



# Education with impact: MS Academy

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MS Foundation MasterClass impact report 2025



NEUROLOGY ACADEMY: EDUCATION WITH IMPACT

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## Acknowledgements

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## Introduction

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The MS Foundation MasterClass continues to provide a unique platform for health professionals across the United Kingdom and Republic of Ireland to deepen their understanding of multiple sclerosis (MS), enhance their clinical practice, and develop practical improvement projects that directly impact patient care.

Now in its 12th year, the Foundation MasterClass offers structured, interactive education designed to build confidence, competence, and collaboration among those delivering front-line MS services. The 2025 cohort once again demonstrated the energy and innovation that underpin the Neurology Academy's mission to drive education that leads to measurable change.

*"This year the 2025 MS Academy Foundation MasterClass delegates delivered a range of impactful projects that will provide a springboard for driving forward service improvement and transformation, to improve the care we provide people with MS"*

– Dr Wallace Brownlee, honorary academic director, MS Academy

Each delegate — some working jointly — undertook an improvement project rooted in their local service, addressing real-world challenges across the MS pathway, from diagnosis and disease-modifying therapy (DMT) management to rehabilitation, cognitive care, and service redesign. Collectively, these projects form a powerful reflection of how individual learning translates into personal development, organisational improvement, and national insight.

*"This course has been outstanding. The best learning offer I've ever had, to be honest. So much excellent information, applicable across the multidisciplinary speakers, expert in their fields. It's pretty much been a privilege to attend!"*

*"It was excellent. I learned so much and networked with wonderful colleagues. I highly recommend attending, as I have taken so much away from the experience as a whole."*

*"Improved my confidence and competence as an ST5; my patients will receive better care as a result."*

*"Great venues. Great speakers. Great organisation. Having this funded is a huge privilege, and we are very grateful! Super valuable educational opportunity."*

– Delegate feedback, November 2025

This report brings together 22 projects that demonstrate how clinicians; nurses, doctors, therapists, and pharmacists; are driving better outcomes for people with MS through face-to-face education, peer support, clinical leadership, original research, and innovative service development.

## About the MS Foundation MasterClass

The MS Foundation MasterClass is an accredited training programme developed by the **MS Academy**, part of the wider **Neurology Academy**. It provides a structured educational framework to enhance clinical understanding and leadership in MS care.

Delivered through a blend of online learning, interactive workshops, and peer discussion, the course covers:

- Core knowledge of MS diagnosis and treatment
- Symptom management and multidisciplinary working
- Disease-modifying therapies and safety monitoring
- Service improvement, audit, and quality measurement

Delegates are drawn from a wide range of professional backgrounds including medical, nursing, physiotherapy, occupational therapy, speech therapy, pharmacy and general practice.

A key component of the programme is the **individual project**, where each participant applies their learning to address a gap or challenge within their local service. Projects are presented at the closing module and form the foundation of this annual *Education with impact* report.



# The national picture 2025

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The 22 projects presented in 2025 collectively highlight the continuing evolution of MS care across the NHS and allied services. While each project addressed a local challenge, several consistent national themes emerged, reflecting both progress and areas of ongoing need.

## 1. Service redesign and data-driven improvement

Many participants undertook detailed evaluation of service pathways, governance, and monitoring systems. Projects such as Ola Okunowo's MS database review and Mahlet Tejo's natalizumab safety audit demonstrated how structured audit and process mapping can enhance patient safety, reduce delays, and strengthen oversight.

The increasing use of digital tools and artificial intelligence — shown in Dr Abdullah Virk's AI interpretation project— reflects a growing appetite for technology-assisted efficiency and aligns with NHS transformation priorities to move from analogue to digital services.

## 2. Rehabilitation and functional optimisation

Rehabilitation emerged as a strong theme, with several projects focusing on maintaining or improving function, independence, and safety. Initiatives such as Stanley Idu's submaximal training programme, Coralie Seary's integrated spasticity walking clinic, and Jo Wakefield's pressure injury prevention pathway illustrate how multidisciplinary innovation supports people with advanced MS to live well for longer.

## 3. Proactive, person-centred care

Several projects focused on proactive, personalised approaches, including Kelly Wood and Laura Loxley's menopause and ageing-well pathway, Chrissie Peacock's primary-care MS review framework, and Mariam Sherkawi's cognitive screening pilot.

These projects reflect the NHS Long Term Plan's emphasis on prevention, gender-sensitive care, and community-based support.

## 4. Medication safety and DMT optimisation

Therapeutic optimisation featured prominently in projects such as:

- Mahlet Tejo's audit removing unnecessary post-infusion observation
- Dr Sanjida Chowdhury and Dr Shahjalal Khanyes' DMT switching analysis

These studies collectively contribute to the evidence base supporting safer, more efficient use of DMTs and improving long-term MS management.

## 5. Collaboration, education, and leadership

A defining feature of the 2025 cohort was the strength of interdisciplinary working and emerging leadership. Whether through patient-centred design, MDT collaboration, or new digital tools, participants consistently demonstrated how education empowers clinicians to deliver meaningful improvement.

## Emerging themes from the 2025 cohort

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- **Digital integration and AI** are becoming central tools for service efficiency, safety, and data quality.
- **Holistic, patient-led care** is increasingly embedded within service design.
- **Workforce empowerment**, remains essential, with delegates demonstrating leadership across nursing, therapy, medicine, and pharmacy.
- **Equity and inclusion** are increasingly prioritised, including gender-specific care, access, and community engagement.
- **Evaluation and evidence-based practice** underpin sustainable change, with more delegates embracing structured audit and QI methodologies.

## Impact of the MS Foundation MasterClass programme

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Since its inception, the MS Foundation MasterClass has trained hundreds of healthcare professionals. Many have progressed to the Advanced MasterClass, gone on to lead specialist services, develop new pathways, or influence policy. The 2025 cohort continues this legacy, demonstrating how structured education translates into practical, measurable improvements.

Through their projects, participants have:

- **Enhanced service quality** through audits, pathway redesign, and evidence-based change
- **Improved patient experience** through personalised, proactive care
- **Fostered collaboration** across disciplines, organisations, and regions
- **Generated new evidence** to inform future MS service development

## Looking ahead

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As MS services continue to evolve, the lessons from these 22 projects provide a clear direction for future progress:

- Strengthen digital integration and real-time data sharing
- Invest in rehabilitation and community-based support
- Champion workforce development and clinical leadership
- Embed personalised care principles at every stage of the MS pathway

The MS Foundation MasterClass remains a vital catalyst for this progress — fostering leadership, collaboration, and meaningful improvement across MS services.

The following sections present the 22 Foundation MasterClass projects from 2025. Each summary illustrates how knowledge gained through the programme has been applied to improve care, streamline pathways, and enhance the lived experience of people with multiple sclerosis.



# Innovating men's health in MS: a dedicated clinic model

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*Joint project winner: Maria Antoniou & Abraham Ignacio, MS clinical nurse specialists, University College London Hospitals NHS Foundation Trust*

## The challenge

Men with multiple sclerosis (MwMS) represent only around 30% of the MS population, yet experience more aggressive disease progression, higher stigma, and unique health needs that are frequently overlooked in standard MS care. Research shows that MwMS often minimise physical symptoms, avoid reporting changes in mood, cognition or sexual function, and face barriers in discussing sensitive issues such as erectile dysfunction, urological problems, and low libido.

Traditional MS pathways rarely provide a gender-sensitive space for these concerns, leading to unmet needs and reduced engagement.

## The project

Maria Antoniou and Abraham Ignacio piloted a dedicated Men's Health Clinic for MS at the National Hospital for Neurology and Neurosurgery (NHNN), University College London Hospitals.

The clinic was designed as a multidisciplinary pathway integrating neurology, urology, psychology, sexual health and lifestyle support.

The clinic model included:

- Comprehensive 1-hour assessments (face-to-face or virtual).
- A modified review template focused on men's health issues.
- Individualised care plans with referrals to specialist services.
- Patient surveys and structured evaluation post-clinic.

Referrals were accepted via neurologists, MS nurses, and self-referral, ensuring broad access and reducing stigma.

## The results

- 11 male patients (mean age 41) took part.
- 82% had RRMS; 18% had PPMS — all on DMTs including ocrelizumab, cladribine, ofatumumab, natalizumab, fingolimod and DMF.
- Priority concerns recorded:
  - Erectile dysfunction (3)
  - Fatigue (2)
  - Mood concerns (2)
  - Reduced libido (2)
- 67% of reported concerns had previously been raised in routine reviews yet remained unaddressed.



- Following clinic attendance:
  - 56% were referred to specialist services (andrology, urology, fatigue, psychology, vocational rehabilitation).
  - 38% received symptom education or management directly from the MS specialist nurse.
- Post-clinic evaluation revealed:
  - 54% found the clinic helpful.
  - 45% would not change the clinic model.
  - 27% felt comfortable discussing sensitive concerns in the session.

## The impact

The pilot captured previously underreported symptoms and opened new conversations about sexual health, mental wellbeing, and lifestyle impact.

The clinic demonstrated the vital role of MS specialist nurses in facilitating these discussions, coordinating care and providing symptom education.

The project has shown that a dedicated men's health model:

- Improves symptom disclosure.
- Enhances access to relevant specialists.
- Reduces stigma by normalising sensitive discussions.
- Supports more holistic, personalised care for MwMS.

## The future

Next steps include:

1. Developing a streamlined assessment template tailored to men's needs.
2. Refining pre-appointment questionnaires to support symptom disclosure.
3. Formalising the clinic as part of the NHNN MS nursing service.
4. Expanding the clinic model to capture a broader cohort and evaluate long-term outcomes.
5. Sharing findings across MS networks to support the development of gender-sensitive MS pathways nationally.

## Conclusion

This innovative pilot demonstrates that dedicated men's health clinics can capture unmet needs, enhance engagement and ensure equitable, gender-sensitive care for men with MS. It provides a scalable model that other MS centres can adopt to better understand and support the specific challenges faced by MwMS.

# Next steps with MS: implementing 1:1 nurse-led virtual support for people newly diagnosed with MS

*Joint project winner: Sorcha Barlow, MS support and education nurse, MS Ireland*

## The challenge

A diagnosis of multiple sclerosis can be overwhelming, particularly in the first two years. Many newly diagnosed people report uncertainty, isolation, and difficulty understanding symptoms, lifestyle adjustments, and available supports.

In Ireland, pressures on neurology services mean MS nurses often focus on diagnosis, DMT initiation, and medical monitoring. As a result, newly diagnosed individuals frequently do not receive timely, personalised education or psychosocial support, leaving them unsure how to manage day-to-day symptoms or access community resources.

As the national organisation supporting people with MS, MS Ireland identified a clear gap in structured 1:1 early-stage support — a gap this pilot aimed to address.

## The project

Sorcha Barlow piloted Next Steps with MS, a nurse-led, one-to-one virtual support service delivered via Zoom, designed specifically for people diagnosed within the previous two years.

The model provides:

- A 45-minute individualised session led by MS Ireland's support & education nurse.
- A patient-selected menu of topics (fatigue, mood, bladder/bowel, stress, lifestyle, intimacy, diet, communicating diagnosis).
- A structured expression-of-interest and screening form with GDPR-compliant consent.
- Documentation integrated directly into Salesforce, aligning with existing MS Ireland casework systems.

The service complements hospital-based MS nursing by focusing on education, empowerment, self-management and signposting, rather than treatment initiation.

## The results

Ten participants completed sessions during the pilot. Outcomes included:

- 30% referred into MS Ireland physiotherapy programmes.
- 40% enrolled onto the next FACETS fatigue-management course.
- 20% signposted to peer support communities (Shift.ms, MS Together).
- 10% referred to the Younger Persons Week programme.
- Participants rated session satisfaction 9/10 on average.
- Qualitative feedback highlighted feeling “understood,” “supported,” and “better prepared” to manage early symptoms.

Most frequently selected discussion topics included fatigue, anxiety/stress, and bladder and bowel changes.

### **The impact**

The pilot clearly demonstrated that brief, structured, nurse-led virtual sessions fill a significant gap in early MS support.

The model:

- Provides a low-cost, scalable approach using existing nurse expertise.
- Reduces pressure on neurology teams by addressing non-DMT queries in a structured way.
- Increases engagement with MS Ireland services, helping people avoid isolation.
- Supports early self-management by making symptom advice timely and accessible.

### **The future**

Next steps proposed include:

1. Developing a formal referral pathway with clear eligibility criteria.
2. Setting structured limits (e.g. one or two sessions per person).
3. Introducing a formal outcome-measurement framework, including three-month follow-up.
4. Exploring grounds for national rollout if further evaluation supports it.

### **Conclusion**

Sorcha Barlow's project provides strong evidence that 1:1 nurse-led virtual education can significantly improve confidence, engagement, and early symptom management for newly diagnosed people with MS.

The initiative offers a scalable, person-centred model that bridges the gap between neurology services and community support, ensuring no one feels alone in the earliest and most vulnerable stage of their MS journey.

# The development of a gait assessment day as part of the long-term conditions pathway at DMRC

*Louise Berridge, neurology physiotherapist, Defence Medical Rehabilitation Centre - Stanford Hall*

## The challenge

At the Defence Medical Rehabilitation Centre (DMRC) Stanford Hall, a significant proportion of service personnel with long-term neurological conditions are living with multiple sclerosis. Owing to advances in MS treatment, more personnel are remaining in active military service for longer, requiring sustained rehabilitation and monitoring.

However, unlike other well-established neurological pathways at DMRC, there was no standardised pathway for long-term neurological conditions. This resulted in inconsistent monitoring, suboptimal use of outcome measures, variable clinical decision-making, and potential unmet rehabilitation needs.

## The project

Louise Berridge led the development of a structured Gait Assessment Day, designed to provide equitable, efficient, and comprehensive assessment for service personnel with MS and other long-term neurological conditions.

The project used a service redesign model and included:

- Staff consultation to identify gaps in equity and unmet needs.
- Caseload analysis to determine clinic frequency requirements.
- Creation of a criteria decision tool to ensure patients were placed on the most appropriate pathway (page 2).
- Development of a full-day multidisciplinary timetable including:
  - Gait Lab analysis (gait analysis & 6MWT)
  - Neurophysiotherapy, Exercise Rehabilitation Instructor (ERI), Orthotics assessments
  - Functional outcome measures (FGA, MCTSIB, TUG)
  - Pre-assessment subjective outcomes (MSIS-29, MSWS-12, update questionnaire)
- Adoption of a Plan–Do–Study–Act (PDSA) framework to run two pilot days and refine the process (page 3).

The day was run quarterly with three patients per clinic, meeting service demand efficiently.

## The results

Ten Structured feedback from both staff and patients was overwhelmingly positive.

According to the pie chart on page 3, 71% of patients rated the day “extremely useful” and 29% “somewhat useful.”

Patient feedback included comments such as:

*“I found the entire day beneficial. I appreciated the programme and the support provided throughout the day.”*

The pilot confirmed:

- Improved equity of service across long-term neurological conditions.
- Consistent use of validated objective and subjective outcome measures.
- Better clinical insight into progression and functional needs.
- Enhanced ability to make clear, timely recommendations to wider Defence healthcare teams.

## The impact

The establishment of the Gait Assessment Day has:

- Created a dedicated, standardised pathway for long-term MS and neurological conditions.
- Ensured fairer access to specialist rehabilitation services.
- Enabled earlier identification of changes in mobility or function.
- Supported proactive rather than reactive management.
- Improved communication across Defence multidisciplinary teams.

This model significantly strengthens DMRC’s ability to provide continuous, high-quality care for service personnel with MS during their military careers.

## The future

Based on the success of the pilot, the Gait Assessment Day is now delivered quarterly as routine practice.

Future plans include expanding the model:

- Beyond long-term conditions to support wider neurological cohorts.
- Integrating digital tools for streamlined data capture.
- Continuing iterative quality improvement with patient and staff feedback every cycle.

## Conclusion

Louise’s project exemplifies robust service redesign, using evidence-based assessment and multidisciplinary collaboration to create an equitable, efficient, and clinically meaningful pathway. The Gait Assessment Day now stands as a model of excellence within Defence rehabilitation, ensuring that service personnel with MS receive structured, consistent, and high-quality care throughout their military service.

# The evolving process of MS therapy clinics

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*Louise Blackall, neurology physiotherapist & Nicola Paget, neurology occupational therapist,  
Hertfordshire Community NHS Trust*

## The challenge

Within East and North Hertfordshire, more than 600 people are under the care of neurologists, with a similarly sized caseload managed by the Community MS Nursing Team. These caseloads do not fully overlap, and patients may be under the care of neurologists both within and beyond the county.

The Neuro Outpatient Team — comprising physiotherapists, occupational therapists, and MS nurse specialists — identified that Did Not Attend (DNA) rates were significantly higher for people with MS than for other neurological conditions.

High DNA rates negatively affect timely access to therapy, reduce efficiency, and increase the risk of unmet rehabilitation needs. A lack of a clear pathway for MS patients (pre-2022) further contributed to variable processes and inconsistent engagement.

## The project

Louise Blackall and Nicola Paget undertook a multi-stage quality improvement project to evaluate and evolve the structure of MS therapy clinics over several years.

Key developments included:

### **2022 – No formal MS therapy pathway**

- Face-to-face (F2F) assessments only (clinic or home visit), mostly discipline-specific.

### **September 2022 – Start of Therapy Clinics**

- Introduction of drop-in therapy clinics to reduce waiting times.
- Evolved into appointment-based joint OT/PT clinics.
- Home visits offered when clinically indicated.

### **July 2024 – DNA Quality Improvement Project**

- High DNA rates triggered telephone audits to understand reasons.
- Findings led to implementing text message reminders.
- Required updates to clinical software systems to enable SMS communication.

### **Post-project changes**

- F2F clinic appointments sent by letter with specific appointment times.
- Rehab Assistants conducted telephone screening to determine whether a clinic appointment or home visit was appropriate.
- Introduction of pre-assessment questionnaires to clarify the purpose of therapy and help patients prepare.
- However, screening was time-intensive, and RAs often received questions beyond their scope, leading to patient frustration.

## May 2025 – Telephone Assessment Clinics Introduced

- Weekly clinics combining telephone and in-person appointments.
- Joint OT/PT assessments with follow-up appointments or home visits allocated appropriately.

## The results

Despite multiple pathway adaptations, DNA rates did not improve — in fact, they increased slightly. Because several variables changed across the evaluation period, it remains difficult to isolate the impact of any single intervention.

However, the project achieved several positive outcomes:

- Reduced time required to book initial assessments, due to telephone triage.
- Telephone appointments proved more time-efficient for therapists and effective for triaging home visits.
- Pathway changes improved patient choice and increased opportunities for engagement, even if attendance rates did not yet reflect this.
- The service now provides greater flexibility, with mixed telephone and F2F models better suited to the fluctuating nature of MS symptoms.

The authors note that patient experience was not measured and should form part of future evaluation.

## The impact

Although the project did not achieve its primary aim of reducing DNAs, it generated rich insight into the barriers PwMS face when accessing therapy — including fatigue, variable symptoms, transport challenges, misunderstanding of appointment purpose, and communication preferences.

The project also enhanced service structure and professional collaboration, creating a more responsive and flexible MS therapy pathway that will underpin future improvements.

## The future

Planned next steps include:

1. Developing a clinic for people newly diagnosed with MS, delivered jointly with the MS Nurse Specialist.
2. Producing educational leaflets and common exercise resources to support self-management.
3. Introducing an MS-specific cognitive screening tool to support more holistic assessment.
4. Investigating whether home visits vs clinic appointments influence DNA rates.
5. Incorporating patient feedback into pathway design.
6. Trialling patient-initiated appointment scheduling to improve autonomy and choice.

## Conclusion

This project demonstrates an ongoing, iterative approach to improving MS therapy services. While attendance outcomes varied, the work has strengthened pathway structure, increased flexibility, and established foundations for a more patient-centred, efficient, and responsive MS therapy service. Continued refinement — guided by data and patient experience — will be essential in shaping the next stage of pathway development.



# Switching disease-modifying therapies: natalizumab to ocrelizumab or fingolimod

*Dr Sanjida Chowdhury, specialty registrar & Dr Shahjalal Khan, neurology specialty registrar,  
Nottingham University Hospitals NHS Trust*

## The challenge

Natalizumab is a highly effective disease-modifying therapy (DMT) for relapsing–remitting MS but carries a well-established risk of progressive multifocal leukoencephalopathy (PML), particularly in people who are JCV antibody positive.

For many people with MS, stopping natalizumab becomes necessary due to rising PML risk — yet the period between discontinuing natalizumab and starting a new DMT is clinically hazardous. A long washout period increases the risk of severe rebound disease activity, while an excessively short interval may create safety concerns.

Despite this challenge, there is no standardised national protocol for switching from natalizumab to another high-efficacy DMT, making local evidence essential.

## The project

This retrospective evaluation analysed 64 people with RRMS at Nottingham University Hospitals NHS Foundation Trust who discontinued natalizumab and switched to either:

- Ocrelizumab (n=44), or
- Fingolimod (n=20).

Data extracted included:

- Disease duration
- Length of natalizumab treatment
- JCV antibody status and titre
- MRI activity pre- and post-switch
- EDSS scores
- Relapse rates

The main objective was to determine whether washout period correlated with relapse risk and radiological activity.

## The results

Key findings from the study include:

- Reasons for switch
  - PML risk: 54 patients
  - Secondary progressive MS: 5
  - Side effects: 2
  - Pregnancy planning: 3  
(Poster, Results column)

- 84.5% (n=64) of patients were JCV-Ab positive with a median titre of 0.54 (0.21–3.12).
- Median washout period:  
53 days (range 30–91 days).  
This aligns with the commonly recommended short-interval switch for reducing rebound risk.
- Relapse activity:  
Only two patients experienced a relapse after switching from natalizumab to ocrelizumab or fingolimod.
- MRI findings:  
Four patients developed new non-enhancing T2 lesions, three of whom were JCV-positive.  
All lesions were consistent with MS activity rather than PML, and there was no association between washout duration and new lesion formation.
- Follow-up MRI timing:  
Median of 6 months post first dose of the new DMT.

These findings are visually presented in the poster's Results column (page 1), which aligns directly with the write-up.

## The impact

This study provides reassuring real-world evidence that:

- A short washout window (approx. 6 weeks) between natalizumab and ocrelizumab or fingolimod is safe and clinically effective.
- Early initiation of ocrelizumab, which suppresses circulating CD19+ cells by week 2–3, offers a biologically plausible protective effect against rebound disease.
- The very low relapse rate suggests that well-coordinated switching can maintain disease stability.

It also highlights the importance of vigilant MRI monitoring and multidisciplinary collaboration during treatment transition.

## The future

The authors recommend:

1. Moving toward a standardised switching protocol based on these positive outcomes.
2. Continued longitudinal follow-up of this cohort to evaluate sustained safety.
3. Potential expansion of the analysis to include biomarkers related to immune reconstitution.
4. Sharing findings at regional MS networks to help harmonise switching practices nationally.

## Conclusion

This project provides valuable evidence that switching from natalizumab to ocrelizumab or fingolimod can be safely achieved using a short washout interval, maintaining treatment continuity and reducing the risk of disease reactivation.

The findings support the development of structured transition protocols and reinforce the role of timely MRI surveillance in safeguarding patient outcomes.

# Enhancing speech & language therapy referrals and anticipatory care for people with MS

*Melissa Connor, specialist speech and language therapist, Airedale NHS Foundation Trust*

## The challenge

Dysphagia and communication problems are common but frequently under-recognised in MS. Evidence suggests that 30–45% of people with MS experience dysphagia, and up to 75% report communication difficulties such as voice, speech or language changes.

However, at Airedale NHS Foundation Trust, referrals to community speech & language therapy (SLT) were inconsistent, varied in quality, and often lacked the information needed to triage and prioritise effectively.

Additional challenges included:

- Mixed referral sources (GPs, district nurses, neurology, care homes) using non-standardised referral methods.
- MS nurses managing large caseloads (311 pwMS), many covering mixed specialties due to staffing pressures.
- Longstanding but outdated practices such as pre-emptive thickening of fluids before SLT assessment.
- Limited anticipatory guidance for patients awaiting appointment, creating risk around swallowing and communication deterioration.

These issues collectively created delays, safety concerns, and missed opportunities for early intervention.

## The project

Melissa Connor developed a comprehensive MS-specific SLT referral toolkit, co-produced with the MS nurse and informed by NICE guidance on coordinated multidisciplinary care.

The toolkit included:

1. A new structured MS-specific referral form (page 1 poster image)
  - Improving relevance, clarity and completeness of information.
2. Role of SLT in MS (patient-friendly explainer)
3. Clear guidance on “When to refer”
4. DYMUS dysphagia screening questionnaire
  - Highlighted as more sensitive than single swallowing questions and suitable for use at MS reviews.
5. Think Before You Thicken leaflet
  - Addressing risks of unnecessary thickened fluids (e.g., dehydration, residue, reduced QoL).
6. General eating & swallowing advice
7. Communication strategies for pwMS

As shown visually on the poster’s central panel (page 1), these resources formed an integrated toolkit for MS nurses, community teams and non-specialist neuro nurses.

## The results

The project delivered clear benefits at multiple levels:

### For patients:

- Earlier identification of swallowing issues through DYMUS screening.
- Access to evidence-based advice before SLT assessment.
- Reduced risk associated with inappropriate strategies (e.g., unnecessary thickening).

### For MS nurses and wider neuro teams:

- Faster, higher-quality referrals with fewer rejections.
- Confidence in providing anticipatory guidance.
- Structured information to support non-specialist nurses now caring for MS patients due to staffing constraints.

### For SLTs:

- Better-prepared initial assessments due to improved referral information.
- More efficient triage, reducing delays and improving safety.
- Foundation created for expanded collaboration with MS services (e.g., PEG decision-making support).

## The impact

This project has significantly strengthened the MS–SLT interface, embedding anticipatory care, standardised screening, and consistent referral pathways across the Trust.

It improves patient safety, ensures earlier intervention, and provides a replicable model for other community SLT services supporting neurological populations.

## The future

Melissa identifies additional resources to build on this work, including:

- Oral hygiene guidance
- Advice for families, carers, and workplaces supporting people with communication difficulties

Further collaboration with the neurology service is planned to expand joint education and cross-specialty resources.

## Conclusion

This project demonstrates how MS services can be enhanced through simple but powerful tools that improve referral quality, streamline triage, and promote early, patient-centred intervention.

The new MS-specific SLT referral pathway delivers clearer communication, improved safety, and stronger multidisciplinary working — embodying the MasterClass ethos of practical, sustainable service improvement.

# Understanding treatment pathways and barriers to accessing high-efficacy DMTs through implementation of a fast-track DMT MDT

*Dr Arron Cook, neurology specialty registrar, Lancashire Teaching Hospitals NHS Foundation Trust*

## The challenge

Earlier initiation of high-efficacy disease-modifying therapies (DMTs) is strongly linked with improved long-term MS outcomes, including reduced relapse rates and slower disability progression. However, a 2022–2023 audit at the Royal Preston Hospital revealed significant delays at multiple stages of the MS treatment pathway — from diagnosis to MDT discussion and through to treatment initiation. Many patients fell outside the ‘core’ timeframes defined by the international MS brain health quality standards.

These delays were attributed to:

- Infrequent MDT scheduling
- Backlogs in case discussions
- Administrative delays
- Complexity of initiating B-cell therapies
- Screening and vaccination requirements delaying first dose

## The project

In August 2024, Arron Cook and colleagues implemented a Fast-Track Virtual MDT, designed to run continuously via an email group rather than waiting for the routine monthly meeting.

Membership included:

- 5 consultant neurologists
- 2 MS nurses
- 1 MS DMT coordinator

Eligibility for fast-track MDT review included:

- Newly diagnosed active RRMS
- PPMS eligible for ocrelizumab
- Active disease on first-line therapy in patients under 55

## The results

A retrospective review of MDT activity from April–June 2025 comparing routine vs fast-track MDTs showed:

### MDT performance

Metric	Routine MDT	Fast-track MDT	Key insight
Number of patients	41	18	Younger cohort in fast-track (avg 34 vs 47 years)
Time to MDT discussion after diagnosis	Often breached	<b>&gt;50% within aspirational 7 days</b>	Major improvement
Time to being offered a DMT	None exceeded core 2-month limit	<b>50% met achievable 3-week target</b>	Strong performance
Time to DMT initiation	Major bottleneck	<b>&gt;70% breached 4-week core timeframe</b>	No improvement

## Reasons for ongoing delays

The main barriers to timely initiation were:

- Screening bloods
- Vaccination requirements
- Kesimpta onboarding and injection training
- Patient-related delays

## The impact

The fast-track MDT significantly improved early-stage timelines, ensuring patients were reviewed and offered treatment more quickly and in line with international standards. However, delays persisted at the final step of the pathway — treatment initiation — highlighting a systemic bottleneck unrelated to MDT processes.

The project has:

- Reduced diagnostic-to-MDT and MDT-to-treatment-offer delays
- Enabled real-time discussion of high-priority cases
- Improved alignment with NNAG and ABN guidance
- Identified specific operational gaps beyond MDT processes

## The future

Proposed next steps include:

1. Running the immunisation and screening processes directly through the MS service to reduce fragmentation.
2. Reviewing Kesimpta training delivery to shorten timelines.
3. Conducting further data analysis across a larger timeframe to identify additional operational barriers.
4. Working towards a fully integrated DMT initiation pathway aligned with the 2024 NNAG MS Optimal Clinical Care Pathway.

## Conclusion

Arron Cook's project demonstrates that fast-track MDT structures can meaningfully accelerate early parts of the treatment pathway — but to truly optimise access to high-efficacy therapies, services must also address the downstream delays in screening, vaccination, and treatment delivery.

This work provides a clear roadmap for MS centres seeking to streamline decision-making and improve the timeliness of high-efficacy DMT initiation.

# Roadmap of cognitive services for MS patients in Sheffield and surrounding areas

*Kirsty Griffiths, research nurse, Sheffield Teaching Hospitals NHS Foundation Trust*

## The challenge

Cognitive impairment affects 45–65% of people living with MS and can significantly impact daily functioning, independence, and quality of life (DeLuca et al., 2020). Even in early-stage MS, cognitive problems are common.

Despite this high need, access to neuropsychological assessment and cognitive rehabilitation varies widely across Sheffield, Barnsley, Rotherham, Doncaster, and North Derbyshire.

Issues identified include:

- Lack of a single, centralised source for referral criteria or service availability.
- Neuropsychology services with limited MS-specific provision.
- Long waiting lists, understaffed services, and inconsistent assessment pathways.
- Patients screened in the NEuRoMS trial often seeking cognitive support that was not currently available, leading to increased referral queries to the MS Team.

## The project

Kirsty Griffiths aimed to map all cognitive services across Sheffield and surrounding areas to create a comprehensive, practical “roadmap” to support MS clinicians in locating appropriate services for patients with cognitive concerns.

The method included:

- Liaising with the MS multidisciplinary team to gather existing knowledge.
- Online searching for neuropsychology, community rehabilitation, and long-term condition services.
- Direct contact via email and telephone with providers across multiple regions (Sheffield, Barnsley, Rotherham, Doncaster, North Derbyshire).
- Collecting information on:
  - Service type
  - Referral criteria
  - Contact details
  - Waiting times
  - Whether MS-specific care was offered
- Collating all known referral forms into one place for staff use.  
(Workflow shown in the diagram on the poster’s “Objective and Method” section.)



## The results

The mapping exercise revealed significant variation in cognitive service provision:

- Some areas offered full neuropsychology assessments with structured follow-up.
- Others provided only general rehabilitation services with limited cognitive support.
- Several services did not respond to enquiries, reflecting the difficulty in navigating the system.
- No services provided dedicated MS-specific cognitive pathways.

Kirsty produced a working document (roadmap) containing:

- Service descriptions
- How to refer
- Contact details
- Referral forms

The poster shows screenshots of this roadmap (Results section).

## The impact

The roadmap equips the MS team with a single, accessible resource enabling:

- Faster and more confident signposting
- Reduced burden on clinicians searching for cognitive pathways
- Greater clarity for patients seeking assessment and support
- Improved MDT awareness of what services actually exist

It also highlights a major regional unmet need, strengthening the case for improved investment in MS cognitive services.

## The future

The roadmap will be a living document, updated as services evolve.

It also provides a foundation for:

- Advocating improved MS-specific cognitive services
- Informing commissioners of gaps in neuropsychology provision
- Supporting implementation of NEuRoMS trial findings into routine care

## Conclusion

Kirsty Griffiths' project addresses an important gap in MS care. By creating a structured, accessible roadmap of cognitive services, she has improved staff confidence in signposting, reduced inefficiency, and highlighted the urgent need for more consistent and comprehensive MS cognitive pathways across the region.

# Improving information sharing between primary and secondary care in MS

*Samuel Hayes, neuroscience specialist pharmacist, NHS Greater Glasgow and Clyde*

## The challenge

Early initiation of disease-modifying therapies (DMTs) is linked with improved long-term outcomes in MS. NHS England's minimum standard requires initiation within 12 weeks of a treatment decision.

However, in NHS Greater Glasgow and Clyde (GGC), significant delays occurred between:

- Consultant review
- Baseline screening tests
- Prescribing
- Homecare processing and delivery

Many of these delays were linked to fragmented communication between primary care, secondary care, MS nurses, pharmacists, and homecare services. As a result, initiation times for ofatumumab and cladribine were inconsistent and often prolonged.

## The project

Samuel Hayes evaluated the timelines for starting ofatumumab (48 patients) and cladribine (22 patients) between January–September 2025, examining the time between:

- Consultant review
- Baseline screening
- Prescription issuing
- Treatment delivery via homecare

He investigated the root causes of delays and whether a specialist MS pharmacist could improve coordination by bridging communication gaps.

## The results

The analysis revealed substantial variation in time-to-treatment:

Treatment	Mean delay (days)	Median (days)	Range (days)
Ofatumumab	47.3	34	0–205
Cladribine	71.4	50	22–192

Delays often resulted from:

- Missing or incomplete blood tests
- Additional screening (e.g., chest X-ray)
- Pregnancy testing
- Lack of clear documentation
- Homecare coordination delays
- Washout periods during therapy switching

Despite delays, the NHS England 12-week minimum standard was generally met, but inefficiencies were evident.

### **The impact**

The project demonstrated that delays were systemic rather than drug-specific, caused by breakdowns in information flow between different care providers.

A specialist pharmacist could reduce these delays by:

- Independently prescribing once screening is complete
- Coordinating missing tests
- Liaising directly with homecare
- Tracking bottlenecks in real-time
- Improving communication between consultant, nurse and pharmacy teams

The workflow optimisation model on page 3 of the write-up clearly shows how pharmacist integration can streamline the pathway from prescribing to monitoring.

### **The future**

Samuel proposes developing a pharmacist-led, integrated MS treatment initiation pathway, including:

- Pharmacist-led prescribing of ofatumumab and cladribine
- A coordinated pre-consult screening schedule
- Real-time tracking of initiation delays
- Shared communication logs across primary and secondary care
- Formal evaluation of pharmacist impact on initiation timelines

### **Conclusion**

Samuel Hayes' project highlights that improving information sharing and introducing specialist MS pharmacists could significantly reduce delays, improve patient experience, and optimise service efficiency.

His findings provide clear evidence that streamlining communication across the MS treatment pathway is essential to achieving faster, safer, and more consistent initiation of high-efficacy therapies.

# Optimising immunoglobulin monitoring in MS: bridging the gap between neurology and immunology

*Dr Shannon Healey, internal medicine training and academic clinical fellowships & Dr Isobel Platt clinical research fellow, University College London Hospitals NHS Foundation Trust*

## The challenge

Ocrelizumab and ofatumumab are high-efficacy anti-CD20 monoclonal antibodies widely used in relapsing–remitting MS. By depleting B cells — key producers of immunoglobulins — these therapies can lead to reduced IgG and IgM levels, raising concerns about hypogammaglobulinaemia and infection risk.

However, real-world data on long-term immunoglobulin trajectories, risk factors for low Ig levels, and associated infection rates remain limited.

Given increasing use of anti-CD20 therapies, there is a critical need to:

- Understand the true frequency of low immunoglobulins,
- Identify patient-specific risk factors, and
- Inform safe, rational monitoring pathways between neurology and immunology.

## The project

This single-centre retrospective cohort study included 643 patients at the Queen Square MS Centre/ National Hospital for Neurology and Neurosurgery who initiated or continued ocrelizumab or ofatumumab between Nov 2018 – Jan 2025.

Data collected included:

- Demographics and MS disease characteristics
- IgG and IgM levels at baseline and every 6 months (+/-2 months)
- Documented infections
- Treatment switches, pauses, and discontinuations
- Extraction was performed via electronic patient records and analysed using mixed-effects models to handle repeated measures.

## The results

### Cohort characteristics:

- Mean age at initiation: 38.6 years
- Female: 70.2%
- EDSS: 2.61
- DMTs: 348 on ocrelizumab; 310 on ofatumumab  
(Poster demographics table, page 1)

**IgG results:**

- Both drugs caused a gradual reduction in IgG over time.
  - Ocrelizumab produced a faster decline than ofatumumab.
  - Sustained low IgG ( $\geq 2$  low readings):
    - 4.5% on ocrelizumab
    - 4.6% on ofatumumab
- (Graph and table on poster, page 1)

Age and greater number of previous DMTs were associated with lower IgG.

**IgM results:**

- Both therapies reduced IgM levels over time.
  - Decline was faster with ofatumumab.
  - Sustained low IgM:
    - 27.6% on ocrelizumab
    - 19.4% on ofatumumab
- (IgM graph and results table, poster page 1)

Male sex and multiple prior DMTs were associated with lower IgM.

**Infections:**

- 1.5% (10 patients) experienced serious infections, including 5 shingles cases — the most common serious infection, supporting Green Book vaccination guidance (page 1, Results section).
- 104 patients had any recorded infection.
- Only 3 discontinued therapy due to recurrent non-serious infections.
- One pause occurred due to neutropenia.

**Discontinuations and switches:**

- 10 switched ocrelizumab → ofatumumab (mostly convenience).
- 7 switched in the opposite direction (due to side effects).
- 8 paused for pregnancy.
- 3 switched to other high-efficacy DMTs.
- 1 death (melanoma recurrence), MDT deemed unrelated to therapy.

**The impact**

This is the largest real-world cohort to date examining immunoglobulin dynamics in anti-CD20 MS therapies.

Key impacts include:

- Providing strong reassurance that although Ig levels fall, serious infection rates remain low.
- Identifying at-risk groups (older age, males, multiple previous DMTs) to support personalised counselling.
- Reinforcing the importance of shingles vaccination prior to therapy.
- Supplying high-quality real-world evidence to guide:
  - Immunology referrals
  - Monitoring frequency
  - Safety protocols for long-term therapy

The study significantly strengthens the scientific basis for bridging neurology and immunology pathways in MS services.

## The future

Dr Healey and Dr Platt propose:

- Developing risk-stratified Ig monitoring pathways, adjusting frequency based on risk factors.
- Closer shared-care models with immunology for patients developing sustained low IgG/IgM.
- Long-term follow-up to understand whether Ig trajectories differ as ofatumumab cohorts mature.
- Improved documentation of infection timing relative to Ig levels.
- National dissemination to contribute to UK-wide anti-CD20 safety standards.

## Conclusion

This project delivers the clearest real-world picture to date of immunoglobulin behaviour under anti-CD20 therapy in MS. The findings show that while immunoglobulin levels fall predictably, serious infections remain uncommon, providing assurance for both clinicians and patients.

The work lays essential groundwork for future integrated immunology–neurology monitoring pathways and represents a high-quality contribution to national MS service development.

# Bone health in MS: identifying and reducing osteoporosis risk in people with multiple sclerosis

*Sally Hiron, neurology community nurse, Midlands Partnership University NHS Foundation Trust*

## The challenge

People with MS (PwMS) face a significantly increased risk of osteopenia, osteoporosis, and fragility fractures, with up to 30% having osteoporosis and 43% osteopenia. PwMS are three times more likely to experience fractures than the general population.

Multiple MS-related factors contribute to this risk, including:

- Reduced mobility and weight-bearing ability
- Fatigue leading to falls
- Low vitamin D levels
- Corticosteroid use
- Higher prevalence in women, who already have increased osteoporosis risk

Despite clear NICE guidance requiring routine bone health assessment in MS, bone health is often overlooked during MS reviews, leading to missed opportunities for early identification and prevention.

## The project

Drawing on her experience of routinely completing FRAX scores for Parkinson's patients, Sally sought to implement a bone health screening and risk identification pathway for people with MS within the Community Neurology Service.

The project involved:

- Reviewing availability of bone health screening for PwMS
- Identifying gaps in current bone health assessment provision
- Developing a risk stratification tool considering:
  - Age, sex, BMI
  - MS type and duration
  - Medication history (especially steroids)
  - Mobility levels
  - Vitamin D status
- Using FRAX as a structured screening tool
- Forwarding FRAX results and guidance to GPs for further investigation (DEXA) and treatment
- Drafting protocols to ensure timely reassessment and follow-up
- Identifying and signposting educational resources for patients, carers, and clinicians

## The results

The project identified significant unmet need among PwMS who had never received a recent fracture risk assessment or DEXA scan.



It also highlighted:

- Variation in access to bone health screening across services
- Need for coordinated communication with GP practices and tertiary centres
- An opportunity to embed systematic bone health checks into routine MS reviews
- Increased awareness among clinicians about the scale of bone health risk in MS

The new clinical system being implemented for the Adult Ability Team will support scheduled bone health reassessment, improving protocol adherence.

## The impact

By introducing structured bone health assessment into MS care, this project:

- Supports early identification of PwMS at risk of osteoporosis
- Enables timely, preventative intervention
- Reduces future risk of major osteoporotic fractures (MOF)
- Promotes collaborative working between neurology, primary care, and specialist services
- Raises awareness of osteoporosis risk factors and preventative strategies

Given the significant disability consequences of fractures in PwMS — slower recovery, higher complication rates, and greater likelihood of institutionalisation — this proactive approach could have a profound impact on long-term outcomes.

## The future

Sally plans to:

- Finalise and implement the risk stratification tool for all PwMS reviewed in the service.
- Embed FRAX screening into clinical assessments.
- Work with GPs to ensure consistent onward referral for DEXA where indicated.
- Develop educational materials for patients, carers, and clinicians.
- Use the new clinical system to automate follow-up reminders and reassessment schedules.

## Conclusion

This project highlights a crucial yet often neglected aspect of MS care. By developing a structured approach to identifying osteoporosis risk, Sally Hirons has created a proactive, prevention-focused model that aligns with NICE guidance and promotes safer, more holistic long-term management for people with MS.

# Optimising MS outpatient efficiency through electronic triage

*Dr Yun Huang, neurology specialty registrar, The Walton Centre NHS Foundation Trust*

## The challenge

Multiple sclerosis relapses are unpredictable and can cause significant functional decline if not assessed and treated promptly.

However, distinguishing a true relapse from:

- recurrence of previous symptoms,
- functional neurological symptoms, or
- unrelated conditions
- is complex and requires specialist assessment.

Inappropriate referrals can lead to unnecessary corticosteroid use, avoidable MRI requests, and delays in managing genuine relapse activity. Conversely, missed or delayed management of true relapses may compromise long-term outcomes.

## The project

Dr Yun Huang conducted a retrospective audit of all patients attending the MS Relapse Clinic at The Walton Centre between 1 January and 30 June 2025.

Data extracted included:

- demographics
- presenting symptoms
- MRI requests and results
- final diagnosis
- whether corticosteroids were given
- whether disease-modifying therapy (DMT) was escalated

The aim was to understand patterns of acute neurological presentation, evaluate diagnostic accuracy, and identify opportunities to streamline relapse assessment pathways.

## The results

### Clinic activity:

- 40 patients attended
- 67% female
- 83% RRMS

**Presenting symptoms:**

- 37% sensory
- 20% mixed motor/sensory
- 15% brainstem
- 12% motor
- 8% visual

**Final diagnosis:**

- 55% true relapse
- 27% recurrence of previous symptoms
- 5% progression
- 5% functional symptoms
- 8% unrelated symptoms

**Management outcomes:**

- 63% received oral methylprednisolone (500 mg × 5 days)
- 55% had MRI requested
- 36% of MRIs showed new lesions
- 64% of patients with true relapse underwent DMT escalation

**The impact**

The audit confirms that the relapse clinic effectively:

- Enables accurate, specialist-led differentiation of acute neurological presentations
- Ensures judicious steroid use, avoiding unnecessary treatment
- Provides a timely platform for DMT escalation, aligning acute care with long-term disease management
- Supports rapid triage and reduces inappropriate imaging
- Facilitates multidisciplinary input into recovery planning

The findings highlight excellent clinical judgement and a well-functioning acute MS assessment pathway.

**The future**

The audit identifies clear opportunities for strengthening the service:

- Refining referral criteria to reduce non-relapse presentations
- Improving MRI utilisation guidance to avoid unnecessary imaging
- Embedding outcome measures into relapse assessments
- Strengthening links with psychology and rehabilitation for holistic post-relapse care
- Developing patient and primary care education materials to support appropriate referrals

**Conclusion**

This project demonstrates the value of a specialist relapse clinic in delivering responsive, accurate, and guideline-aligned care for acute neurological presentations in MS. With targeted refinements to referral pathways and a stronger multidisciplinary approach, the clinic can further enhance outcomes for people experiencing acute MS symptoms.

# The impact of submaximal training in people with MS referred to the Walter Brice Rehabilitation Centre

*Stanley Idu, senior physiotherapist, Medway Community Healthcare*

## The challenge

Walking difficulty is the most common disability affecting people with MS (pwMS) referred to the Walter Brice Centre (WBC). Many individuals present with:

- Severe endurance limitations
- Balance impairment
- Muscle weakness
- Neuromuscular fatigue
- Reduced activity tolerance

These issues affect functional mobility, independence, and the ability to participate in daily activities at home, work, and in the community.

Although there is strong evidence supporting exercise in MS — especially submaximal training, which is performed below an individual's fatigue threshold — services often lack structured programmes designed for pwMS with moderate to severe disability (EDSS 5.5–6.5).

Stanley aimed to explore whether submaximal, fatigue-aware exercise could help patients progress toward meaningful rehabilitation goals.

## The project

A service evaluation was conducted over 10 referrals to WBC. After two patients withdrew, 8 pwMS (3 men, 5 women) with:

- EDSS 5.5–6.5
- Age 40–66 years (mean 55)
- 6 on DMTs and 2 not on DMTs

were enrolled.

Patients consented verbally and underwent baseline assessment in:

- Balance – Berg Balance Scale
- Standing endurance – Time to Fatigue (TTF)
- Walking endurance – TTF

The intervention consisted of:

- Task-oriented submaximal training, delivered weekly
- Intensity set at approximately 85% of each patient's fatigue threshold
- Standing/walking TTF testing performed safely within parallel bars
- A home exercise programme to continue between sessions

Patients were reassessed at discharge and results compared with baseline.

## The results

The study demonstrated meaningful improvements, particularly in balance and walking endurance:

### EDSS

- 3 of 8 patients improved their EDSS score by 0.5 points, which, although small, is clinically meaningful in this disability range.

### Walking endurance

Of the 6 patients for whom walking was a goal:

- 5 improved, with increases ranging from +1 to +5 minutes.

### Balance (Berg Balance Scale)

Of the 7 assessed for balance:

- 5 improved, with gains up to +16 points — a substantial functional improvement.

### Standing endurance

Of the two patients unable to walk independently:

- One improved from 3 to 10 minutes standing.

An important observational finding was that patients on DMTs showed more consistent improvement than those not receiving a DMT.

## The impact

This project provides real-world evidence that submaximal, fatigue-adjusted exercise offers a safe, feasible, and effective rehabilitation strategy for pwMS with higher EDSS scores.

Key impacts include:

- Improved functional endurance
- Enhanced balance
- Greater confidence and independence
- Tailored exercise that respects MS fatigue and energy limits
- Reinforcement of DMTs as a potential supportive factor in rehabilitation outcomes

For patients with significant mobility impairment, even small improvements in endurance or balance translate into meaningful gains in daily functioning and quality of life.

## The future

Stanley recommends:

1. Larger-scale studies with control groups
2. Statistical testing of outcomes
3. Longer follow-up to determine durability of improvements
4. Exploring comparisons between submaximal training and other exercise modalities
5. Consideration of a structured “Submaximal MS Programme” within WBC

These next steps would strengthen the evidence base for embedding submaximal training more widely across MS rehabilitation services.

## Conclusion

Submaximal training represents a highly promising approach for pwMS with moderate to severe disability. Stanley Idu’s project demonstrates that with appropriate fatigue-aware exercise prescription, patients can make meaningful improvements in walking endurance, balance, and functional mobility. The evaluation provides a practical model for community rehabilitation teams seeking to deliver accessible, person-centred MS exercise interventions.

# An overview of the multiple sclerosis patient database

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*Ola Okunowo, MS clinical nurse specialist, Dartford and Gravesham NHS Trust*

## The challenge

This project arose following a safeguarding enquiry after a patient with MS from another Trust was lost to follow-up, deteriorated, and sadly died.

The event prompted the question: “How do we ensure our MS patients are monitored safely and not lost in the system?”

At Darent Valley Hospital, the MS team uses a local patient database to track:

- Follow-up appointments
- Blood test monitoring
- MRI surveillance
- Treatment status and DMT prescribing

However, the system relies heavily on manual data entry, making it vulnerable to human error, outdated information, and missed investigations.

The introduction of Patient-Initiated Follow-Up (PIFU) across the Trust has increased this risk further, as patients may remain on long waiting lists unless actively managed.

## The project

Ola Okunowo undertook a comprehensive review of the MS patient database to assess:

- Monitoring compliance
- Accuracy of existing entries
- Gaps in blood test and MRI follow-up
- Opportunities to improve database functionality and safety

The review analysed all 593 registered MS patients, including disease subtype, DMT status, and compliance with investigations.

## The results

### Patient cohort

- 593 total patients
  - 423 RRMS (71%)
  - 68 SPMS (11.5%)
  - 47 PPMS (8%)
- 352 patients on DMTs (321 RRMS; 21 SPMS; 10 PPMS)

### Monitoring findings

An initial audit found over 50% of patients overdue for blood tests or MRI scans due to incomplete or outdated entries.



A subsequent detailed review showed:

MS subtype	Appointment compliance	MRI compliance	Blood test compliance
<b>PPMS</b>	90%	90%	100%
<b>SPMS</b>	86%	84%	82%
<b>RRMS</b>	95%	84%	82%

These figures demonstrate reasonably good attendance but significant variation across investigations, particularly MRI and blood monitoring.

### Follow-up gaps

The introduction of PIFU had created a backlog, with many patients waiting longer than expected for review because the system relied on manual list management.

Daily calls from patients reporting missing or incorrect appointments highlight that administrative processes alone are insufficient.

### The impact

This project demonstrates that the MS database is a valuable but under-optimised tool.

Key safety risks identified include:

- Patients becoming overdue for essential monitoring
- Increased administrative burden on MS nurses
- Missed opportunities for early detection of disease activity or treatment toxicity

By analysing the database's weaknesses, Ola has shown the need for more robust, automated systems that reduce reliance on manual updates.

### The future

Ola recommends essential system improvements:

1. Integrate the MS database with the hospital's EHR and patient portal, allowing:
  - Automatic update of blood tests
  - Automatic population of MRI results
  - Direct linkage of appointment data
2. Automated alerts for overdue tests, missed appointments, or required MRI surveillance.
3. Clinician dashboards to monitor compliance in real time.
4. Routine database audits to maintain data accuracy and reduce safety risks.
5. Regular review of the PIFU waiting list to ensure patients are seen within the intended timeframe.

### Conclusion

This project highlights significant patient safety risks associated with manual tracking systems in MS services. By reviewing the database comprehensively, Ola Okunowo has identified clear, practical improvements that would greatly enhance monitoring compliance, reduce administrative workload, and ensure patients are not lost to follow-up. The work provides a solid foundation for developing a more efficient, integrated, and safer MS monitoring system.

# Supporting individuals with MS in a primary care setting

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*Christina Peacock, pharmacy technician, Bolton NHS Foundation Trust*

## The challenge

Multiple sclerosis is often overlooked within primary care.

Because MS is not included in QOF, CQC audits, or incentivised LTC frameworks, many people with MS (pwMS) do not receive consistent or structured review within general practice.

This can lead to:

- Delayed or missed annual reviews
- Inconsistent documentation
- Limited understanding of MS-specific medications (DMARDs/DMTs)
- Reduced confidence among patients in raising concerns with their GP

Chrissie's work across several regions in England also showed large variation in MS support, with some practices demonstrating strong engagement while others lacked awareness, structure, or clarity around responsibilities.

Her personal experience — supporting her husband with RRMS — further highlighted how challenging the primary care landscape can be for patients and families.

## The project

Chrissie undertook a structured evaluation across multiple Primary Care Network (PCN) sites to understand and improve how people with MS are supported. The project focused on five best-practice domains:

- Annual secondary care reviews
- Annual MS-specific reviews within primary care
- Accurate recording of DMTs/DMARDs
- Use of standardised templates (e.g., Arden's MS Review Template)
- Access to local and national support services

A systematic search of electronic records was carried out to identify all patients with MS. For each patient, Chrissie reviewed:

- Last LTC review
- Specialist team involvement
- DMARD/DMT status
- Blood monitoring and ICE results
- Any documented concerns or unmet needs

The work also included staff training, patient engagement initiatives, and the development of new support resources.

## The results

Across participating GP practices, several key themes emerged:

### 1. Variation in review frequency

Most patients had an annual LTC review recorded, but many lacked MS-specific content, such as mobility, fatigue, mental health, and symptom progression. Standardised reminders and the Arden's template helped create consistency.

### 2. Inconsistent engagement with secondary care

Some patients received regular specialist input, but others had little or no recent documentation from neurology teams, creating uncertainty about shared care responsibilities.

### 3. DMARD/DMT awareness gaps

Because DMARDs/DMTs are not usually prescribed in general practice, many GPs were unfamiliar with:

- Treatment purpose
- Monitoring requirements
- Safety considerations

This affected patient confidence in primary care.

Chrissie delivered staff education to improve knowledge and update records.

### 4. Patient uncertainty about where to seek help

Many patients were unsure when to contact their GP versus their MS Team, leading either to delays in care or unnecessary specialist referrals.

Education improved patient empowerment and engagement.

### 5. Development of support resources

During MS Awareness Week, Chrissie produced a comprehensive MS support fact sheet, shared across practices and online, which was widely welcomed by patients. Patients reported they had previously been unaware of the local support available.

## The impact

This project has significantly strengthened primary care support for people with MS by:

- Improving consistency and quality of MS reviews
- Enhancing staff confidence with DMARDs/DMTs
- Reducing fragmentation between primary and secondary care
- Increasing patient awareness of available support
- Improving recording of monitoring (ICE results, medication safety checks)
- Encouraging more proactive engagement with GP practices

It also highlighted how improved primary care MS support can reduce avoidable secondary care demand, supporting NHS Long Term Plan aims.

## The future

Chrissie intends to:

1. Expand this work across other PCNs and regions.
2. Standardise use of the Arden's MS Review Template in more practices.
3. Continue staff training on MS medications and safety monitoring.
4. Refine and update the MS support fact sheet for national use.
5. Develop clearer pathways for shared care communication between GPs and MS Teams.

## Conclusion

This project demonstrates how primary care can play a crucial role in supporting people with MS — particularly when structured reviews, accurate medication management, and patient empowerment are prioritised.

Chrissie Peacock's work provides a scalable model for strengthening MS support across general practice, improving patient confidence, continuity, and long-term condition management.

# Specialist rehabilitation of walking: optimising clinical pathways for people with multiple sclerosis

*Coralie Seary, clinical specialist physiotherapist, University College London Hospitals NHS Foundation Trust*

## The challenge

Walking impairment is one of the most disabling and life-altering symptoms for people with MS (pwMS). It significantly affects independence, mobility, quality of life, and leads to higher rates of fatigue, falls, and deconditioning.

Although multiple NICE-recommended interventions exist to support walking (FES, orthotics, PR-Fampridine, spasticity management, neurophysiotherapy, exercise), they are delivered through separate specialist clinics, each with its own waiting list, appointment schedule, and referral pathway.

This leads to:

- Multiple appointments across different services
- Long waits (3–12 months depending on clinic)
- Repeated referrals and duplicated assessments
- Increased travel burden
- Inefficient use of clinical time

Patients frequently move between FES, spasticity, orthotics, Fampridine monitoring, and physiotherapy — even though many of their needs overlap.

Coralie recognised that pwMS with walking impairments require joined-up, streamlined, and skilled multidisciplinary management in order to reduce delays and optimise walking outcomes.

## The project

The project aimed to improve efficiency and reduce hospital visits by creating a single, integrated Spasticity Walking Clinic capable of delivering multiple interventions in one appointment.

This involved:

- Mapping current pathways using LEAN methodology to identify waste, duplication, and inefficiencies
- Training an Independent AHP Prescriber to allow prescribing of PR-Fampridine and first-line spasticity medications
- Designing a one-stop clinic combining:
  - FES assessment and monitoring
  - Fampridine monitoring and prescribing
  - Spasticity assessment and titration
  - Orthotics assessment and liaison
  - Physiotherapy advice, mobility aid review, referrals

Longer appointment slots were planned so that multiple needs could be addressed at once. Consultant rehabilitation/neurology support was built into clinic days to ensure safe oversight.

## The results

A retrospective review of 61 follow-up appointments in the new clinic showed:

### **Interventions delivered** (Figure 3)

- Fampridine: 91.8%
- FES: 88.52%
- Spasticity management: 49.18%
- Orthotics input: 29.63%
- Physiotherapy input: 29.63%

### **Number of interventions per appointment** (Figure 4)

- 48% (n=29) of appointments addressed all five walking intervention categories
- 98% included two or more categories

This demonstrates the efficiency gained by combining clinics.

### **Further referrals (25%; n=15)**

Including:

- Community physiotherapy (n=8)
- Occupational Therapy (n=5)
- Complex orthotics (n=2)
- Speech & Language Therapy (n=1)
- Pain Team (n=2)
- Wheelchair services (n=1)
- Urology (n=1)
- Sativex pathway (n=1)

## The impact

Coralie's integrated Spasticity Walking Clinic significantly improved pathway efficiency by reducing repeated referrals, long waits, and the need for multiple appointments.

Benefits include:

- An estimated >50% reduction in hospital visits for walking-related needs
- A clear, centralised access point for pwMS with mobility impairments
- A more flexible and responsive service able to treat complex walking issues holistically
- Reduced travel burden for patients with higher EDSS (6.0–7.0)
- More efficient use of physiotherapy, orthotics, spasticity, and FES resources
- Stronger alignment with the NHS Long Term Plan principle: “the right treatment, at the right time”

The project also increased the clinic's capability through AHP prescribing, reducing reliance on medical sign-off and speeding up decision-making.

## The future

Identified next steps include:

1. Training the AHP prescriber in Sativex prescribing under consultant supervision.
2. Patient focus groups to obtain direct feedback and shape future improvements.
3. Economic evaluation — including clinic delivery costs and patient transport savings.
4. Reducing DNAs and cancellations by refining scheduling and administrative processes.
5. Strengthening links with community therapy teams to extend specialist input closer to home.

## Conclusion

This project demonstrates that combining multiple specialist walking interventions into a single, prescriber-led clinic can significantly reduce appointment burden, streamline pathways, and improve outcomes for people with MS.

Coralie Seary's work provides a scalable model for integrated rehabilitation, grounded in efficiency, patient need, and evidence-based practice. It represents meaningful service transformation and aligns strongly with national ambitions for coordinated, patient-centred care.

# Piloting the perceived deficits questionnaire (PDQ) in community neurorehabilitation services for MS

*Runner up: Mariam Sherkawi, neurology occupational therapist, Cambridgeshire and Peterborough NHS Foundation Trust*

## The challenge

Cognitive dysfunction affects 43–70% of people with MS and is one of the strongest determinants of quality of life and functional independence.

Within Community Neurorehabilitation Services (CNRS), cognitive concerns are frequently observed, yet access to formal neuropsychology is limited due to service constraints and waiting lists.

Occupational therapists (OTs) therefore require a practical, evidence-based, and OT-led screening tool to reliably capture cognitive issues in routine practice.

The Perceived Deficits Questionnaire (PDQ), part of the MS Quality of Life Inventory, measures difficulties across four domains common in MS:

- Attention
- Retrospective memory
- Prospective memory
- Planning/organisation

However, it was not yet being used within CNRS, and its feasibility, acceptability, and clinical value in this context were unknown.

## The project

Mariam Sherkawi piloted the PDQ within CNRS through a structured four-stage process (illustrated on the poster under Methods):

1. Patient completion – One pwMS completed the PDQ independently, providing early feasibility data.
2. Education session – A 30-minute teaching session was delivered to OTs, including rationale, scoring, interpretation, and a case example.
3. Supporting resources – A concise guidance sheet was developed for daily use.
4. Feedback and evaluation – Four OTs participated in semi-structured interviews exploring feasibility, clinical relevance, and implementation barriers.

## The results

The poster's Results section visually highlights the key findings:

### Patient experience

- The PDQ was described as clear, relevant, and easy to complete.
- This confirmed existing literature and demonstrated suitability in a real CNRS setting.



## OT perspectives

OTs found that the PDQ:

- Provided a structured and consistent way to capture patient-reported cognitive challenges.
- Generated richer clinical insights than informal questioning.
- Helped reveal how cognitive difficulties affected daily tasks and routines.
- Supported patient-centred goal setting and early rehabilitation planning.
- Highlighted specific cognitive domains through subscale scoring, aiding targeted interventions.
- Strengthened MDT discussions by offering objective, patient-reported data.

OTs also noted that some patients may require assistance completing the tool due to visual, motor, or literacy challenges, suggesting the need for flexible delivery (e.g., reading the questions aloud).

## The impact

This pilot shows that the PDQ is a feasible, practical, and clinically valuable tool within CNRS.

It enhances:

- OT confidence in identifying cognitive concerns
- Quality of clinical documentation
- Consistency of cognitive screening
- Person-centred care planning
- MDT communication and shared decision-making

By adding structure and depth to cognitive assessment, the PDQ bridges a significant gap in community-based MS rehabilitation.

## The future

As outlined in the poster's Next Steps:

1. The PDQ will be embedded into routine CNRS OT assessments for people with MS.
2. All newly appointed OTs will be trained to use the PDQ.
3. An MDT education session will be delivered to raise awareness of the tool and when referrals to OT for cognition are appropriate.
4. Continued evaluation will support long-term sustainability and service-wide consistency.

## Conclusion

Mariam Sherkawi's project demonstrates that the PDQ is a robust, patient-centred cognitive screening tool that can be readily integrated into community neurorehabilitation practice.

The pilot shows strong potential for improving early identification of cognitive challenges and for enhancing personalised, holistic rehabilitation planning.

This work makes an important contribution to MS cognitive care and is a deserving Runner-Up for MSFMC21.2.

# Natalizumab safety monitoring audit: evaluating the need for post-infusion observation

*Mahlet Tejo, nurse, Imperial College Healthcare NHS Trust*

## The challenge

Natalizumab is a high-efficacy DMT for relapsing–remitting MS, delivered via monthly intravenous infusions. Traditional protocols require one hour of post-infusion observation to detect delayed hypersensitivity or anaphylaxis.

However, emerging evidence suggests that reactions almost always occur during infusion, not after.

This results in:

- Longer hospital visits
- Reduced infusion capacity
- Increased staffing demand
- Slower patient flow

Mahlet's MS infusion unit wanted to determine whether asymptomatic patients truly needed a mandatory one-hour post-infusion wait.

## The project

A prospective audit reviewed all natalizumab infusions between January 2024 and January 2025.

Data included:

- Sex and age distribution
- Number of infusions
- Presence of any infusion reactions
- Safety outcomes during and after infusion

Cohort:

- 115 RRMS patients
- 70% female, 30% male

A total of 1380 natalizumab infusions were analysed.

## The results

Across all 1380 infusions:

- 0 hypersensitivity reactions
- 0 delayed reactions
- 0 adverse events occurring after infusion
- 0 unplanned interventions or transfers

The data showed that every infusion-related symptom occurred during the infusion period, not afterwards.

Patients who were asymptomatic during infusion remained stable after treatment.

## The impact

Following the audit:

- The MS infusion service removed the requirement for routine one-hour post-infusion observation in asymptomatic patients.
- Patients now leave immediately after treatment unless symptoms occurred during infusion.
- This change has improved:
  - Clinic capacity
  - Efficiency
  - Staff workload distribution
  - Patient experience and waiting times

This redesign aligns with evolving national practice and safely modernises natalizumab delivery.

## The future

Mahlet recommends:

1. Ongoing monitoring to ensure no delayed reactions occur.
2. Sharing results with neighbouring services to encourage regional standardisation.
3. Applying similar methodology to other infusion therapies.
4. Evaluating the impact on capacity, waiting times, and staffing.

## Conclusion

Mahlet Tejo's audit provides clear, real-world evidence that routine post-infusion observation adds no safety benefit for natalizumab patients who remain asymptomatic during infusion.

Her findings support a safer, more efficient, and patient-centred infusion service and contribute meaningfully to national discussions on MS DMT delivery.

# Evaluating AI interpretation of clinical letters in MS

*Dr Abdullah Virk, neurology and stroke senior clinical fellow, King's College Hospital NHS Foundation Trust*

## The challenge

Free-text clinical letters are one of the richest sources of MS clinical information — yet they are also one of the most difficult to interpret at scale. The MS PinPoint project aims to use artificial intelligence (AI) and natural language processing (NLP) to extract key clinical fields from routine neurology correspondence, enabling:

- faster access to patient information
- reduced administrative workload
- improved research datasets
- more efficient pathways for large-scale MS service evaluation

However, the variability in how clinicians write letters — differing terminology, structure, and documentation styles — creates major barriers for AI interpretation.

## The project

Dr Virk evaluated whether an AI model could reliably extract six clinically relevant data fields from MS clinic letters:

- MS diagnosis
- MS subtype
- Mobility status
- EDSS
- OCB status
- Smoking history

A total of 80 MS patient letters were analysed, generating 480 field-level checks (6 categories × 80 patients).

AI outputs were compared with gold-standard clinician-verified data.

## The results

The accuracy table on the poster summarises the findings:

Category	Accuracy	Key notes
MS diagnosis	100%	Consistent wording makes this easy for AI to detect
Subtype	77.5%	Requires contextual interpretation
Mobility	37.5%	Often described indirectly in letters
EDSS	15%	Numeric values poorly recognised
OCB Status	3.75%	Highly variable wording; often not included
Smoker	5%	Negation (“non-smoker”, “never smoked”) not interpreted correctly

## Insights

The analysis demonstrates:

- AI performs very well for structured, clearly stated variables (e.g., MS diagnosis).
- AI performs moderately for context-dependent fields (e.g., subtype).
- AI performs poorly for fields involving:
  - numerical extraction (EDSS)
  - inconsistent phrasing (OCB)
  - negation (smoking status)

The model often correctly identified when information was not present, meaning “correct unknown” outputs are promising for future semi-supervised model refinement.

## The impact

This project is one of the first UK MS evaluations demonstrating how AI could support clinical coding and data extraction from narrative letters.

Key impacts include:

- Demonstrating which MS features are currently AI-ready (diagnosis, subtype).
- Identifying where clinical letter standardisation would greatly improve downstream AI performance.
- Highlighting opportunities to reduce admin burden by automating simple data pulls.
- Laying the groundwork for future large-scale MS audits that rely on routine clinical documentation.

This work aligns strongly with NHS digital transformation goals and future MS service optimisation.

## The future

The poster and write-up propose several key development steps:

1. Entity standardisation rules
  - Particularly for numerical fields (EDSS) and categorical fields (OCB).
2. Negation detection models
  - E.g., “non-smoker”, “no evidence of MS”.
3. Context window expansion
  - Capturing  $\pm 2$  sentences for better interpretation of subtype and mobility.
4. Clear tagging of “unknown” vs “not mentioned” in training data.
5. Use of F1-score and recall for more detailed evaluation.
6. Expansion of the training dataset with clinician-annotated letters.

## Conclusion

Dr Abdullah Virk’s project provides valuable proof-of-concept evidence that AI can accurately interpret some elements of MS clinic letters, while revealing important limitations for more complex or inconsistently documented data fields.

This work represents an early but significant step toward using AI to streamline clinical data capture, reduce manual administration, and support future precision-focused MS care.

# Pressure injury prevention in advanced MS

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*Joanna Wakefield, MS specialist practitioner, Ashford and St Peter's Hospitals NHS Foundation Trust*

## The challenge

People with advanced MS face significantly higher risk of pressure injuries, driven by multiple MS-related factors highlighted in NICE (2014) guidance:

- Severe mobility restriction
- Reduced or absent sensation
- Cognitive impairment
- Inability to reposition independently
- Postural deformity
- Moisture/incontinence
- Nutritional deficits

Within Jo's community MS caseload, she observed several individuals being admitted to hospital due to pressure injuries — often resulting in:

- Long hospital stays
- Reduced independence
- Temporary (sometimes prolonged) admission to nursing homes
- Increased carer burden
- Marked impact on wellbeing and quality of life

Research confirms that pressure injuries:

- Affect over 700,000 people annually
- Cost the NHS over £1.4 million per day
- Have a significant negative effect on quality of life, pain, and emotional wellbeing

Despite these risks, pressure injury prevention in advanced MS is often inconsistent, and existing practice tended to be informal, opportunistic, and highly variable.

## The project

Jo aimed to strengthen pressure injury prevention for people with advanced MS by focusing on two key elements of NICE guidance:

1. Risk identification
2. Patient and carer education

The project involved:

- Reviewing current practice across the community MS service
- Introducing the Braden Scale as a standardised annual risk assessment tool
- Developing improved documentation for communicating pressure care needs
- Providing tailored education and written resources to patients and carers

The Braden Scale was selected for its simplicity and moderate predictive validity (Huang et al., 2021), making it suitable for use during community MS annual reviews.

## The results

The project led to practical, implementable changes in routine community MS care:

### 1. Systematic risk assessment

The Braden Scale is now used to identify those at high or severe risk (score  $\leq 12$ ). This supports earlier and more consistent identification of pressure injury vulnerability.

### 2. Enhanced documentation

Key risk factors (posture, equipment, continence, nutritional factors, mobility) are now formally recorded and included in GP letters, strengthening multidisciplinary communication.

### 3. Tailored pressure injury education

Patients and carers now receive:

- Verbal and written guidance
- Bespoke advice matched to their individual risks
- Signposting for concerns or escalating symptoms

This approach aligns with evidence that education tailored to patient needs and circumstances improves health literacy and outcomes (Durrant et al., 2019).

### 4. Insights from real patient experience

The poster's case example ("Ann") demonstrates the severe impact of pressure injuries in daily life, including:

- 37-day hospital admission
- 18 months in a care home
- Risks linked to posture, prolonged sitting, and difficulty tolerating recommended repositioning

This example emphasises the need for more meaningful, personalised education and collaborative decision-making.

## The impact

The project has already strengthened:

- Early identification of high-risk patients
- Consistency of pressure injury assessment
- Quality of information shared with GPs and wider MDT teams
- Tailoring of advice to patient goals, lifestyle, and abilities
- Continuity of care during hospital admissions and transitions

It supports a more proactive, preventative approach, helping people with advanced MS remain safely at home for longer.

## The future

Jo proposes next steps to further embed and expand this pathway:

1. Gather patient feedback on usefulness of education and resources.
2. Extend proactive prevention to people with mild/moderate risk.
3. Create a standardised pressure injury documentation template to share across community and secondary care.
4. Develop early MS team education and prevention initiatives to catch risks sooner.
5. Evaluate long-term outcomes such as incidence of pressure injury, admissions, and equipment provision.

## Conclusion

Jo Wakefield's project addresses a significant yet under-recognised area of advanced MS care.

By introducing standardised risk assessment, improved documentation, and personalised education, she has created a clearer, more robust approach to pressure injury prevention in community MS practice.

This work provides a strong foundation for future service development and has the potential to significantly improve safety, independence, and quality of life for people with advanced MS.



# Menopause screening and promoting ageing well for women with multiple sclerosis

*Kelly Wood, clinical specialist physiotherapist & Laura Loxley, clinical specialist occupational therapist, South West Yorkshire Partnership NHS Foundation Trust*

## The challenge

Women are three times more likely to develop MS than men, and approximately 30% of women with MS are peri- or post-menopausal. Despite this, menopause remains poorly recognised and inconsistently assessed within MS services, even though hormonal change may influence MS symptoms, disability progression, and quality of life.

The overlap between menopausal and MS symptoms — including fatigue, heat sensitivity, cognitive changes, mood disturbance, bladder symptoms, muscle weakness, and pain — makes assessment even more complex.

Evidence and emerging research suggest:

- Oestrogen decline may contribute to neurodegeneration and cognitive decline.
- Sleep disturbance during menopause can worsen MS symptoms.
- Vasomotor instability can trigger Uhthoff's phenomenon.
- Bone health and fracture risk require particular attention, especially with steroid exposure.

Yet women with MS are rarely offered structured menopause assessment or proactive education about the menopause, HRT, or ageing well.

## The project

Kelly and Laura's project forms part of a wider service redesign within the Long-Term Conditions Therapy Team, aiming to shift from reactive to proactive care. They proposed developing a comprehensive menopause screening pathway integrated within holistic MS assessments.

Their objectives were to:

- Improve personalised care and patient choice
- Promote healthy ageing and reduce risk of future comorbidities
- Enhance signposting and "make every contact count"
- Improve communication between NHS Trusts and primary care
- Reduce unnecessary long-term commissioning costs

To achieve this, the project focused on selecting and piloting menopause assessment tools that could be integrated without overburdening appointments.

Tools proposed for inclusion included:

- Menopause Rating Scale (MRS): measures psychological, somatic, and urogenital symptoms
- FRAX®: assesses bone health and fracture risk
- PHQ-9: screens for low mood and depression

A focus group will evaluate these tools for usability, relevance, and feasibility, before piloting a combined assessment within clinical practice.

## The results

As this is a developmental service proposal, the main outputs to date include:

- A clear case for integrating menopause screening into MS care
- Identification of validated assessment tools suitable for MS populations
- A structured proposal for designing a holistic menopause screening component within annual reviews
- Recognition that HRT is often overlooked in women with MS despite benefits for mood, cognition, vasomotor symptoms, bone health, metabolic and cardiovascular health

The review highlighted important clinical insights:

- The peri-menopause often coincides with transition from RRMS to more progressive forms of MS
- Many symptoms commonly attributed to “MS progression” may in fact relate to menopause
- Preventative care in midlife is crucial — particularly regarding bone health, sarcopenia, falls risk, and cardiovascular wellbeing

## The impact

Although not yet fully implemented, this project has already prompted:

- Increased professional awareness
- Improved understanding of the menopause/MS interface
- Recognition of the need for structured, proactive assessment within clinical reviews
- Stronger alignment with person-centred care principles and healthy ageing frameworks
- A foundation for future cross-service collaboration between neurology, gynaecology, primary care, and menopause specialists

It also positions the service to better address inequity for women ageing with MS.

## The future

Next steps identified by Kelly and Laura include:

1. Establish a focus group to evaluate and select assessment tools.
2. Pilot the menopause screening components within routine LTC/MS assessments.
3. Develop patient-facing educational materials.
4. Strengthen interdepartmental pathways, especially with menopause specialists and primary care.
5. Evaluate patient experience and refine the pathway using feedback.
6. Integrate screening outcomes into MDT decision-making, care planning, and onward referrals.

## Conclusion

Kelly Wood and Laura Loxley highlight a critical but overlooked aspect of MS care: the menopause.

By proposing a structured menopause screening and ageing well pathway, they aim to improve women's health, promote independence, prevent avoidable comorbidities, and support holistic wellbeing in midlife and beyond.

Their project provides an essential foundation for future service transformation in women's health within MS pathways.

## National impact, reflections and conclusion

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### The national Picture: progress and learning from 2025

The 2025 MS Foundation MasterClass cohort represents a diverse cross-section of the UK's MS workforce — from specialist nurses and pharmacists to physiotherapists, occupational therapists, and neurologists. Their projects collectively illustrate how education, when coupled with structured support and mentorship, can drive genuine service transformation.

Across 22 projects, participants delivered tangible improvements in safety, efficiency, accessibility, and patient experience. Many initiatives have already influenced local practice, with several being scaled regionally or informing wider discussions on MS care pathways, digital transformation, rehabilitation, and personalised care.

### Shared learning and emerging insights

The 2025 projects highlight a number of emerging areas that will continue to shape MS service development in the years ahead:

- **Growing recognition of cognitive health**  
Community teams are beginning to integrate validated cognitive screening tools such as the PDQ, supporting earlier identification of cognitive concerns and strengthening MDT decision-making.
- **Closer integration with primary care**  
Improved collaboration between MS specialists and GPs — as demonstrated in several projects — strengthens continuity of care, ensures long-term condition management principles are applied equitably, and enhances safety, monitoring, and holistic support.
- **A stronger emphasis on holistic health and lifelong wellbeing**  
Menopause, mental health, pain, spasticity, mobility, and palliative principles are increasingly embedded within MS care, reflecting a mature understanding of the full lifespan impact of MS.
- **The rise of patient co-production**  
Many projects actively engaged people with MS to shape resources, guide pathway redesign, or test new tools. This reinforces the MasterClass ethos of education that drives change through partnership, ensuring services evolve in ways that reflect lived experience.

## Conclusion

The MS Foundation MasterClass 2025: Education with Impact report showcases how individual passion, combined with structured learning, translates into collective transformation. From local audits to..... system-level redesign, every project reflects the shared vision of the Neurology Academy: to create a future where people with multiple sclerosis receive care that is coordinated, compassionate, and evidence-led.

Through these projects, delegates have demonstrated not only the power of education to inspire innovation, but also the power of collaboration to sustain it. Together, they are helping to redefine what excellence in MS care looks like — now and for the years to come.

Find out more about MS Academy: [neurologyacademy.org/ms-academy](https://neurologyacademy.org/ms-academy)



## Neurology Academy: education with impact

**MS Academy** is part of Neurology Academy.

Neurology Academy is an innovative educational provider for healthcare professionals including consultants, specialist nurses, pharmacists, therapists and other allied health professionals. Our courses are developed by practising specialists who combine their experience and expertise into case-based learning designed to create specialists in their field with confidence in effecting change.

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