



MS Project ECHO: Outcomes from an Innovative Pilot to Improve Access to MS Care in Underserved Areas



Gary A Stobbe, MD¹, Kevin N Alschuler, PhD², Deborah P Hertz, MPH³, Annette Wundes, MD¹, Gloria von Geldern, MD¹, John D Scott, MD, MSc, FIDSA⁴, Kenton T Unruh, PhD⁴, Rosalind C Kalb, PhD³, Piper Reynolds, BA³, George H Kraft, MD², Katharine Alexander, BA² and Kurt Johnson, PhD²,
(1)Dept. of Neurology, University of Washington, Seattle, WA, (2)Dept. of Rehabilitation Medicine, University of Washington, Seattle, WA, (3)National Multiple Sclerosis Society, New York, NY, (4)Dept. of Medicine, University of Washington, Seattle, WA

Introduction

- Geographic disparities impact the ability of people with MS to access quality MS Care
- Project ECHO[®] (*Extension for Community Healthcare Outcomes*) improves healthcare outcomes in underserved areas using technology to build confidence and capacity of community providers:
 - Develops “knowledge networks” - bringing together specialists & community providers via videoconferences
 - Shares “best practices” - reducing variability in care and accelerating dissemination of new knowledge
 - Employs case-based learning - maximizing learning efficiency
- Project ECHO[®] - safe & effective for patients with Hepatitis C, HIV, chronic pain
- **MS Project ECHO** - University of Washington (UW) & National MS Society collaborative pilot
 - Designed to improve care delivery to patients with MS in rural communities
 - 41 CME weekly videoconference sessions
 - First Project ECHO to involve an alliance between an academic institution & patient advocacy organization

Objectives

To establish feasibility of the ECHO model™ for the MS population and to assess impact on MS care by community-based providers.

Methods

Facilitation of 41 one-hour sessions, over 3 waves including:

- Experts from UW MS Center, National MS Society and community-based providers from Alaska, Idaho, Montana and Washington
- MS-related didactic (15-30 min) (see *Figure 1*)
- Case presentations by participants (30-45 minutes)
- Connection to lay and professional info and resources from National MS Society

Qualitative interviews upon completion (n= 24; 13 clinical sites. See *Table 1*)

- Impact on provider confidence in MS practice
- Case consultation influence on practice habits
- Connection to information and resources from the National MS Society by patients of the participants

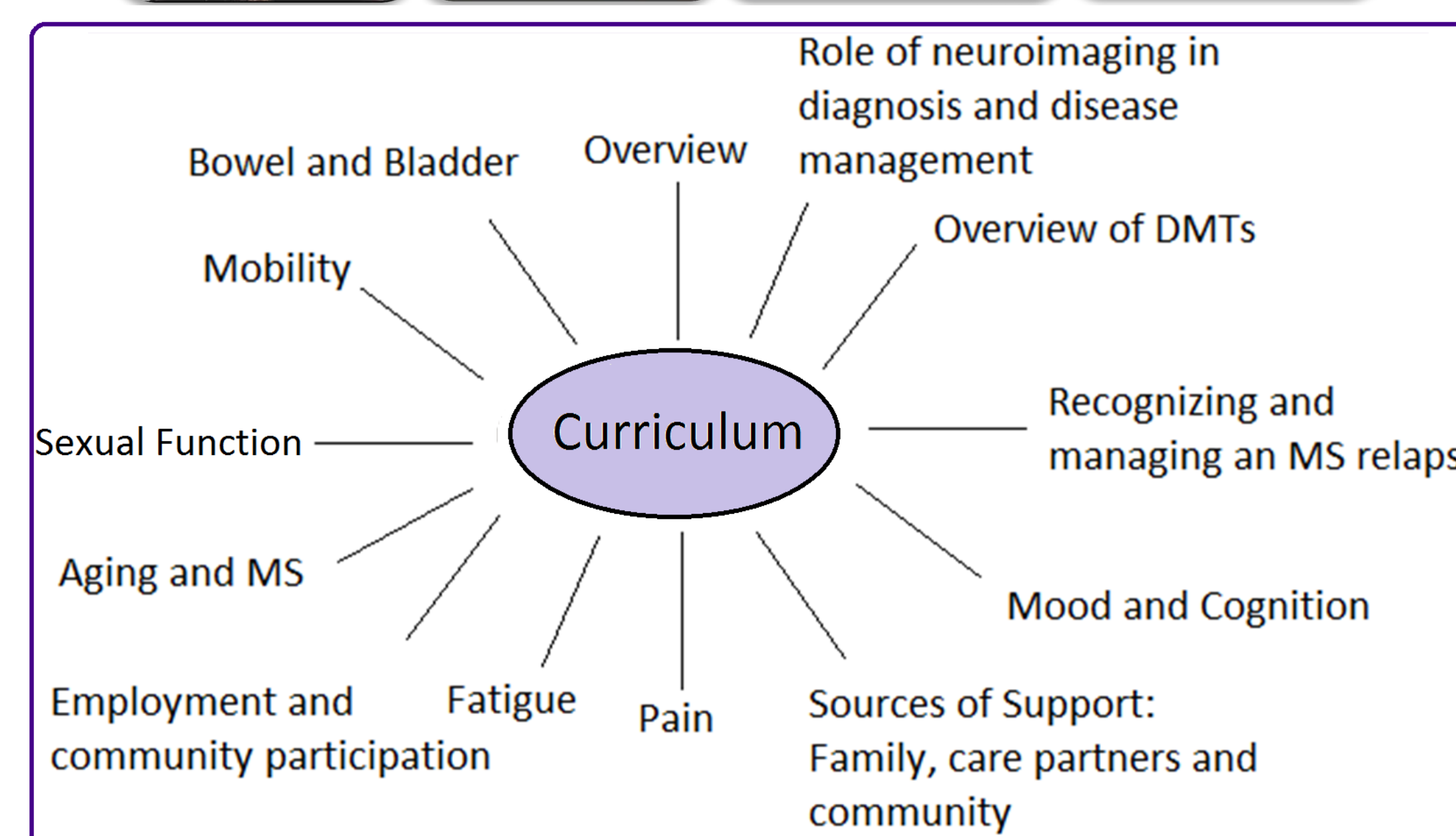


Figure 1. Examples of didactic content.

Discipline	N (Total = 24)
Family Medicine	2
Internal Medicine	3
Physiatry	3
Neurology	11
Naturopathy	1
ARNP	1
Physicians Assistant	3

Table 1

Results

24 Participants engaged in 29-93% of sessions

- Trend of greater participation from participants with more MS patients (76-86%)
- Number of MS patients cared for ranged from less than 10 to over 200

41 cases presented

- Improved confidence in MS care delivery was rated at 4.53 (5 point Likert scale) - bias toward lower ratings from less engaged participants

15 of 24 participants available for interview

- 11 of 15 utilized National MS Society resources
- 13 of 15 appreciated having a mix of specialties represented
- 9 of 15 expressed interest in continuing participation in MS Project ECHO
- 9 of 15 expressed time of day or time constraints as primary barriers to participation
- Having medical students enhanced satisfaction and participation (n=4)
- 12 of 15 interviewed were “presenters” of at least one case (totaling 24 cases) - 3 “non-presenters” attended fewest sessions & perceived the least impact on their practice

Four themes emerged reflecting impact related to the case consultations:

- Improved confidence in existing treatment decisions (9 of 12 presenters) - example – “absolutely influenced me and gave me so much confidence”
- Direct change in patient care (12 of 24 cases) - example – “I shortened the time gap between DMTs when switching”
- Changes in general MS practice habits (8 of 12 presenters) - example – “I made changes monitoring disease progression as well as utilizing Society resources”
- Improved perception of patient confidence in their MS-related care - examples – “my patient was excited to know I was increasing my knowledge of MS care” and “improved confidence knowing I am part of a team”

Conclusions

- MS Project ECHO is feasible and has potential to be an efficient, replicable method to reduce care disparity in rural communities
- Recruitment suggests greatest interest by community neurologists, although other disciplines participated
- Level of participation suggests strong interest in:
 - learning strategies to enhance care for people with MS
 - being part of a learning network

Future Direction

- Replicate MS Project ECHO with a larger number of community-based participants to determine ideal target audience (specialty-type)
- Replicate in other geographic regions (including international)
- Use more objective determinants to examine provider practice impact
- Measure impact more objectively on direct patient resource utilization and outcomes