Integrating the Patient Voice into Continuing Medical Education Results in Improved Clinician Knowledge and Performance in Multiple Sclerosis

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INTRODUCTION

Background

Multiple sclerosis (MS) strikes people in the prime of their lives, affecting upwards of 400,000 people in the United States and 2.5 million worldwide.[1] However, a diagnosis of MS is no longer a sentence of doom; "the MS landscape has been comprehensively and irreversibly transformed by progress"[2] in understanding the pathophysiology of the disease and the development of targeted therapy. As new therapeutic options become available, establishing effective patient-centric treatment plans, based upon newly identified targets and incorporating mechanism of action, will be increasingly essential to achieving optimum quality of life for all of these individuals.

The Patient Voice

CME Outfitters (CMEO) believes that in all instructional design, the patient must be at the center of the educational equation. Their stories reflect struggles, challenges, and communications gaps between the patient and the health care providers (HCPs) that may become a barrier to optimal outcomes. Telling their stories creates teachable moments and changes culture, and changing culture is essential to changing behaviors.

Outcomes Study Aim

The goal of this study was to demonstrate the effectiveness of integrating audio responses directly from patients into an educational activity to raise awareness of challenges patients face and narrow knowledge and performance gaps among neurologists and the multidisciplinary treatment team.

Gaps in Clinician Knowledge and Performance

As the front-line of HCPs seeing patients with MS, the team of neurologists, physician assistants, nurse practitioners, nurses, and pharmacists plays a critical role in tailoring treatment to the individual patient as well as incorporating patient-centered care including shared decision-making in practice. As such, the following gaps in knowledge and performance have been observed:

- *Appreciation of new insights into the pathophysiology of MS and advanced molecular engineering technologies have altered treatment targets in MS.[3] Practicing neurologists often lack up-to-date information to appropriately incorporate new and emerging agents into their therapeutic regimens in a timely fashion.*
- *When several treatments are available, health care professionals should involve patients in the decision-making process regarding whether to initiate treatment and, if so, with which agent; however, "health care professionals often do not involve their patients in these decisions."[4]*
- *In their pursuit of the Holy Grail of MS treatment—disease-activity free status (DAFS)—clinicians may lose sight of what is actually of most importance to their patients.*

Educational Activity Goals

Education is key to narrowing or eliminating these gaps, but not all education is effective. This continuing education initiative incorporated the patient voice into content to instruct HCPs how to:

- *Develop a management plan that examines the latest treatment options and their mechanism of action in concordance with patients with multiple sclerosis.*
- *Select a decision aid to be incorporated into a model of patient-centered care that involves shared decision-making.*
- *Identify factors that are of primary importance as targets of treatment in collaboration with your patients with MS.*

METHODS

Education centered around American Academy of Neurology MS Quality Measurement Set practice guidelines and National Quality Strategy Priorities for improved engagement of patients in care will improve patient health outcomes.

Achieving a clear patient voice for this intervention began with the engagement of an advisory panel of MS Patient Influencers—MS patients/advocates—each with peer networks of approximately 5,000 patients with MS. Interviews with these patient leaders consisted of questions developed in alignment with the activity learning objectives to gain patient insights and perspective into their care. Both audio and transcribed responses from the patient leader interviews were provided to faculty for review and discussion during the activities, and audio clips from patient leaders were integrated into the educational content. Interviews with these patients provided insights from the patient perspective and aligned patient needs with physician gaps to shape content.

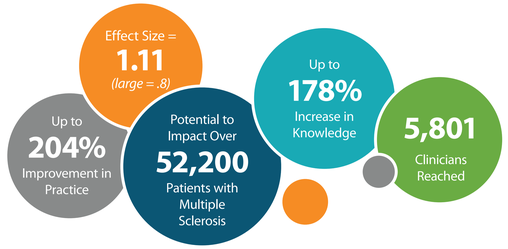
The educational activity described in this presentation was supported by educational grants from Genzyme, a Sanofi company, and Novartis Pharmaceuticals Corporation.

METHODS cont'd

Example Patient Leader Question: What factors most influence people's decisions in weighing risk versus benefit?

The activity consisted of a 60-minute webcast, followed by a 30-minute live Q&A. Audio from interviews with MS patient leaders (n = 21) were integrated into the content. An outcomes study was conducted via a survey administered prior to the activity, immediately after the activity, and 3 months following the activity. The survey consisted of questions evaluating knowledge, competence, performance, and confidence. Data were analyzed using McNemar's tests for paired data. Effect size, expressed as Cohen's *d*, was also calculated for overall knowledge.

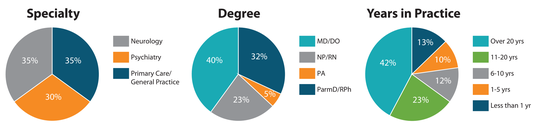
RESULTS



Demographics

A total of 5,801 clinicians participated in the activity, representing nearly 52,200 patients with multiple sclerosis. A subset of participants responded to the follow-up survey (n = 30). Figure 1 shows the demographic distributions of activity participants.

Figure 1. Demographic Distributions of Activity Participants.

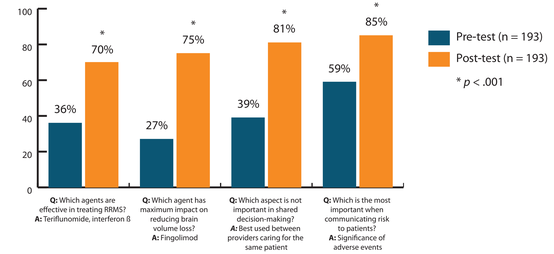


RESULTS cont'd

Knowledge

A significantly larger number of participants post-activity versus pre-activity achieved correct responses on knowledge questions related to identifying agents effective for relapsing-remitting forms of MS (RRMS, 70% versus 36%, $p < .001$), the therapeutic agent with best impact on brain volume loss (75% versus 27%, $p < .001$), elements of shared decision-making (81% versus 39%, $p < .001$), and adverse events as important for communicating risk (85% versus 59%, $p < .001$). These findings reflect an effect size of 1.11 (large = .8). Figure 2 shows percentages of participants responding correctly to the four knowledge questions.

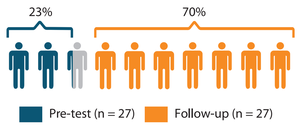
Figure 2. Percentages of Participants Responding Correctly to Four Knowledge Questions, Pre- and Post-Activity.



Performance

HCPs were asked how often they incorporate mechanism of action into their treatment decisions. Response options include 0% of the time, 1% - 25% of the time, 26% - 50% of the time, 51% - 75% of the time, and 76% - 100% of the time. Data were compared statistically between those who answered 51% of the time and above. Participants in the follow-up survey significantly outperformed those in the pre-activity survey (70% versus 23%, $p < .001$) (Figure 3).

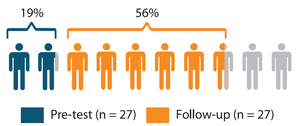
Figure 3. Percentages of Participants Indicating They Incorporate Mechanism of Action into Treatment Decisions at Least Half of the Time.



Confidence

Confidence for identifying factors of importance to their patients was also improved immediately following the activity, with a greater percentage of participants during the follow-up survey indicating they were "Confident" or "Extremely confident," compared to pre-survey (56% versus 19%, $p < .001$) (Figure 4).

Figure 4. Percentages of Participants Indicating They Were "Confident" or "Extremely Confident" in Their Ability to Identify Factors of Importance to Their Patients.



CONCLUSIONS

- Incorporating the patient voice aligns with the patient-centered care and shared decision-making priorities of the Institute for Healthcare Improvement (IHI) Triple Aim and the National Quality Strategy (NQS)

CONCLUSIONS cont'd

- Qualitative analysis found that integrating the patient voice into educational activity on MS improved HCP…

- Feedback from learners supported the qualitative findings, providing real-life examples of improvements in practice behaviors as a result of the activity

DISCUSSION

We harnessed the power of the patient leaders' observations and analysis of their followers to create a patient collaboration with key opinion leaders [KOLs] to provide actionable education. This alignment of patient KOLs and physician KOLs to marry evidence with best practices can truly drive and impact care – and that is a primary goal of CME Outfitters. It has been exciting to hear feedback from clinicians who have been able to immediately implement things they took away from a CMEO activity in their practices.

Learner Feedback

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