Addressing Gaps in MS Patient Care Via Personalized Continuing Education

Katie Robinson, PhD[1]; Patricia Coyle, MD[2]; and Robert A. Esgro[1]

[1]Vindico Medical Education, Thorofare, NJ, krobinson@VindicoCME.com, [2]Stony Brook University Medical Center, Stony Brook, NY

1 Defining the Need for Education

At the time of the needs assessment (Jan '17)

- *There was a 5-year period of rapid approvals for RRMS; providers struggled to differentiate options[1-2]*
- *No therapies were available for PPMS[1]*
- *Shared decision making (SDM) was underutilized[2-3]*

Identified Knowledge/Competence Gaps to Define the Educational Needs

Immunopathology of Disease and Associated Implications

- Neurology providers scored only 44% on questions related to the immunopathology disease and associated clinical implications (e.g., diagnosis, classes of therapies)[2]

Clinical Advances & Patient Engagement

- Neurology providers scored only 35% on pretest questions related to current and emerging treatment options; 37% lacked confidence in differentiating treatment options[2]
- 97% of neurologists recognize the importance of SDM, yet 40% of patients with MS report they have no say in treatment[2,3]

1. D'Amico E, et al. *Int J Mol Sci.* 2016;17;1-14.
2. Vindico Data on File. Neurology. 2016-2017.
3. Wray S, et al. *Neurology.* 2015;84(suppl); abstr P3.235.

2 Program Content and Design

Program Goals and Content

Optimize use of new guidelines and patient outcomes via sequential, personalized education on

Immunopathology of disease & imaging | *New guidelines* | *New and emerging options* | *Gender-specific issues* | *Shared decision making*

Personalized Learning Approach

Half-day CME Summit

229 *Attendees*

Best Of Web Posting

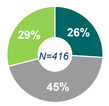
Dec 31, 2017

411 *Learners*

*2 weeks post-learning, participants received an email linking them to a **CME web activity** to addresses the LO on which they were **most deficient** based on outcomes of initial education*

Personalized CME

Invitations



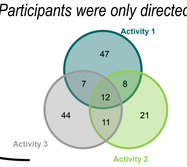
Follow-up Participants

Overall Distribution of Participants

372 *learners, 88 from PL*

21% *participation rate* *(88/416)*

Participants were only directed to 1 activity, yet

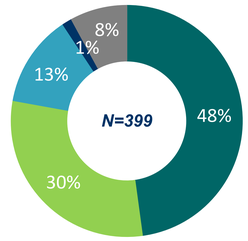


19% *participated in multiple activities*

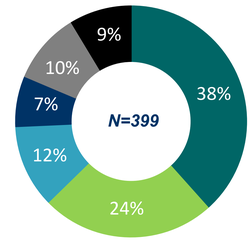
This personalized approached garnered >4-fold increase in neurology follow-up participation and subsequent learning

3 Overall Demographics

Degree



Specialty



78% Were physicians APPs, or nurses

60% Specialize in neurology, radiology or nursing

Providers see on average **8 patients per month** with MS

4 Overall Impact of the Education

Educational Efficacy

Overall there was an **48%** relative increase in knowledge and competence

60% relative increase in knowledge regarding frequency of MRI use in patients on DMTs

78% posttest score on questions related to MS in pregnancy

56% relative increase in knowledge regarding current and emerging DMTs

Potential Patient Impact

>3.8K Number of patients with MS seen per month who are **32% more likely to receive evidence-based care**

5 Personalized Learning – Impact of the Education

100%

Noted that the personalized learning activities reinforced the original content from MS Forum or the web enduring

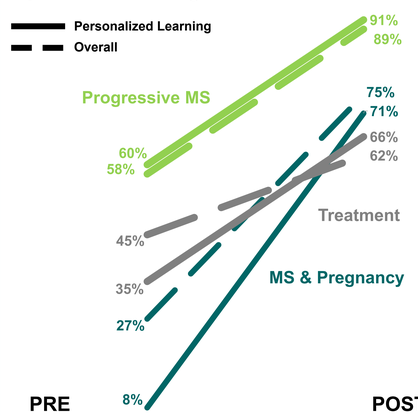
Posttest scores of those who scored 0% on initial CME posttest

71% *N=14* — *MS in Pregnancy*

91% *N=12* — *Progressive MS*

66% *N=17* — *Treatment selection*

Impact on Knowledge



Q: What are options for 30-y/o newly diagnosed patient?

700%

A: IFNβ GA, DMF, fingolimod, teriflunomide, or ocrelizumab

Q: Which of the following is true regarding pregnancy in MS?

53%

A: Pregnancy is safe for women with MS, with no increased risk of complications

Q: What is the best management plan for a 61-y/o with SPMS?

89%

A: Ocrelizumab plus exercise therapy

Self-Reported Performance

100% *Of personalized learning participants have implemented practice changes* *N=15*

6 Conclusions & Opportunities

Personalized Education

- ✓ *Addresses persisting knowledge gaps*
- ✓ *Encourages follow-up participation*
- ✓ *Garners participation beyond that which was directly targeted*

Opportunities

- ✓ *Direct targeting of personalized education can be adopted across specialties*
- ✓ *Personalized learning can be adopted for sequential delivery of education or customization of educational curricula*

This activity was supported by educational grants from Novartis Pharmaceuticals Corporation; Sanofi Genzyme; and Teva Pharmaceuticals.