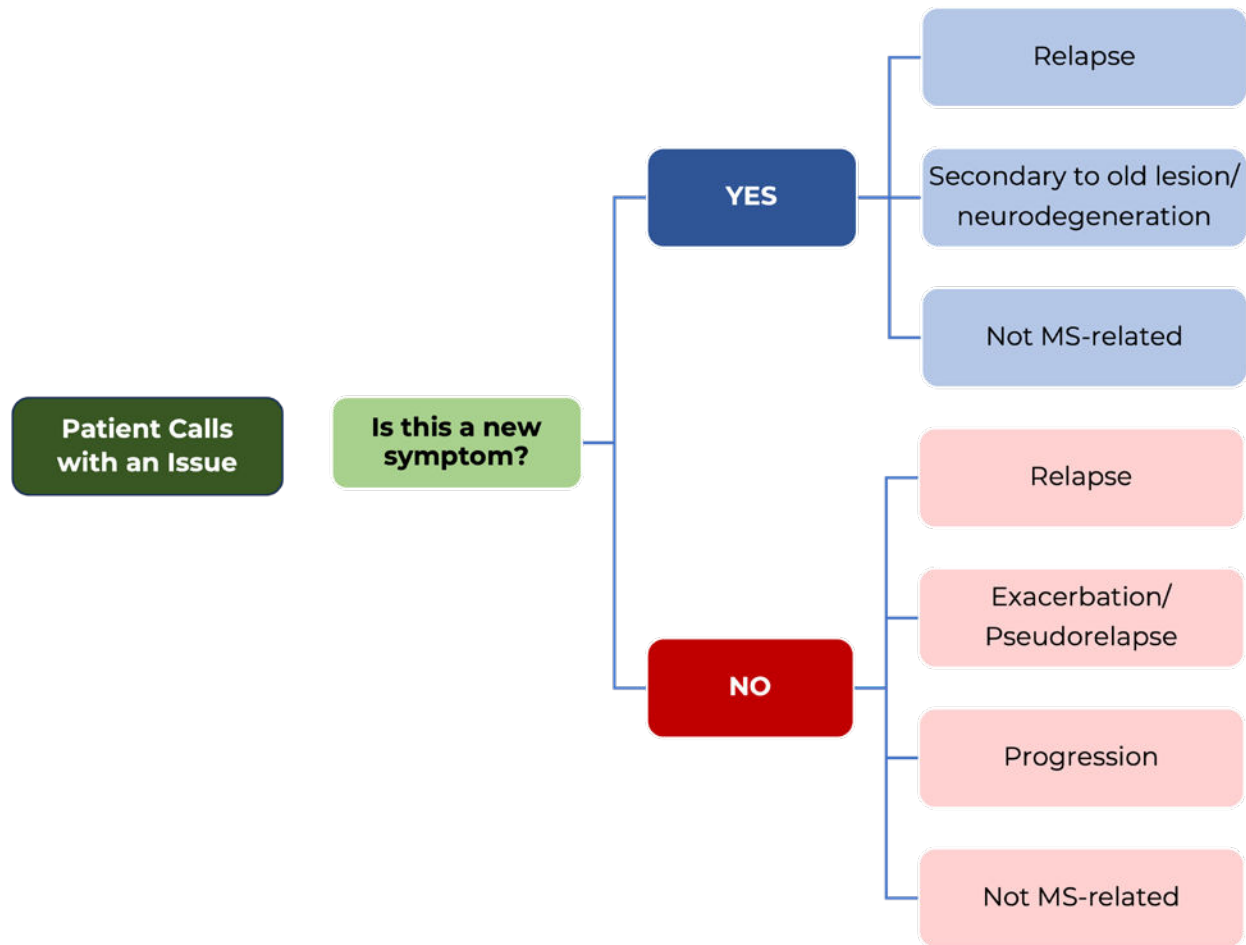
<input type="checkbox"/> Mood changes (depression/anxiety)	<input type="checkbox"/> Weight gain	<input type="checkbox"/> Hoarseness and/or coughing
<input type="checkbox"/> Sleep disturbance	<input type="checkbox"/> Increased blood pressure	<input type="checkbox"/> Low blood pressure
<input type="checkbox"/> Stomach upset or heartburn	<input type="checkbox"/> Headache	<input type="checkbox"/> Fatigue (right headache)
<input type="checkbox"/> High blood sugar	<input type="checkbox"/> Increased fatigue	<input type="checkbox"/> Dizziness
<input type="checkbox"/> Increased appetite	<input type="checkbox"/> Fever	<input type="checkbox"/> Muscle cramps
<input type="checkbox"/> Chills	<input type="checkbox"/> Infection	<input type="checkbox"/> Other:

Form Completed By: _____
 Date: _____
 Sign: _____

Insert Logo / Contacts / Delete Text Box

You can access these MS Relapse Tools on the MSNA website

Symptom assessment flowchart



Using the symptom assessment flow chart

The symptom assessment flowchart can be used to gather subjective information about the patient's symptoms. Begin by determining if the symptom is **new** or **old** by considering the following questions:

- How did the symptom start? How quickly did it develop and over what time?
- Where is the symptom located? Does the symptom radiate and has it spread over time?
- What are its characteristics? Is it intermittent or constant? When does it occur? What makes the symptoms better or worse?
- What are the impacts of the symptoms?
- Do they have any comorbidities that could be impacting this symptom?
- What lifestyle factors could be impacting this symptom? work, stress, reduced sleep, strenuous exercise, hot weather
- Are they unwell (other than the MS symptom)?
- Is the symptom a side effect of any medications? Have they had a recent change in medications?
- What's their mood like?
- Are they experiencing menopause or pregnancy?

When you have determined what **category** the symptom falls into, you need to consider what the follow up is, including immediate and longer-term actions:

- Do they need to come to hospital? Do they need an ambulance?
- Do they need to come to the clinic for further investigation? Do they need an MRI?
- Do they need a review with their GP or neurologist?
- Do they need steroids to help with recovery? Have they had issues with steroids in the past?
- What are their comorbidities and how do they need to be managed? For example, diabetes and monitoring of blood sugars
- Do they require more support from the broader multidisciplinary team? For example, referral to a physiotherapist, occupational therapist or counselling
- Does their current MS management need to be reviewed, including any DMDs?
- Do they need a referral to another specialist?
- Do they need other medications or treatments? For example, antibiotics for an infection
- What is the follow up going to be?

Early intervention is key no matter what, even if it's just monitoring.

Be clear with the patient about what you know and don't know. Let them know that you may have to follow up with a doctor. Patients are appreciative of honesty.

Case studies

Below are a range of case studies that use the symptom assessment flow chart:

Case study 1

37-year-old woman diagnosed in 2014

Patient is getting pins and needles in her hand. She has not had a relapse for a long time and is fairly sure it is a new symptom.

Is this a new symptom?

The nurse reviewed the patient's history and confirmed it was a new symptom.

What category does it fall into?

To determine this the nurse gathered more history:

- This new symptom has been happening over the last 2-3 weeks
- The pins and needles are present in the morning - mostly for a minute, but sometimes up to 10 minutes
- They are present when driving and writing
- Patient uses her hands a lot in her work as a hairdresser
- Moving her hands improves symptoms

This appears to be a **non-MS symptom**.

The nurse reviewed with the neurologist and agreed to refer the patient for a nerve conduction study. In the meantime, she was given a splint and if there is a long wait for the appointment a referral to an occupational therapist (OT) will be arranged.

In this case, the MS Nurse played a crucial role in addressing the new symptom and ensuring it was not ignored a 'just a new symptom'.

Case study 2

Recently diagnosed with MS seven months ago

Patient has lost feeling in her right hand and cannot feel it or use it. They describe the hand as being 'just dead'. She is concerned she may have to start on a MS drug.

Is this a new symptom?

The nurse reviewed the patient's history – the patient had an EDSS of 4.5 following her initial relapse, however, the symptoms were different and she did not have any issues with her right hand. The nurse confirmed it was a new symptom.

What category does it fall into?

To determine this, the nurse gathered more history:

- The symptom has started over a period of a few hours and was getting worse
- The symptom is persistent, is ascending the arm and is impacting her motor function and causing sensory issues.
- The patient also has a new headache causing pain behind her eye and it is worse on eye movement

The nurse determined that this was a MS relapse, communicated this with the patient and organised for her to come in for an urgent review. The patient was examined by a neurologist and underwent an urgent MRI a few days later which confirmed expansion and enhancement of one of her old spinal cord lesions.

The patient is now on a highly efficacious MS treatment and is doing exercises to try and regain some of the function in her right hand.

In this case, the MS Nurse played a crucial role in getting the patient assessed and tested immediately and addressing her relapse before more damage could occur and giving the patient a good chance at recovery.

Case study 3

Diagnosed with MS 12 years ago

Patient has found for the last six months that his left leg is 'a little bit annoying'.

Is this a new symptom?

The nurse reviewed the patient's history and confirmed it was a not a new symptom and has been an issue following previous relapses.

What category does it fall into?

To determine this the nurse gathered more history:

- The patient enjoys walking and could usually make it to 5 kms before their left leg felt heavy with a bit of foot drop. If he sat and relaxed for a while he could eventually get up and continue walking
- Over the last six months, that has changed and this symptom now occurs around 3.5 kms
- Other than this symptom, the patient is well

This appears to align with MS progression, and the nurse advised the patient of this.

The patient was referred to physiotherapy to review his exercise regime. The nurse liaised with the neurologist and agreed not to make any other changes to his MS treatment and wait to see the outcome from the physiotherapy referral.

In this case, the MS Nurse was crucial in determining that the patient's MS was progressing, and getting early access to some support that could prevent further progression.

Case study 4

Diagnosed in 2018

The patient left a voicemail message saying that her MS symptoms had 'got really bad'. In a follow up phone call, she indicated that her weak side was weaker and that her other side was weak as well.

Is this a new symptom?

The nurse reviewed the patient's history, asked follow-up questions and determined it was not a new symptom, just a worsening of previous symptoms. The patient has been experiencing a progression of her symptoms each time she is seen by her team.

What category does it fall into?

To determine this the nurse gathered more history:

- The patient had a runny nose the previous week but was improving
- The patient has had some incontinence and noticed a change in the smell of her urine.

This appears to be an exacerbation of old symptoms due to infection.

The patient's husband has cancer and cannot provide any supports. The nurse had concerns for the patient's safety and got her agreement to call an ambulance

At hospital they did some screening, and she had a UTI and upper respiratory tract infection. The patient was treated with antibiotics for both and the symptoms resolved.

The nurse spoke to the patient about the deconditioning that can take place when experiencing these symptoms. As part of the patient's discharge planning, she received referrals to allied health professionals to support her to maximise her function and get her back to her previous level.

In this case, the MS Nurse was crucial in addressing the symptoms and ensuring that going forward the patient was empowered to ask for support when needed.

Ms comorbidities

Many people living with MS also present with comorbidities. Comorbidities adversely affect MS outcomes, including MS relapses, disability/disease progression, MRI-related outcomes, symptom severity, employment outcomes, DMD initiation and choice, mortality and hospitalisation.

Research shows² that most physical and mental health comorbidities occur more frequently in people with MS than in the general population. This includes a higher prevalence of gastrointestinal, musculoskeletal, cardiovascular and respiratory comorbidities

Specific comorbidities more common among people with MS include:

- **Neurological and movement disorders:** Epilepsy, seizures, sleep disorders and Parkinson's disease
- **Psychiatric comorbidities:** Depression, anxiety, and bipolar disorder
- **Chronic cardio-metabolic disorders:** Hypertension, hyperlipidaemia, diabetes, peripheral vascular disease, congestive heart failure and stroke
- **Autoimmune disorders:** Various conditions, fibromyalgia, and irritable bowel disease
- **Other conditions:** Vision problems.

Read more about the evidence base behind MS comorbidities and considerations for healthcare professionals in MS Australia's [Modifiable Lifestyle Factors for Multiple Sclerosis for Health Professionals Guide](#).

Urinary tract infections and MS

Urinary Tract Infections (UTIs) in people living with MS are very common, as MS often makes it difficult to empty the bladder completely. Some other aspects that increase the risk of UTI include medications, such as MS therapies and medications to manage other MS symptoms, the use of catheters to empty the bladder, age, and level of disability.

A UTI can be of significant concern for individuals with MS and can be extremely dangerous. A UTI may lead to worsening of known MS symptoms and lead to hospitalisation. This is why it is important to recognise the signs of a UTI early and understand the need to treat it as soon and as effectively as possible.

For more information on managing bladder and bowel issues for people living with MS refer to the [Your Guide to Bladder & Bowel Wellness with Multiple Sclerosis](#), developed by a team of MS Nurses.

Conclusion

In summary, effective symptom assessment sits at the centre of high-quality MS nursing care. In this module we explored how MS symptoms are often complex, fluctuating and frequently invisible, a structured approach (such as OLD CARTS and the symptom assessment flowchart) helps MS Nurses clarify what the person is experiencing, determine whether the presentation suggests relapse, pseudo relapse, progression, or an unrelated issue, and allows them to act early to reduce risk and distress.

Assessment should also consider comorbidities, lifestyle triggers and medication effects, recognising how these factors can worsen symptoms and drive avoidable hospitalisations, particularly with conditions such as urinary tract infections.

No single clinician can meet every need, so timely referral and partnership with the multidisciplinary team – and with community supports – remains essential for practical management strategies and sustained quality of life. By combining clinical reasoning with clear communication, validation and follow-up, MS nurses can help ensure every symptom ‘tells a story’ that leads to the right care at the right time.

References

1. Giovannoni G, Butzkueven H, Dhib-Jalbut S, Hobart J, Kobelt G, Pepper G, Sormani MP, Thalheim C, Traboulsee A, Vollmer T. Brain health: time matters in multiple sclerosis. *Mult Scler Relat Disord*. 2016 Sep;9 Suppl 1:S5-S48. doi: 10.1016/j.msard.2016.07.003. Epub 2016 Jul 7. PMID: 27640924.
2. MS Australia (2025). *Modifiable Lifestyle Factors for Multiple Sclerosis: For Health Professionals*. Retrieved from: https://www.msaustralia.org.au/wp-content/uploads/mlf-hp_master.pdf



IOMSN has reviewed this project that was developed by Therese Burke as a resource for MS Nurses. IOMSN has concluded that this project is fair balanced and accurate and is valid for educational purposes.