Multiple Sclerosis Academy®

Education with impact: MS Academy

MS Foundation MasterClass impact report 2024

Neurology Academy®

NEUROLOGY ACADEMY: EDUCATION WITH IMPACT

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Introduction

Multiple sclerosis (MS) is a complex and evolving neurological condition that requires equally adaptive and multidisciplinary approaches to care. The MS Foundation MasterClass 2024 was developed to address this need by fostering innovation, collaboration, and education among healthcare professionals. Through a series of impactful projects, this MasterClass aimed to enhance the understanding, management, and delivery of MS care across the UK. For many delegates, this was their first experience of delivering and showcasing a project of this kind.

The projects showcased in this report reflect the diverse challenges faced by people with MS and healthcare teams, from optimising early interventions to streamlining pathways and improving patient education. Each project was designed to address a specific gap in service provision or care delivery, while also being scalable for implementation in other regions or settings.

In addition to advancing clinical practices, the projects collectively highlight the importance of engaging with patients as active participants in their care. By prioritising patient-centred approaches and leveraging multidisciplinary expertise, the MasterClass has created a blueprint for transforming MS services nationwide. This report summarises the outcomes, challenges, and potential for broader application of these pioneering initiatives.

“The MS Foundation MasterClass 2024 projects showcase the remarkable impact of innovation, collaboration, and dedication in advancing MS care. These initiatives not only address critical gaps but also inspire a new standard of excellence in patient-centred healthcare.”

- *Dr Wallace Brownlee, honorary academic director, MS Academy*

“The Foundation MasterClass delegate projects showcased a deep understanding of key issues, a strong commitment to enhancing patient care, and remarkable innovation and determination to drive future change. Easily my favourite part of the MasterClass because it demonstrates the delegate's journey through our education.”

- *Ruth Stross, head of nursing, Neurology Academy*

“Great seeing and hearing about everyone's projects. Liked how the session was kept relaxed and informal so it wasn't intimidating at all to speak in front of everyone in the group.”

- *Delegate feedback*

“Easy, relaxed atmosphere. Really enjoyed reading others' posters. Amazing depth and breadth of knowledge. Boosted my own confidence that we are doing the right thing in our setting. I found the entire experience very positive. Doing a project was quite a daunting prospect but the process helped me to focus on the direction, needs and limits of our own service and patients. The project may be used/included ultimately to justify and inform any future changes to MS services so the whole process was extremely beneficial.”

- *Delegate feedback*

Key objectives of the MS Foundation MasterClass 2024:

1. **Empower healthcare professionals** with the tools and knowledge to innovate and improve MS care pathways.
2. **Foster collaboration** among multidisciplinary teams and the third sector to address complex patient needs.
3. **Enhance patient outcomes** by addressing gaps in education, early intervention, and specialised support.
4. **Drive sustainable change** through replicable models and evidence-based approaches.

The insights gained from this MasterClass reflect the potential for local solutions to inspire national transformation in MS care. The MS Foundation MasterClass 2024 projects represent a significant step forward in advancing MS care by addressing critical gaps, innovating treatment pathways, and fostering multidisciplinary collaboration. These projects highlight the potential for local initiatives to create widespread improvements in patient care, showcasing solutions that are scalable across the UK.

Through diverse themes, including early intervention, patient education, streamlined services, and improved safety protocols, the projects underscore the dedication of healthcare professionals to overcome systemic challenges and optimise MS care. The insights gained from these efforts not only enhance patient experiences but also provide replicable models for national service transformation.

Endorsements from third sector organisations, such as charities, non-profits, and community groups, bring vital perspectives to healthcare education. These voices bridge the gap between clinical practice and lived experience, fostering more inclusive, holistic learning for our delegates. Their support for all of the MS MasterClasses is key and encourages collaboration across sectors, enriching educational content and promoting shared understanding among healthcare professionals, patients, and communities alike.

> **"I was privileged to attend the Foundation MasterClass this year. The teaching was wonderful, and the atmosphere was positive, but the highlight for me was hearing delegates presenting their projects with so much passion. There was a real breadth of topics showing the increasingly holistic treatment and management of MS around the country - and really demonstrating how each delegate addresses an issue specific to their patch."**
>
> *- Charlie Peel, healthcare partnerships lead, OvercomingMS*

Themes explored:

- **Empowering patient education:** Focused on enabling self-management and improving the flow of clinical consultations.
- **Improving pathway efficiency:** Identifying and targeting inefficiencies in referrals, diagnostics, and multidisciplinary collaboration.
- **Enhancing safety monitoring:** Governance for high-risk therapies, improving treatment outcomes.

Each project demonstrates how education and collaboration can deliver meaningful changes in MS care while inspiring innovation across healthcare settings.

Acknowledgements

Every single piece of work in this booklet comes from the efforts of dedicated healthcare professionals and we are very grateful to each for their work on these projects. We're also aware that, without our Faculty and our speakers, there would be no MS Academy, and are hugely thankful to them, and to our sponsors whose financial support enables so much of our work.

National themes and takeaways

The MS Foundation MasterClass 2024 projects collectively provide a comprehensive overview of critical areas for improvement and innovation in MS care. By addressing specific challenges at the local level, these initiatives offer scalable solutions that can be applied nationally. The following themes and takeaways reflect the collective impact of these projects:

1. Empowering patient education:

- Projects such as the Living well with MS initiative highlight the transformative potential of targeted education in empowering patients. By improving their understanding of brain health and self-management strategies, patients are better equipped to actively engage in their care, reducing reliance on clinical interventions and promoting better outcomes.

2. Streamlining pathways:

- Initiatives like optic neuritis pathway development and regional MDT referral reviews demonstrate the value of optimised referral and diagnostic processes. By reducing inefficiencies and delays, these projects enable timely interventions and improve the overall patient experience.

3. Enhancing multidisciplinary collaboration:

- The importance of effective communication and collaboration between healthcare professionals was a recurring theme. Projects such as integrating multidisciplinary teams for referral reviews and improving MRI monitoring in Anti-CD20 DMTs underscore how multidisciplinary approaches can lead to more cohesive and efficient care delivery.

4. Advancing safety and monitoring practices:

- Robust safety protocols and enhanced monitoring systems were pivotal in projects like safety monitoring for Sativex therapy and experience with cladribine. These initiatives ensure adherence to guidelines and improve treatment efficacy, setting benchmarks for high-risk therapies.

5. Promoting early intervention:

- Early-stage interventions, such as those seen in the developing a community-based early rehabilitation pathway project, demonstrated the importance of proactive care. Engaging patients early in their disease journey can prevent complications and foster long-term self-management.

6. Addressing service gaps locally:

- Localised initiatives, such as the Worcestershire MS Services project, highlight the impact of tailoring services to meet regional needs. These efforts reduce patient burden, improve accessibility, and strengthen the overall care network.

Takeaway message:

The MS Foundation MasterClass 2024 delegate projects demonstrated the transformative power of focused, patient-centred innovation in addressing the challenges of MS care. These projects highlight how targeted education, streamlined pathways, multidisciplinary collaboration, and robust safety protocols can collectively enhance patient outcomes and improve the overall quality of services.

The MasterClass has showcased that small, localised changes can have a ripple effect, inspiring broader national improvements. Each initiative provides a replicable model that, with sustained investment and collaboration, can revolutionise MS care delivery across the UK. Ultimately, these projects are not just solutions, they are a testament to the dedication of healthcare professionals to provide equitable, high-quality, and forward-thinking care to all MS patients. The MS Foundation MasterClass 2024 projects underscore the power of innovation, education, and collaboration in advancing MS care. By addressing both systemic challenges and individual patient needs, these initiatives provide a replicable framework for transforming MS services across the UK. Continued investment in such projects will ensure that all patients benefit from equitable, efficient, and high-quality care.

Early intervention and education:

Projects like Anna Lord's Living well with MS session demonstrated how targeted education empowers patients, improving self-management and reducing dependency on healthcare services.

Streamlined pathways:

Unified referral systems, such as Jihad Gasmelseed's optic neuritis pathway, highlight the value of reducing inefficiencies to improve patient experiences.

Multidisciplinary collaboration:

Initiatives like the regional MDT referral reviews underscore the importance of clear communication and collaboration across care teams to deliver seamless, person-centred care.

Safety and monitoring enhancements:

Robust protocols, such as those proposed by Lindsey Bezzina for bladder management, ensure adherence to guidelines and improve treatment outcomes.

Conclusion:

The MS Foundation MasterClass 2024 projects illustrate how small, local innovations can lead to national advancements in MS care. These efforts embody a commitment to enhancing patient outcomes, optimising healthcare resources, and fostering multidisciplinary collaboration. Through targeted education, streamlined pathways, and improved safety protocols, these initiatives provide a replicable blueprint for improving MS services across the UK. With continued support from sponsors, these projects demonstrate the transformative potential of innovation and collaboration in healthcare.

By addressing systemic challenges and embracing forward-thinking approaches, the MS Academy continues to inspire meaningful change and shape the future of MS care.

Improving introductory communication for advanced MS clinics

Dr Sophie Mullins, specialty registrar neuropalliative fellow, Southmead Hospital, North Bristol NHS Trust

The challenge

Advanced multiple sclerosis (MS) patients often face complex symptoms and require multidisciplinary care. However, inadequate communication prior to clinic appointments can lead to patients feeling unprepared, resulting in inefficient consultations and unmet care needs.

The project

Dr Sophie Mullins identified the need to enhance pre-clinic communication for advanced MS patients. She developed an introductory information leaflet designed to better prepare patients for their clinic visits, thereby improving the effectiveness of consultations and overall patient satisfaction:

View the full MS Foundation MasterClass 19 project winners artricle

Key steps included:

- **Needs assessment:** Conducted surveys and interviews with patients and healthcare professionals to identify gaps in pre-clinic communication and understand patient expectations.
- **Development of information leaflet:** Created a comprehensive yet accessible leaflet detailing what patients can expect during their clinic visit, including the roles of different healthcare professionals, potential discussion topics, and how to prepare for the appointment.
- **Implementation:** Distributed the leaflet to patients scheduled for advanced MS clinics at Southmead Hospital, ensuring they received it well in advance of their appointments:

The results

- **Improved patient preparedness:** Patients reported feeling more informed and prepared for their appointments, leading to more productive discussions during consultations.
- **Enhanced consultation efficiency:** Healthcare professionals observed that patients were more focused and engaged, allowing for more efficient use of consultation time.
- **Positive feedback:** Both patients and staff provided favorable feedback on the clarity and usefulness of the information leaflet.

The impact

Key benefits include:

- **Empowered patients:** Providing clear information beforehand empowered patients to actively participate in their care planning.
- **Optimised clinic workflow:** Enhanced patient preparedness contributed to smoother clinic operations and reduced appointment overruns.
- **Improved patient satisfaction:** Patients appreciated the proactive communication, leading to increased satisfaction with the care received.

The future

1. **Evaluation and feedback:** Continue to gather patient and staff feedback to refine the information leaflet and ensure it meets evolving needs.
2. **Wider implementation:** Consider adopting the leaflet across other departments and clinics within the trust to standardise pre-clinic communication.
3. **Digital integration:** Explore digital formats of the leaflet, such as emails or online portals, to increase accessibility and convenience for patients.

Conclusion

Dr Sophie Mullins' initiative to improve introductory communication for advanced MS clinics through a tailored information leaflet has led to better-prepared patients, more efficient consultations, and enhanced overall patient satisfaction. This approach serves as a model for improving pre-clinic communication in other specialties and healthcare settings.

View full project

Rethinking our MS bladder service

Dr Lindsey Bezzina, clinical fellow, King's College Hospital NHS Foundation Trust

The challenge

Bladder dysfunction is a prevalent issue among individuals with multiple sclerosis (MS), affecting approximately 70–80% of patients. Symptoms such as increased frequency, urgency, incontinence, and retention can significantly impact hygiene, social activities, and overall quality of life. At King's College Hospital, the existing bladder management services for MS patients were identified as suboptimal, leading to inadequate symptom control and patient dissatisfaction.

The project

Lindsey Bezzina initiated a comprehensive review and restructuring of the MS bladder service to enhance patient outcomes and satisfaction.

Key steps included:

- **Service audit:** Conducted a thorough audit of the current bladder management services to identify gaps and areas needing improvement.
- **Multidisciplinary collaboration:** Engaged a multidisciplinary team, including neurologists, urologists, specialist nurses, and physiotherapists, to develop a cohesive and patient-centred bladder management pathway.
- **Implementation of nurse-led clinics:** Established dedicated nurse-led bladder clinics to provide timely assessments, interventions, and ongoing support for MS patients experiencing bladder dysfunction.
- **Patient education and self-management:** Developed educational materials and workshops to empower patients with knowledge and strategies for effective self-management of bladder symptoms.

The results

- **Improved access to care:** The introduction of nurse-led clinics reduced waiting times for bladder assessments and interventions, ensuring timely support for patients.
- **Enhanced patient satisfaction:** Patients reported increased satisfaction with the tailored care and support received, leading to improved quality of life.
- **Effective symptom management:** The multidisciplinary approach facilitated comprehensive assessments and individualised treatment plans, resulting in better symptom control.

The impact

Key benefits included:

- **Patient empowerment:** Educational initiatives equipped patients with the knowledge and tools to manage their bladder symptoms effectively, promoting independence and confidence.
- **Integrated care:** Collaboration among healthcare professionals ensured a holistic approach to bladder management, addressing both physical and psychosocial aspects.
- **Sustainable service model:** The nurse-led clinic model provided a cost-effective and scalable solution to meet the ongoing needs of MS patients with bladder dysfunction.

The future

1. **Continuous evaluation:** Implement regular audits and patient feedback mechanisms to monitor the effectiveness of the bladder service and identify areas for further improvement.
2. **Staff training and development:** Provide ongoing training for healthcare professionals to maintain high standards of care and stay updated on best practices in bladder management for MS patients.
3. **Research and innovation:** Explore and integrate new technologies and treatment modalities to enhance bladder management strategies and patient outcomes.

Conclusion

The restructured MS bladder service led by Lindsey Bezzina has significantly improved the management of bladder dysfunction in MS patients at King's College Hospital. Through a multidisciplinary and patient-centred approach, the project has enhanced patient satisfaction, symptom control, and overall quality of life. Ongoing evaluation and innovation will ensure the service continues to meet the evolving needs of patients.

View full project

Living well with MS: a pilot physiotherapy-led group information session

Anna Lord, physiotherapist, The Walton Centre NHS Foundation Trust

The challenge

Many individuals with multiple sclerosis (MS) lack a comprehensive understanding of how lifestyle factors, particularly exercise, influence brain health and disease progression. This gap in knowledge can lead to suboptimal self-management and increased reliance on clinical interventions.

The project

Anna Lord developed and implemented a physiotherapy-led group information session aimed at educating MS patients on the importance of brain health and the benefits of regular physical activity.

Key steps included:

- **Session development:** Designed a 90-minute interactive session covering topics such as brain health, the role of exercise in MS management, and practical strategies to incorporate physical activity into daily routines.
- **Participant recruitment:** Identified and invited MS patients who could benefit from enhanced education on self-management and exercise.
- **Session delivery:** Conducted the session in a group setting to encourage peer support and shared learning experiences.
- **Feedback collection:** Gathered participant feedback through questionnaires to assess the session's effectiveness and areas for improvement.

The results

- **Participant engagement:** The session was well-received, with participants actively engaging in discussions and expressing appreciation for the practical advice provided.
- **Increased awareness:** Attendees reported a heightened understanding of the connection between exercise and brain health in MS.
- **Positive behavioural intentions:** All participants indicated an intention to increase their physical activity levels following the session.

The impact

Key benefits included:

- **Empowered self-management:** Participants felt more confident in managing their condition through lifestyle modifications.
- **Enhanced peer support:** The group setting fostered a sense of community, allowing individuals to share experiences and support each other's efforts to incorporate exercise into their lives.
- **Potential for reduced clinical visits:** By promoting proactive health management, the initiative may lead to a decreased need for clinical interventions over time.

The future

1. **Session expansion:** Offer the information session regularly and extend invitations to a broader group of MS patients.
2. **Resource development:** Create supplementary materials, such as handouts or online resources, to reinforce session content and support ongoing patient education.
3. **Long-term follow-up:** Implement follow-up assessments to evaluate the sustained impact of the session on participants' physical activity levels and overall disease management.

Conclusion

This pilot project demonstrated that a physiotherapy-led group information session could effectively enhance MS patients' understanding of brain health and motivate positive lifestyle changes. The encouraging feedback suggests that such initiatives can play a crucial role in empowering patients and improving self-management, ultimately contributing to better health outcomes.

View full project

Advance care planning (ACP): audit of community rehabilitation medicine MS caseload

Dr Collins, community rehabilitation specialist, Northern Lincolnshire and Goole NHS Foundation Trust

The challenge

Advance Care Planning (ACP) discussions were not systematically incorporated into community rehabilitation services for multiple sclerosis (MS) patients. This oversight led to gaps in long-term care planning, potentially resulting in care that did not align with patients' preferences and needs.

The project

Dr Collins conducted an audit to assess the integration of ACP discussions within the community rehabilitation medicine caseload for MS patients. The goal was to identify barriers to ACP implementation and develop strategies to embed these critical conversations into routine care.

Key steps included:

- **Audit of current practices**: Reviewed patient records to determine the frequency and quality of ACP discussions within the community rehabilitation setting.
- **Identification of barriers:** Engaged with healthcare professionals to understand challenges hindering ACP integration, such as time constraints, lack of training, or discomfort with the subject matter.
- **Development of an ACP framework:** Created a structured approach to facilitate ACP discussions, including guidelines, prompts, and documentation templates tailored to the community rehabilitation context.
- **Training and support:** Provided education and resources to healthcare professionals to build confidence and competence in conducting ACP conversations.

The results

- **Baseline data:** The audit revealed that ACP discussions were infrequent and inconsistently documented within the community rehabilitation caseload.
- **Identified barriers:** Key challenges included limited time during consultations, lack of standardised processes, and varying levels of comfort among staff in initiating ACP discussions.
- **Framework implementation:** The introduction of a structured ACP framework led to increased initiation and documentation of ACP conversations.

The impact

Key benefits included:

- **Enhanced patient-centered care:** Systematic ACP discussions ensured that care plans better reflected individual patient preferences and goals.
- **Improved staff confidence:** Training and resources empowered healthcare professionals to engage in meaningful ACP conversations, leading to more proactive care planning.
- **Standardised processes:** The ACP framework provided a consistent approach to discussing and documenting advance care plans, improving care continuity.

The future

1. **Ongoing training:** Implement regular training sessions to maintain and enhance staff skills in conducting ACP discussions.
2. **Patient and family engagement:** Develop educational materials to encourage patients and their families to initiate ACP conversations.
3. **Continuous evaluation:** Establish mechanisms for regular audit and feedback to monitor the effectiveness of ACP integration and make necessary adjustments.

Conclusion

The audit highlighted significant gaps in the incorporation of ACP discussions within community rehabilitation services for MS patients. By identifying barriers and implementing a structured framework, the project enhanced the frequency and quality of ACP conversations, leading to more personalised and proactive care planning. Continued efforts in training, patient engagement, and evaluation are essential to sustain these improvements and ensure that care aligns with the evolving preferences and needs of individuals with MS.

View full project

Introducing a pre-consultation patient questionnaire to physiotherapy clinics in the community neurorehabilitation team

Isobelle Gorman, physiotherapist, Central London Community Healthcare NHS Trust

The challenge

Physiotherapy consultations within the Community Neurorehabilitation Team often faced inefficiencies due to incomplete patient histories and unclear treatment goals. This lack of comprehensive information prior to appointments could lead to less effective use of consultation time and suboptimal patient outcomes.

The project

Isobelle Gorman aimed to enhance the efficiency and effectiveness of physiotherapy consultations by introducing a pre-consultation patient questionnaire. This tool was designed to gather essential information from patients before their appointments, ensuring that physiotherapists had a clear understanding of each patient's condition, concerns, and objectives.

Key steps included:

- **Questionnaire development:** Created a comprehensive questionnaire to capture critical information such as medical history, current symptoms, functional limitations, and personal goals related to physiotherapy.
- **Implementation process:** Integrated the questionnaire into the appointment scheduling system, ensuring patients received and completed it prior to their consultations.
- **Staff training:** Educated the physiotherapy team on utilising the questionnaire data to tailor consultations effectively.
- **Patient engagement:** Informed patients about the purpose of the questionnaire and encouraged thorough and honest responses to facilitate better care.

The results

- **Improved consultation efficiency:** Physiotherapists reported that having pre-consultation information allowed for more focused and productive sessions, as they could prioritise addressing specific patient concerns and goals.
- **Enhanced patient satisfaction:** Patients felt that their individual needs were better understood and addressed, leading to increased satisfaction with the care provided.
- **Streamlined care planning:** The collected information enabled the development of personalised treatment plans, improving the overall quality of care.

The impact

Key benefits included:

- **Time optimisation:** Reduced the need for extensive information gathering during consultations, allowing more time for therapeutic interventions.
- **Personalised care:** Facilitated a patient-centered approach by aligning treatment strategies with individual goals and preferences.
- **Improved communication:** Enhanced the dialogue between patients and physiotherapists, fostering a collaborative environment for rehabilitation.

The future

1. **Digital integration:** Develop an electronic version of the questionnaire to streamline data collection and integration into patient records.
2. **Feedback loop:** Establish a system for ongoing patient and staff feedback to continuously refine and improve the questionnaire.
3. **Broader implementation:** Expand the use of the pre-consultation questionnaire to other services within the Community Neurorehabilitation Team and evaluate its impact across different disciplines.

Conclusion

The introduction of a pre-consultation patient questionnaire significantly improved the efficiency and effectiveness of physiotherapy consultations within the Community Neurorehabilitation Team. By ensuring that physiotherapists had access to essential patient information prior to appointments, the project facilitated more personalised and goal-oriented care. The positive outcomes suggest that such tools can enhance patient satisfaction and optimise clinical workflows, with potential applicability across various healthcare settings.

View full project

A fertility preservation pathway: a standardised route for out-of-area participants randomised to autologous haematopoietic stem cell transplantation (aHSCT) on the STAR-MS clinical trial

Sharon Megson, clinical nurse specialist, The Walton Centre NHS Foundation Trust

The challenge

Participants in the STAR-MS clinical trial who are randomised to receive autologous haematopoietic stem cell transplantation (aHSCT) often face challenges in accessing timely fertility preservation services, particularly when they reside outside the primary treatment centre's catchment area. This situation can result in delays to treatment initiation and heightened anxiety among patients regarding the risk of infertility due to the procedure.

The project

Sharon Megson developed a standardised fertility preservation pathway to ensure that all participants, regardless of geographic location, have equitable and timely access to fertility preservation services prior to undergoing aHSCT.

Key steps included:

- **Needs assessment:** Identified gaps in service provision for out-of-area participants and the logistical barriers affecting access.
- **Stakeholder collaboration:** Worked with fertility clinics, reproductive medicine specialists, and the STAR-MS trial coordinators to co-design a streamlined pathway.
- **Pathway development:** Established a clear, step-by-step process outlining referral routes, inter-centre coordination, and timelines to ensure smooth access to fertility services.
- **Patient education:** Created informational materials to support patient understanding of fertility risks associated with aHSCT and available preservation options.

The results

- **Standardised protocol:** Implemented a uniform pathway that clearly defines the referral and coordination process for out-of-area participants, ensuring consistency across the trial.
- **Improved access:** Out-of-area participants experienced fewer delays in initiating fertility preservation procedures, enabling timely commencement of aHSCT treatment.
- **Enhanced patient confidence:** Participants reported reduced anxiety and improved satisfaction, knowing fertility preservation had been proactively integrated into their care.

The impact

Key benefits included:

- **Equitable care:** All trial participants now receive the same standard of care for fertility preservation, irrespective of where they live.
- **Streamlined processes:** Efficient coordination between centres reduced administrative burdens and eliminated unnecessary delays.
- **Patient empowerment:** Clear information and supportive pathways enabled patients to make informed choices regarding their reproductive health.

The future

1. **Pathway evaluation:** Conduct ongoing assessments of pathway effectiveness and adjust based on patient and staff feedback.
2. **Training and awareness:** Deliver continued education for healthcare professionals involved in the STAR-MS trial to ensure consistent application of the pathway.
3. **Policy integration:** Advocate for this standardised fertility pathway to be adopted within national clinical guidelines for aHSCT and other similar treatments.

Conclusion

The development of a standardised fertility preservation pathway for out-of-area participants in the STAR-MS clinical trial has addressed a significant gap in service provision. By ensuring timely and equitable access to fertility services, the project has improved patient experiences, reduced treatment delays, and empowered participants to make informed reproductive health decisions.

View full project

Review of regional MS multidisciplinary team meeting referrals and documentation of outcomes

Charley Benham, advanced pharmacy technician neurosciences & Natasha Westbrook, specialist neurosciences pharmacist, King's College Hospital NHS Foundation Trust

The challenge

Multidisciplinary team (MDT) meetings are essential in multiple sclerosis (MS) care, facilitating collaborative decision-making among healthcare professionals. However, inconsistencies in referral processes and documentation of outcomes can hinder effective communication and continuity of care.

The project

Charley Benham and Natasha Westbrook conducted a review to assess the current practices of MDT meeting referrals and the documentation of outcomes within their regional MS service. The aim was to identify areas for improvement and implement strategies to standardise processes:

Key steps included:

- **Data collection:** Gathered information on existing referral methods and documentation practices across the region.
- **Stakeholder engagement:** Consulted with MDT members to understand challenges and gather insights on current practices.
- **Process mapping:** Analysed the workflow of referrals and documentation to identify variations and inefficiencies.
- **Standardisation efforts:** Developed and introduced standardised templates and guidelines to streamline referral processes and outcome documentation.

The results

- **Enhanced consistency:** The implementation of standardised templates led to more uniform and clear documentation of MDT discussions and decisions.
- **Improved communication:** Standardisation facilitated better information sharing among team members, enhancing collaborative care planning.
- **Increased efficiency:** Streamlined processes reduced administrative burdens, allowing more focus on patient care.

The impact

Key benefits included:

- **Optimised patient care:** Clear and consistent documentation ensured that all team members had access to accurate information, leading to more coordinated and effective patient management.
- **Staff satisfaction:** Standardised processes reduced confusion and workload, contributing to improved job satisfaction among MDT members.
- **Foundation for continuous improvement:** The project established a baseline for ongoing evaluations and enhancements in MDT practices.

The future

1. **Continuous monitoring:** Regular audits to ensure adherence to standardised processes and identify further improvement opportunities.
2. **Training and development:** Ongoing education for staff to maintain high-quality documentation and effective use of standardised tools.
3. **Technology integration:** Explore digital solutions to further streamline referral and documentation processes, enhancing accessibility and efficiency.

Conclusion

The review conducted by Charley Benham and Natasha Westbrook highlighted the importance of standardising MDT meeting referrals and documentation in MS care. By implementing structured processes, the project improved communication, efficiency, and overall patient management within the regional MS service. Continued efforts in monitoring, training, and technological advancements are essential to sustain these improvements and adapt to evolving healthcare needs.

View full project

Optic neuritis referral pathway

Dr Jihad Gasmelseed, specialty registrar in neurology, Royal Devon University Healthcare NHS Foundation Trust

The challenge

Optic neuritis, often presenting as sudden vision loss or eye pain, can be an early indicator of multiple sclerosis (MS). Timely referral and management are crucial to optimise patient outcomes and facilitate early diagnosis of potential underlying neurological conditions. At Royal Devon University Healthcare NHS Foundation Trust, variability in referral practices and delays in the management of optic neuritis were identified, potentially impacting patient care and prognosis.

The project

Dr Jihad Gasmelseed aimed to develop a standardised referral pathway for patients presenting with optic neuritis to ensure prompt evaluation, diagnosis, and management:

Key steps included:

- **Assessment of current practices:** Reviewed existing referral patterns and management strategies for patients with optic neuritis to identify inconsistencies and delays.
- **Stakeholder engagement:** Collaborated with ophthalmologists, neurologists, general practitioners, and emergency department staff to gather insights and foster a multidisciplinary approach to care.
- **Development of referral guidelines:** Established clear criteria for the timely referral of patients with suspected optic neuritis to neurology services, including recommended timelines and necessary diagnostic evaluations.
- **Educational initiatives:** Conducted training sessions and distributed educational materials to healthcare professionals to raise awareness about the importance of early recognition and referral of optic neuritis.

The results

- **Standardised referral process:** Implementation of the new pathway led to more consistent and timely referrals of patients with optic neuritis to neurology services.
- **Reduced time to diagnosis:** The streamlined process decreased the interval between initial presentation and definitive diagnosis, allowing for earlier intervention when necessary.
- **Enhanced multidisciplinary collaboration:** Improved communication and coordination among ophthalmology, neurology, and primary care teams facilitated comprehensive patient care.

The impact

Key benefits included:

- **Improved patient outcomes:** Timely diagnosis and management of optic neuritis reduced the risk of long-term visual impairment and enabled early detection of associated conditions like MS.
- **Increased healthcare efficiency:** A clear referral pathway optimised resource utilisation and reduced unnecessary delays in patient care.
- **Empowered healthcare professionals:** Educational efforts equipped clinicians with the knowledge to identify and act upon cases of optic neuritis promptly.

The future

1. **Continuous monitoring:** Regular audits of the referral pathway to ensure adherence and identify areas for further improvement.
2. **Patient education:** Develop informational resources for patients to recognise symptoms of optic neuritis and seek timely medical attention.
3. **Research opportunities:** Explore the long-term outcomes of patients managed through the standardised pathway to assess its effectiveness and inform future practice.

Conclusion

The establishment of a standardised optic neuritis referral pathway by Dr Jihad Gasmelseed has enhanced the timely and effective management of patients at Royal Devon University Healthcare NHS Foundation Trust. This initiative underscores the importance of multidisciplinary collaboration and education in improving patient care and outcomes in neuro-ophthalmological conditions.

View full project

Experience with cladribine in RRMS patients at Lancashire Teaching Hospitals NHS Foundation Trust

Dr Anupam Bhattacharjee, consultant neurologist, Lancashire Teaching Hospitals NHS Foundation Trust

The challenge

Relapsing-Remitting Multiple Sclerosis (RRMS) is characterised by episodes of neurological dysfunction followed by periods of remission. Managing RRMS effectively requires disease-modifying therapies (DMTs) that balance efficacy with safety. Cladribine, an oral DMT, has shown promise in reducing relapse rates and slowing disease progression. However, real-world data on its use, particularly concerning patient outcomes and safety profiles, remain limited.

The project

Dr Anupam Bhattacharjee conducted a retrospective analysis to evaluate the experience with cladribine in RRMS patients at Lancashire Teaching Hospitals NHS Foundation Trust. The study aimed to assess the efficacy, safety, and patient satisfaction associated with cladribine treatment in a real-world clinical setting.

Key steps included:

- **Patient selection:** Identified RRMS patients who commenced cladribine treatment between January 2020 and May 2023.
- **Data collection:** Gathered data on patient demographics, disease characteristics, prior DMTs, relapse rates, MRI findings, and adverse events before and after cladribine initiation.
- **Outcome measures:** Evaluated clinical outcomes, including annualised relapse rates (ARR), disability progression (measured by the Expanded Disability Status Scale - EDSS), MRI activity, and reported adverse events.
- **Patient feedback:** Collected patient-reported outcomes to assess satisfaction, adherence, and quality of life during cladribine therapy.

The results

- **Efficacy:** Patients demonstrated a significant reduction in ARR post-cladribine treatment. Stabilisation or improvement in EDSS scores was observed in the majority of patients, indicating a halt in disability progression.
- **MRI findings:** Follow-up MRIs showed reduced or stable lesion counts, suggesting effective disease control.
- **Safety:** Cladribine was generally well-tolerated. Reported adverse events were consistent with known safety profiles, including transient lymphopenia and mild infections, with no new safety concerns identified.

- **Patient satisfaction:** High levels of satisfaction were reported, attributed to the oral administration route, manageable side effect profile, and perceived efficacy.

The impact

Key benefits included:

- **Enhanced treatment options:** The positive outcomes support cladribine as a valuable addition to the RRMS treatment arsenal, offering an effective oral alternative to injectable or infusion therapies.
- **Informed decision-making:** Real-world data from this study provide valuable insights for clinicians and patients when considering cladribine, facilitating personalised treatment decisions.
- **Resource optimisation:** The favourable safety profile and reduced monitoring requirements may lead to more efficient utilisation of healthcare resources.

The future

1. **Long-term follow-up:** Continue monitoring patients to assess the sustained efficacy and long-term safety of cladribine in the RRMS population.
2. **Comparative studies:** Conduct studies comparing cladribine with other DMTs to delineate its relative effectiveness and safety.
3. **Patient education:** Develop educational programmes to inform patients about cladribine, emphasising adherence, potential side effects, and the importance of regular follow-up.

Conclusion

The experience at Lancashire Teaching Hospitals NHS Foundation Trust indicates that cladribine is an effective and well-tolerated treatment option for RRMS patients. The observed reduction in relapse rates, stabilisation of disability, and positive patient feedback underscore its utility in clinical practice. Ongoing research and long-term data will further elucidate its role in the evolving landscape of MS management.

View full project

Developing a community service for early MS rehabilitation

Sultana Bhatti, occupational therapist & Marissel Hernandez, neurophysiotherapist, Medway Community Healthcare

The challenge

Early rehabilitation in multiple sclerosis (MS) is crucial for maintaining function and quality of life. However, many communities lack accessible services tailored to the early stages of MS, leading to delays in intervention and suboptimal patient outcomes.

The project

Sultana Bhatti and Marissel Hernandez aimed to establish a community-based rehabilitation service specifically designed for individuals newly diagnosed with MS, focusing on early intervention to promote optimal health and well-being.

Key steps included:

- **Needs assessment:** Conducted surveys and interviews with patients and healthcare providers to identify gaps in existing services and determine the specific rehabilitation needs of early-stage MS patients.
- **Stakeholder engagement:** Collaborated with neurologists, physiotherapists, occupational therapists, and patient advocacy groups to design a comprehensive rehabilitation programme.
- **Programme development:** Created a multidisciplinary rehabilitation programme offering physical therapy, occupational therapy, cognitive training, and psychological support tailored to early MS patients.
- **Implementation:** Launched the programme within the community, ensuring accessibility through flexible scheduling and multiple service locations.

The results

- **Increased access:** The community-based programme provided early-stage MS patients with timely access to rehabilitation services, reducing waiting times and travel burdens.
- **Improved patient outcomes:** Participants reported enhancements in physical function, mental health, and overall quality of life.
- **Positive feedback:** Both patients and healthcare providers expressed high satisfaction with the programme's structure and outcomes.

The impact

Key benefits included:

- **Early intervention:** Addressing rehabilitation needs promptly after diagnosis helped prevent secondary complications and promoted long-term health.
- **Community integration:** Offering services within the community fostered a supportive environment and encouraged peer connections among patients.
- **Resource optimisation:** The programme alleviated pressure on hospital-based services by managing rehabilitation needs in a community setting.

The future

1. **Programme evaluation:** Conduct ongoing assessments to measure the programme's effectiveness and identify areas for improvement.
2. **Expansion:** Explore opportunities to extend the programme to other communities and adapt it for different stages of MS.
3. **Training:** Provide education and training for healthcare professionals to ensure the programme's sustainability and integration into standard care practices.

Conclusion

The development of a community service for early MS rehabilitation has demonstrated significant benefits in patient access, satisfaction, and health outcomes. By focusing on early intervention and leveraging community resources, the programme offers a sustainable model for enhancing the quality of care for individuals with MS.

View full project

Case report: progressive multifocal leukoencephalopathy (PML) and immune reconstitution inflammatory syndrome (IRIS) in a patient with relapsing-remitting multiple sclerosis treated with natalizumab

Dr Hamza Ali, specialty registrar in neurology, University Hospitals of North Midlands NHS Trust

The challenge

Natalizumab is a monoclonal antibody used to treat relapsing-remitting multiple sclerosis (RRMS). While effective, it carries a risk of progressive multifocal leukoencephalopathy (PML), a rare but often fatal brain infection caused by the JC virus. Additionally, immune reconstitution inflammatory syndrome (IRIS) can occur after discontinuing natalizumab, leading to paradoxical worsening of neurological symptoms. Managing these complications presents significant clinical challenges:

Read this article for a detailed overview on Natalizumab

The case

Dr Hamza Ali reported on a patient with RRMS who developed PML after 47 months of natalizumab therapy. The patient was JC virus antibody-positive and had prior immunosuppressant use, increasing the risk of PML. Following natalizumab cessation, the patient experienced IRIS, complicating the clinical course.

Key management steps included:

- **Early recognition:** Identified subtle cognitive changes leading to prompt MRI and cerebrospinal fluid analysis, confirming PML.
- **Discontinuation of natalizumab:** Immediately stopped natalizumab upon PML diagnosis to prevent further immunosuppression.
- **Management of IRIS:** Monitored closely for IRIS development post-natalizumab cessation, managing with corticosteroids upon symptom emergence.

The outcome

- **Clinical stabilisation:** Despite initial deterioration due to IRIS, the patient stabilised with appropriate management.
- **Functional status:** Achieved partial neurological recovery, with ongoing rehabilitation to address residual deficits.

The impact

This case underscores the importance of:

- **Vigilant monitoring:** Regular assessment for early PML signs in high-risk patients on natalizumab.
- **Risk stratification:** Evaluating JC virus antibody status and prior immunosuppressant use before and during treatment.
- **Multidisciplinary approach:** Collaborative management involving neurologists, infectious disease specialists, and rehabilitation teams.

The future

1. **Enhanced surveillance:** Implement routine MRI screening protocols for early PML detection in natalizumab-treated patients.
2. **Patient education:** Inform patients about PML risks and symptom awareness to facilitate prompt reporting.
3. **Research initiatives:** Investigate biomarkers predictive of PML and IRIS to improve risk assessment and management strategies.

Conclusion

Dr Hamza Ali's case report highlights the critical need for early recognition and proactive management of PML and IRIS in RRMS patients undergoing natalizumab therapy. Through vigilant monitoring and a multidisciplinary approach, patient outcomes can be optimised despite these serious complications.

View full project

Audit on the use of MRI in monitoring and managing people with multiple sclerosis on anti-CD20 disease-modifying therapies at Dartford and Gravesham NHS Trust

Dr Hind Mohamed, specialty registrar neurology, East Kent Hospitals University NHS Foundation Trust

The challenge

Multiple sclerosis (MS) is a chronic neurological disorder requiring regular monitoring to assess disease progression and treatment efficacy. Magnetic Resonance Imaging (MRI) plays a pivotal role in this monitoring process. Anti-CD20 therapies, such as ocrelizumab and rituximab, are commonly used disease-modifying therapies (DMTs) for MS. However, there is a lack of standardised guidelines on the optimal frequency and protocols for MRI monitoring in patients receiving these therapies, leading to variability in clinical practice.

The project

Dr Hind Mohamed conducted an audit at Dartford and Gravesham NHS Trust to evaluate current MRI monitoring practices for patients with MS on anti-CD20 DMTs, aiming to align them with international recommendations and enhance patient care.

Key steps included:

- **Data collection:** Retrospectively reviewed medical records of patients with MS receiving anti-CD20 therapies to gather information on MRI frequency, sequences used, and clinical outcomes.
- **Benchmarking against guidelines:** Compared current practices to international guidelines, such as those from the Magnetic Resonance Imaging in MS (MAGNIMS) study group, which recommend specific MRI protocols and monitoring intervals for MS patients.
- **Identification of variations:** Analysed discrepancies between current practices and guideline recommendations to identify areas for improvement.

The results

- **MRI frequency:** The audit revealed variability in MRI monitoring intervals, with some patients receiving more frequent scans than recommended, while others had extended intervals between scans.
- **Use of contrast agents:** Gadolinium-based contrast agents were used inconsistently, with some scans lacking contrast enhancement sequences, potentially affecting the detection of active lesions.

- **Spinal imaging:** Spinal MRI was not routinely performed, despite recommendations for its inclusion in comprehensive MS monitoring protocols.

The impact

Key benefits of addressing these findings include:

- **Standardised monitoring:** Implementing uniform MRI protocols ensures consistent monitoring, facilitating early detection of disease activity and timely therapeutic interventions.
- **Optimised resource utilisation:** Aligning MRI frequency with guidelines prevents unnecessary scans, reducing healthcare costs and patient burden.
- **Enhanced patient outcomes:** Improved monitoring practices contribute to better disease management, potentially slowing progression and enhancing quality of life for patients with MS.

The future

1. **Protocol development:** Establish standardised MRI monitoring protocols for patients on anti-CD20 therapies, incorporating guideline recommendations and tailored to the resources available at Dartford and Gravesham NHS Trust.
2. **Education and training:** Provide training for healthcare professionals on updated MRI protocols and the importance of adherence to enhance compliance and understanding.
3. **Continuous audit:** Implement regular audits to monitor adherence to the new protocols, assess their effectiveness, and make iterative improvements based on audit findings.

Conclusion

The audit conducted by Dr Hind Mohamed at Dartford and Gravesham NHS Trust highlights the need for standardised MRI monitoring protocols for patients with MS on anti-CD20 therapies. By aligning practices with international guidelines, the trust can enhance the quality of care, optimise resource utilisation, and improve clinical outcomes for patients.

View full project

MS services in Worcestershire from the perspective of MS nurses: a case for local MS neurologists and a new joint MS clinic

Dr Ammar Waraich, specialty registrar neurology, University Hospitals Coventry and Warwickshire NHS Trust

The challenge

In Worcestershire, multiple sclerosis (MS) patients often face challenges accessing specialised neurological care due to the absence of local MS neurologists. This situation necessitates travel to distant centres, leading to delays in treatment, increased patient burden, and fragmented care. MS specialist nurses, while providing invaluable support, encounter limitations in managing complex cases without direct collaboration with neurologists.

The project

Dr Ammar Waraich conducted an initiative to evaluate the current MS services in Worcestershire from the perspective of MS nurses, aiming to advocate for the establishment of local MS neurologist positions and the development of a joint MS clinic to enhance patient care.

Key steps included:

- **Needs assessment:** Surveyed MS nurses to gather insights on service gaps, patient challenges, and the impact of the absence of local neurologists on care delivery.
- **Data analysis:** Reviewed patient outcomes, referral patterns, and service utilisation to quantify the effects of current service limitations.
- **Stakeholder engagement:** Engaged with healthcare administrators, primary care providers, and patient advocacy groups to discuss findings and explore solutions.
- **Proposal development:** Formulated a proposal advocating for the recruitment of local MS neurologists and the creation of a joint MS clinic, highlighting anticipated benefits for patient care and system efficiency.

The results

- **Identified service gaps:** The assessment revealed significant delays in diagnosis and treatment initiation, increased patient travel burdens, and reliance on MS nurses for complex case management beyond their typical scope.
- **Support for change:** Stakeholders acknowledged the need for local specialised care, expressing support for the proposed enhancements.

The impact

Key anticipated benefits include:

- **Improved access to care:** Local MS neurologists would provide timely consultations, reducing delays in diagnosis and treatment.
- **Enhanced multidisciplinary collaboration:** A joint MS clinic would facilitate seamless coordination among neurologists, MS nurses, and other allied health professionals, leading to comprehensive care plans.
- **Patient satisfaction:** Reducing the need for distant travel and providing integrated services locally would likely enhance patient satisfaction and adherence to treatment.

The future

1. **Implementation planning:** Develop a detailed plan for recruiting MS neurologists and establishing the joint clinic, including resource allocation and timeline.
2. **Continuous evaluation:** Monitor the impact of these changes on patient outcomes, service utilisation, and satisfaction to ensure objectives are met.
3. **Scalability:** Explore the potential to replicate this model in other regions facing similar challenges to improve MS care nationally.

Conclusion

Addressing the insights of MS nurses regarding service delivery challenges in Worcestershire underscores the critical need for local MS neurologists and a joint MS clinic. Implementing these changes promises to enhance patient access to specialised care, improve outcomes, and optimise the efficiency of MS services in the region.

View full project

Adherence to shared care protocols for sativex in managing MS-related spasticity: a concordance audit across primary and secondary care

Dr Arunachalam Soma, specialty registrar in neurology, Barking, Havering and Redbridge University Hospitals NHS Trust

The challenge

Multiple sclerosis (MS)-related spasticity significantly impairs patient quality of life. Sativex, an oromucosal spray containing delta-9-tetrahydrocannabinol (THC) and cannabidiol (CBD), has been approved for managing moderate to severe spasticity in MS patients unresponsive to other treatments. Effective management requires adherence to shared care protocols between primary and secondary care providers. However, inconsistencies in protocol adherence can lead to suboptimal patient outcomes.

The project

Dr Arunachalam Soma conducted a concordance audit to evaluate adherence to shared care protocols for Sativex across primary and secondary care settings within the Barking, Havering and Redbridge University Hospitals NHS Trust. The goal was to identify discrepancies and implement strategies to enhance protocol compliance.

Key steps included:

- **Data collection:** Reviewed patient records to assess adherence to shared care protocols, focusing on initiation, monitoring, and continuation of Sativex therapy.
- **Stakeholder engagement:** Conducted interviews with healthcare professionals in both primary and secondary care to understand challenges in protocol adherence.
- **Analysis:** Identified common areas of non-compliance and underlying causes.

The results

- **Protocol deviations:** The audit revealed variations in adherence, particularly in monitoring schedules and documentation practices.
- **Communication gaps:** Identified a lack of effective communication between primary and secondary care providers, leading to inconsistencies in patient management.

The impact

Key benefits of addressing these findings include:

- **Standardised care:** Improved adherence to protocols ensures consistent and effective management of MS-related spasticity.
- **Enhanced patient outcomes:** Consistent monitoring and management can lead to better symptom control and quality of life for patients.
- **Interprofessional collaboration:** Strengthened communication between care providers fosters a collaborative approach to patient care.

The future

1. **Education and training:** Develop targeted educational programmes for healthcare professionals to reinforce the importance of protocol adherence.
2. **Improved communication channels:** Establish robust communication systems between primary and secondary care to ensure seamless patient management.
3. **Regular audits:** Implement periodic audits to monitor adherence and address emerging challenges promptly.

Conclusion

Dr Arunachalam Soma's audit highlights the need for improved adherence to shared care protocols for Sativex in managing MS-related spasticity. By addressing identified gaps and enhancing interprofessional collaboration, patient outcomes can be significantly improved.

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