Timely Intervention, Monitoring and Education MATTERS in Multiple Sclerosis (TIME MATTERS in MS): global applicability of the MS Brain Health quality improvement tool

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Introduction and aim

- An Excel-based quality improvement (QI) tool was developed to help MS clinics benchmark their services – based on the MS Brain Health recommendations[1] and standards for timely MS diagnosis and management.[2]
- Feedback from three MS centres that piloted prototype 1 of the tool[3] was incorporated to create prototype 2.
- The current pilot study aimed to assess the applicability of prototype 2 of the QI tool in MS centres across a broad geographical area.

Methods

- MS centres in different countries and healthcare settings were invited to evaluate their service using the QI tool.
- Between 31 August 2020 and 10 May 2021, each participating site reviewed the medical records of 36 adults with MS (who attended the centre at least once during the *Study period*, **Figure 1**) and entered requested data into the tool.
- Criteria were agreed to ensure the inclusion of adequate numbers of patients at different stages of the MS care pathway.
- Pilot study sites were asked to complete a survey following their service evaluation, to provide feedback on:
  - ease of use of the QI tool
  - relevance of the data captured
  - usefulness of the tool for promoting service improvement
  - next steps for refining the tool.

Results

- Seventeen MS centres in 14 countries trialled the QI tool; 14 centres completed the post-service evaluation survey.
- **Ease of use:** 57% of respondents rated the tool as 'very easy' or 'easy' to use and 43% rated it 'somewhat easy' to use (**Figure 2**).
- **Relevance of data:** 93% of respondents regarded their results as 'very relevant' or 'relevant' to their centre (**Figure 3**)
- Of 13 centres, 12 considered it 'very important' or 'important' to regularly review timeframes relating to treatment decisions, brain-healthy lifestyle, disease monitoring and managing new symptoms.

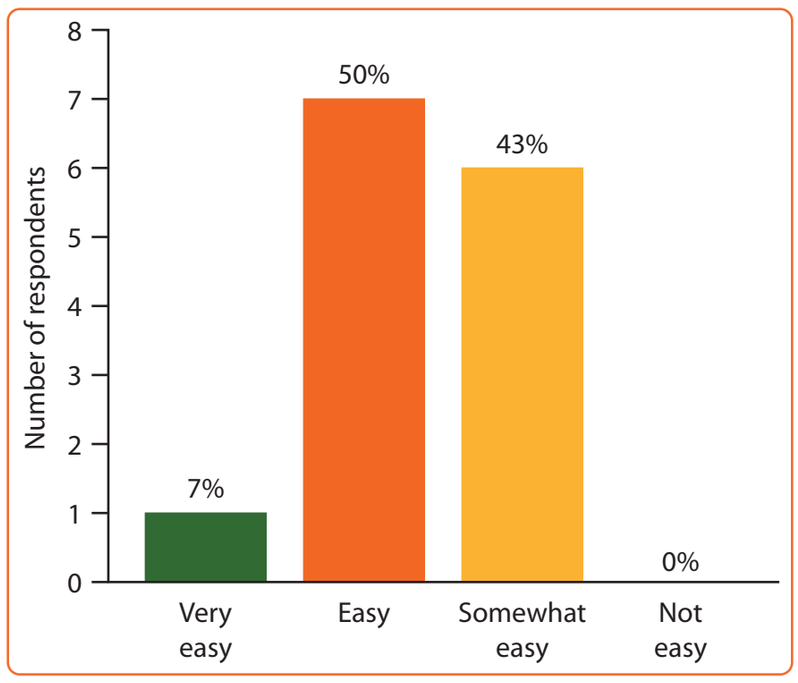

Figure 2. Survey responses to the question 'How easy was the tool to use, on a scale of 1–4, where 1 is not easy and 4 is very easy?' (n = 14).

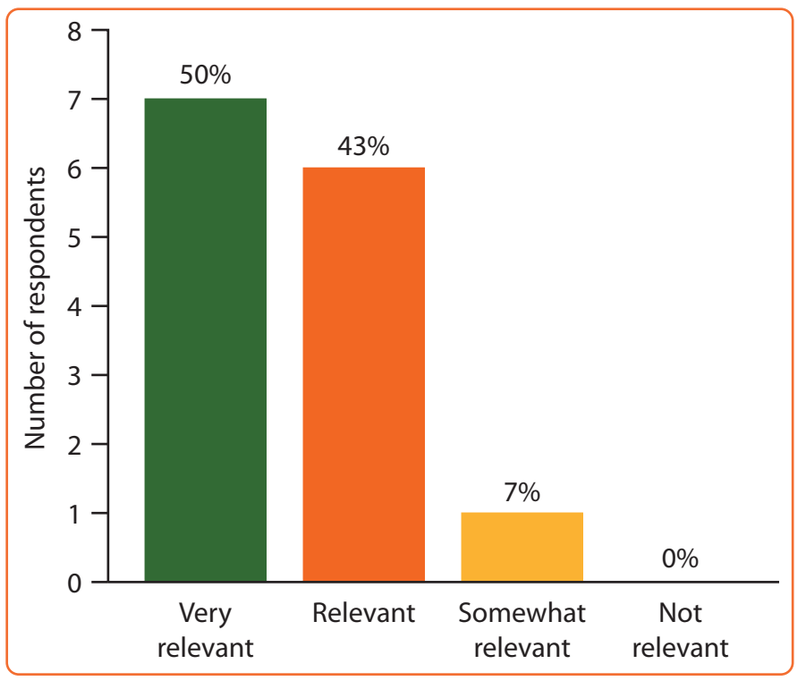

Figure 3. Survey responses to the question 'On a scale of 1 to 4 (where 1 is not relevant and 4 is very relevant), how relevant are the data captured in the tool to your centre?' (n = 14).

MS Brain Health standards voted most relevant for regular use (for a full list of the global consensus standards, click here)	Votes
The MS team should perform a follow-up clinical evaluation of each patient at least **once every year**	7
Anyone who reports symptoms that might be related to MS to a healthcare professional should be referred to a neurologist **within 4 weeks**	5
Patients with MS who experience an acute deterioration of symptoms should be seen by the relevant member of their MS team **within 7 days** of reporting these symptoms	5
Five other standards received four votes each: timing of initial MRI; timing of subsequent MRI(s); discussion about a) brain-healthy lifestyle, b) comorbidities, and c) switching treatment (if suboptimal)	4

Table 1. Standards that received the most votes for inclusion in a modified future tool; 13 centres each chose their five key standards. (Standards with fewer than four votes are not shown.) The timings shown in **bold** represent the 'core' (minimum) standards that all centres should meet.

- **Support for service improvement:** 69% of respondents (9/13) thought their results reflected the care that people with MS currently receive at their centre.
- Based on their findings from piloting the tool, 11 of the 14 centres planned to introduce changes to their service, such as:
  - improve documentation by introducing a pro forma
  - discuss brain health with colleagues not routinely involved in MS care
  - refer patients for lifestyle modification support more routinely
  - offer cognitive screening at first appointment
  - conduct cognitive evaluations more regularly (resources permitting)
  - screen for comorbidities
  - regularly review disease-modifying treatments.
- **Suggested refinements for next phase:** reduce the number of questions included in the tool, making service evaluation quicker and easier.
- The tool currently assesses most of the 26 standards of care defined by the original research;[2] survey respondents were invited to select the *five key MS Brain Health standards* that their centre would assess every year, given the choice.
- The standards that received five or more votes (from 13 respondents) are listed in **Table 1**.
- When the QI tool is made available globally, in the future, 11 of 13 participating MS centres would use a shorter version to reassess their clinical practice.

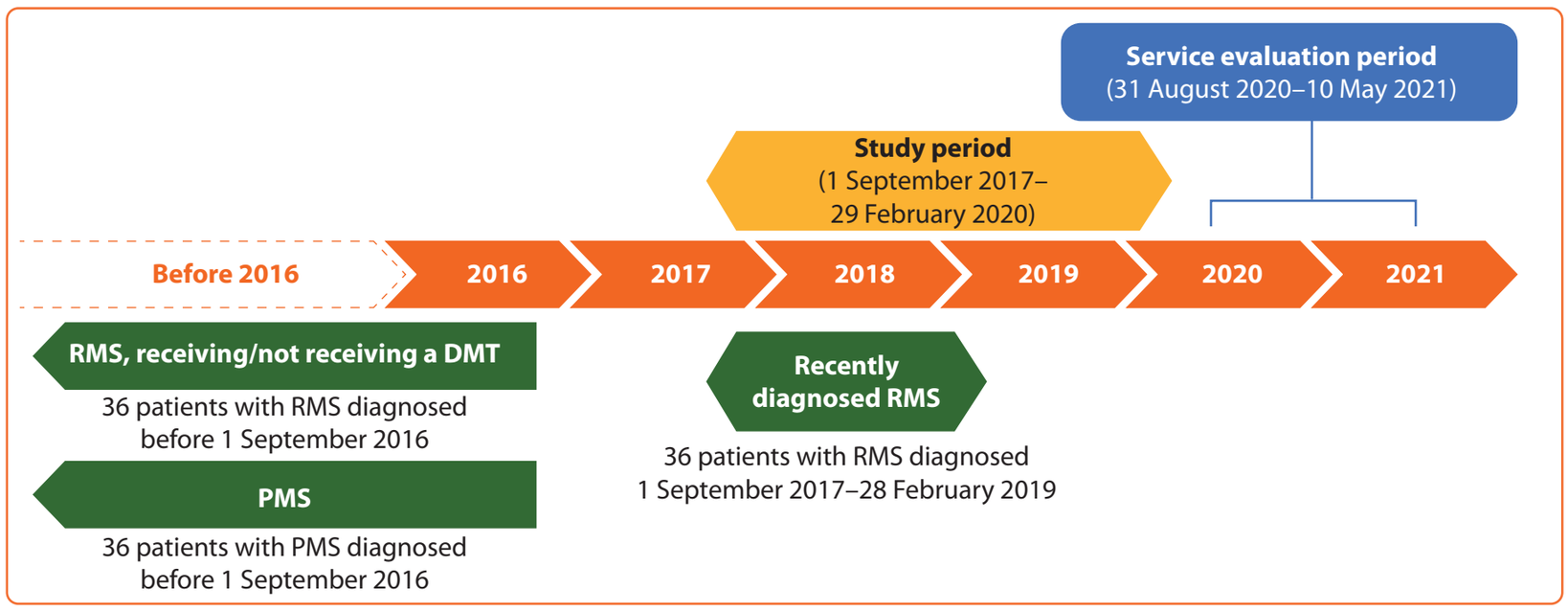

Figure 1. Summary of criteria for selection of 36 patient records to include in the service evaluation.

DMT, disease-modifying treatment; PMS, progressive MS; RMS, relapsing MS

Conclusions

- The QI tool enables MS centres globally to benchmark their services; this can facilitate changes in clinical practice based on local need.
- Widespread uptake of a future short version of the tool may support MS centres to achieve their desired standards for brain health-focused care.
- To promote global uptake of the tool, data collection needs to be incorporated into routine practice.
- The next iteration of the tool should therefore be adapted to enable prospective, rather than retrospective, data collection.

To read *Brain health: time matters in multiple sclerosis*, visit **www.msbrainhealth.org**

Disclosures

J Hobart has received consulting fees, honoraria, support to attend meetings or research support from Acorda, Asubio, Bayer Schering, Biogen Idec, F. Hoffmann-La Roche, Genzyme, Merck Serono, Novartis, Oxford PharmaGenesis and Teva. H Butzkueven's institution receives compensation for advisory board, steering committee and educational activities from Biogen, Roche, Merck and Novartis. His institution receives research support from Biogen, MS Research Australia, NHMRC and MRFF Australia, Novartis and Roche. He receives personal compensation from Oxford Health Policy Forum for serving on the steering group of MS Brain Health. J Haartsen has received consulting fees from Biogen, Merck and Roche. T Ziemssen has received grants and personal fees from Biogen, Novartis, Sanofi, and Teva, and personal fees from Almirall, Bayer, Merck, and Roche. T Lane is the Director of Clinical Research London Ltd and has received fees from Oxford Health Policy Forum. G Giovannoni has received consulting fees from AbbVie, Atara Bio, Bayer HealthCare, Biogen, Canbex Therapeutics, Five Prime Therapeutics, GlaxoSmithKline, GW Pharma, Merck, Merck Serono, Novartis, Oxford PharmaGenesis, Protein Discovery Laboratories, Roche, Sanofi Genzyme, Synthon, Teva Neuroscience and UCB; and grant/research support from Bayer HealthCare, Biogen, Merck, Merck Serono, Novartis and Sanofi Genzyme.

The MS Brain Health initiative is funded by grants from Bristol Myers Squibb and by educational grants from Biogen, F. Hoffmann-La Roche and Merck KGaA, all of whom have no influence on the content. Support for the preparation of this poster has been provided by Oxford PharmaGenesis and Oxford Health Policy Forum, Oxford, UK, funded by the companies listed above.

Presented at the 37th Congress of the European Committee for Treatment and Research in Multiple Sclerosis (Digital Experience), 13–15 October 2021

References

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3. Hobart J *et al.* Poster presented at the 34th congress of the European Committee for Treatment and Research in Multiple Sclerosis, 10–12 October 2018, Berlin, Germany.

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