

Background

Project ECHO, (Extension of Community Health Outcomes) was created by Dr. Sanjeev Arora at the University of New Mexico. Project ECHO follows a 'Hub' and 'Spoke' model of knowledge dissemination and capacity building, which aims to exchange knowledge between academic health science centres ("Hubs") and the frontline of community care partners ("Spokes"). It relies on the flow of knowledge in multiple directions: from specialist to primary care providers; between primary care providers; and from primary care providers to specialist. This educational program uses videoconferencing technology to link participants.

Baycrest Health Sciences, in partnership with North East Specialized Geriatric Centre, has been leading "Project ECHO Care of the Elderly" (ECHO COE) building the capacity of over 100 primary care providers across a large geographic area in Canada since January 2018. Each session is skillfully facilitated by a trained facilitator to maximize engagement and knowledge sharing.

Objective of the Project: To evaluate the efficacy of the ECHO Care of the Elderly program in increasing capacity of primary care providers to manage care of older adults.



"ECHO COE in Action"

Key Message

- ECHO COE uses technology to effectively increase knowledge and self-efficacy of primary care providers in Ontario
- Participants find the technology easy to use

Methodology

Design: Mixed-methods; program evaluation

Participants: Participants were primary care providers across Ontario

Intervention: Project ECHO Care of the Elderly was piloted over 10 weekly 90 minute sessions followed by a 15 week Cycle. Each weekly session focused on a topic related to geriatric care, selected based on needs assessments. Sessions included a short didactic presentation by a medical specialist and a case presentation by a spoke. There were three rotating facilitators who are all certified Care of the Elderly family physicians. Participants registered on a Community of Practice website for access to videos and slides of the didactic presentations, as well as resources and tools mentioned in the sessions.

Evaluation

- On-line pre and post knowledge and self-efficacy questionnaires
- Weekly satisfaction evaluations
- Live focus group, using Zoom videoconferencing technology
- Engagement was scored manually during each session

Findings

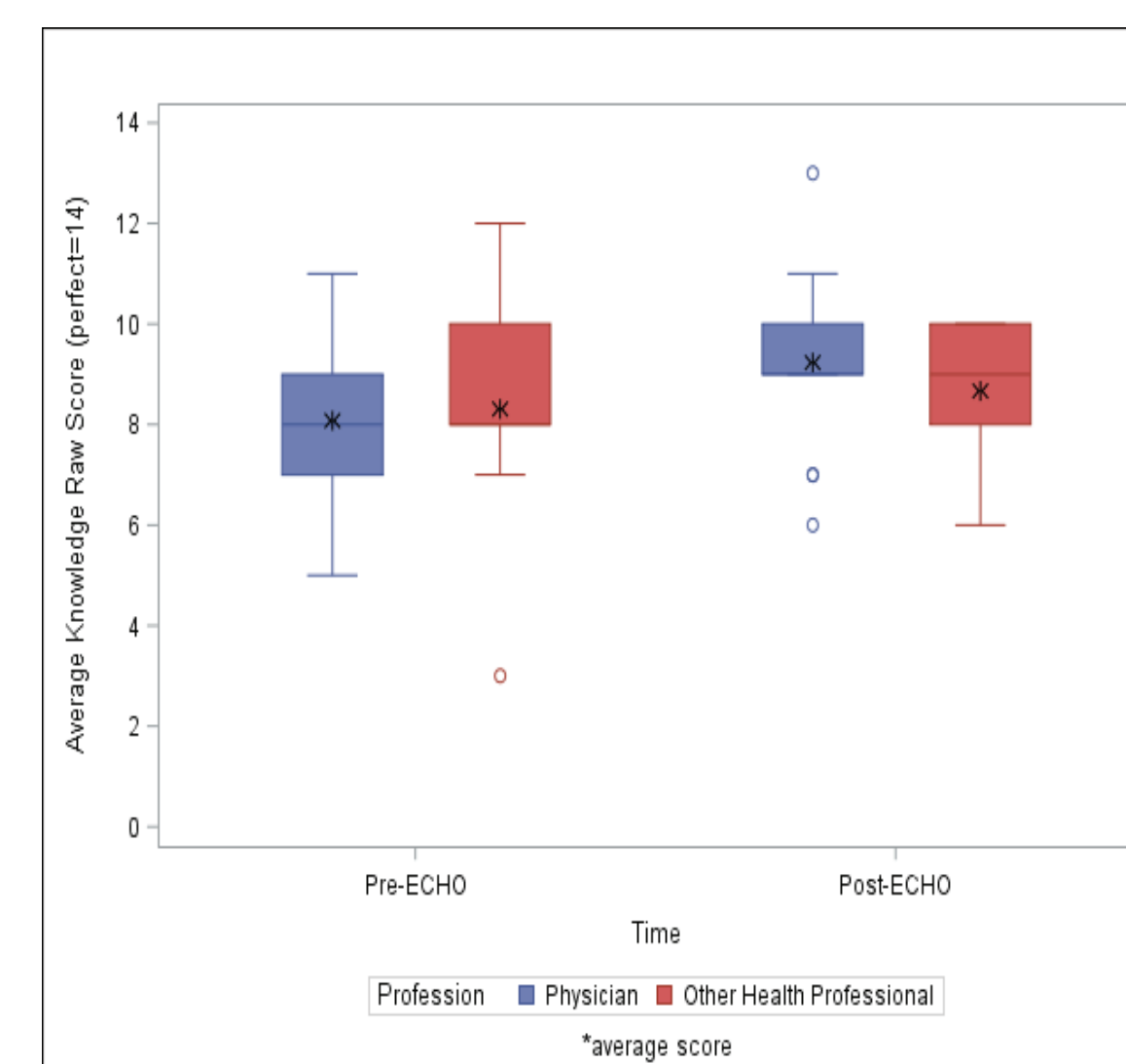


Figure 1. Pre-Post Knowledge Scores for Pilot Participants; n=26
Physicians=13; Non physicians=13

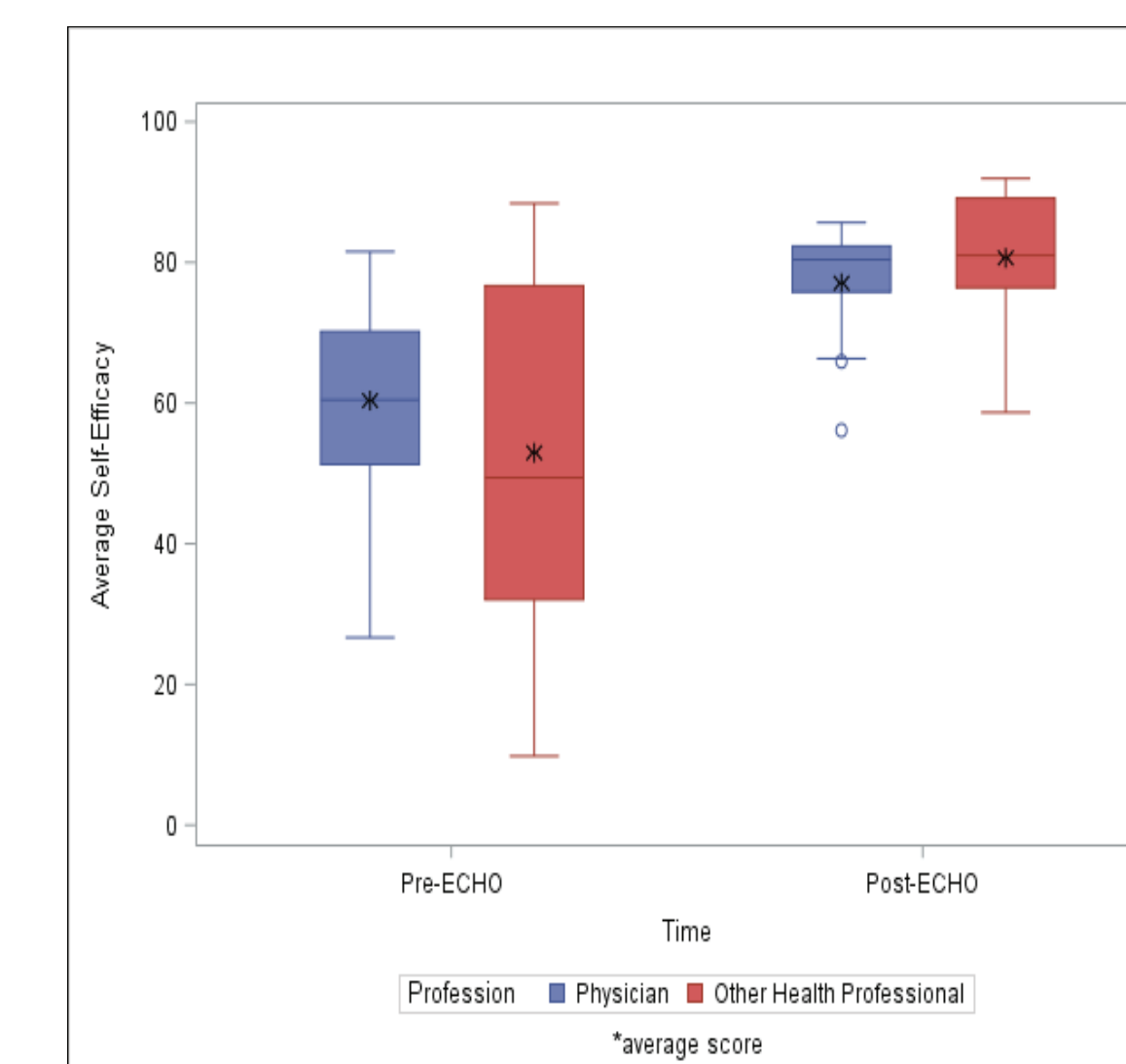


Figure 2. Pre-Post Self-Efficacy Scores for Pilot Participants by Profession; n=26; 0=Not Confident, 50=Somewhat Confident, and 100=Very Confident

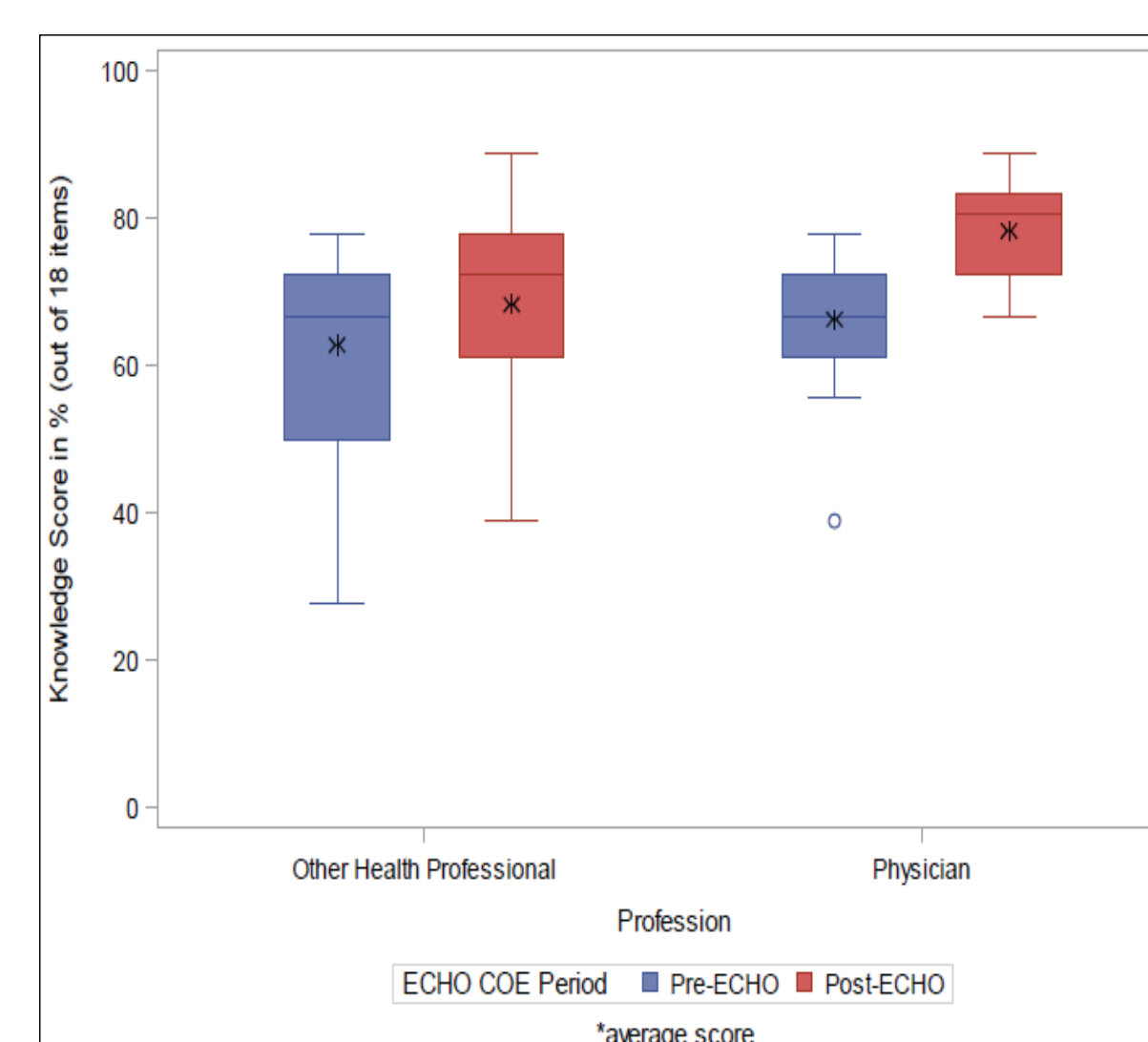


Figure 3. Pre-Post Knowledge Scores by Profession for Cycle 1
Participants; n=42
Physicians=14; Non physicians=28

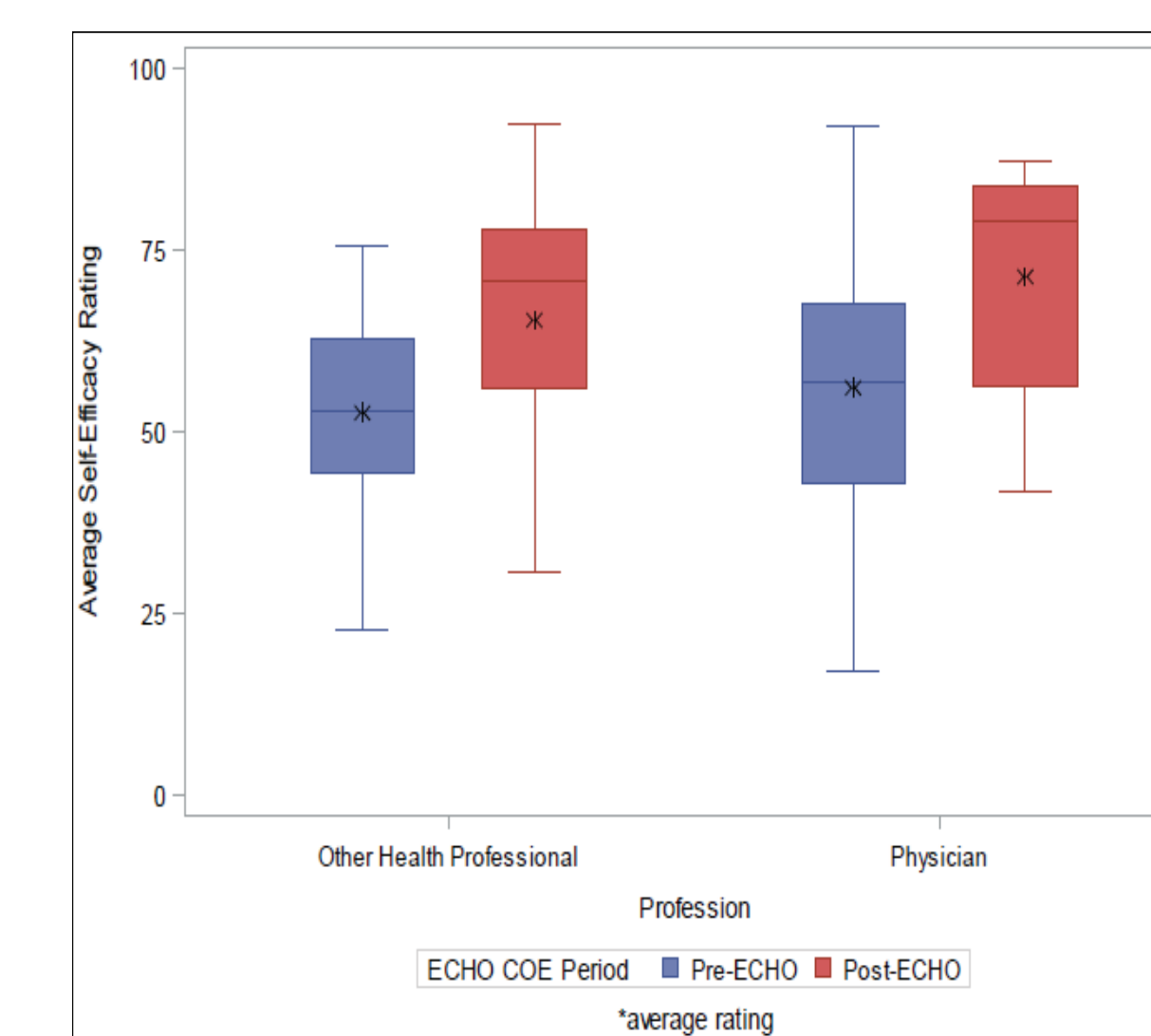


Figure 4. Pre-Post Self-Efficacy Scores for Cycle 1 Participants by Profession; n=42; Scale 0=Not Confident, 50=Somewhat Confident, and 100=Very Confident

Pilot Findings

- Overall, N=26 registrants attended at least 6/10 sessions. Analysis included these 26 participants.
- Both physicians and other health professionals showed a significant increase in self-efficacy (Wilcoxon signed-rank test p=0.001 and p=0.009, respectively).
- Change in knowledge was noted for both groups with larger changes observed among the physicians compared to other health professionals.

Cycle 1 Findings

- Both physicians and other health professionals showed an increase in knowledge (statistically significant) and self-efficacy (statistically significant for non-physicians).
- Improvements were noted in self-reported ratings of comfort level working with older adults (statistically significant)
- Overall, participants were satisfied with the program (4.4 / 5)

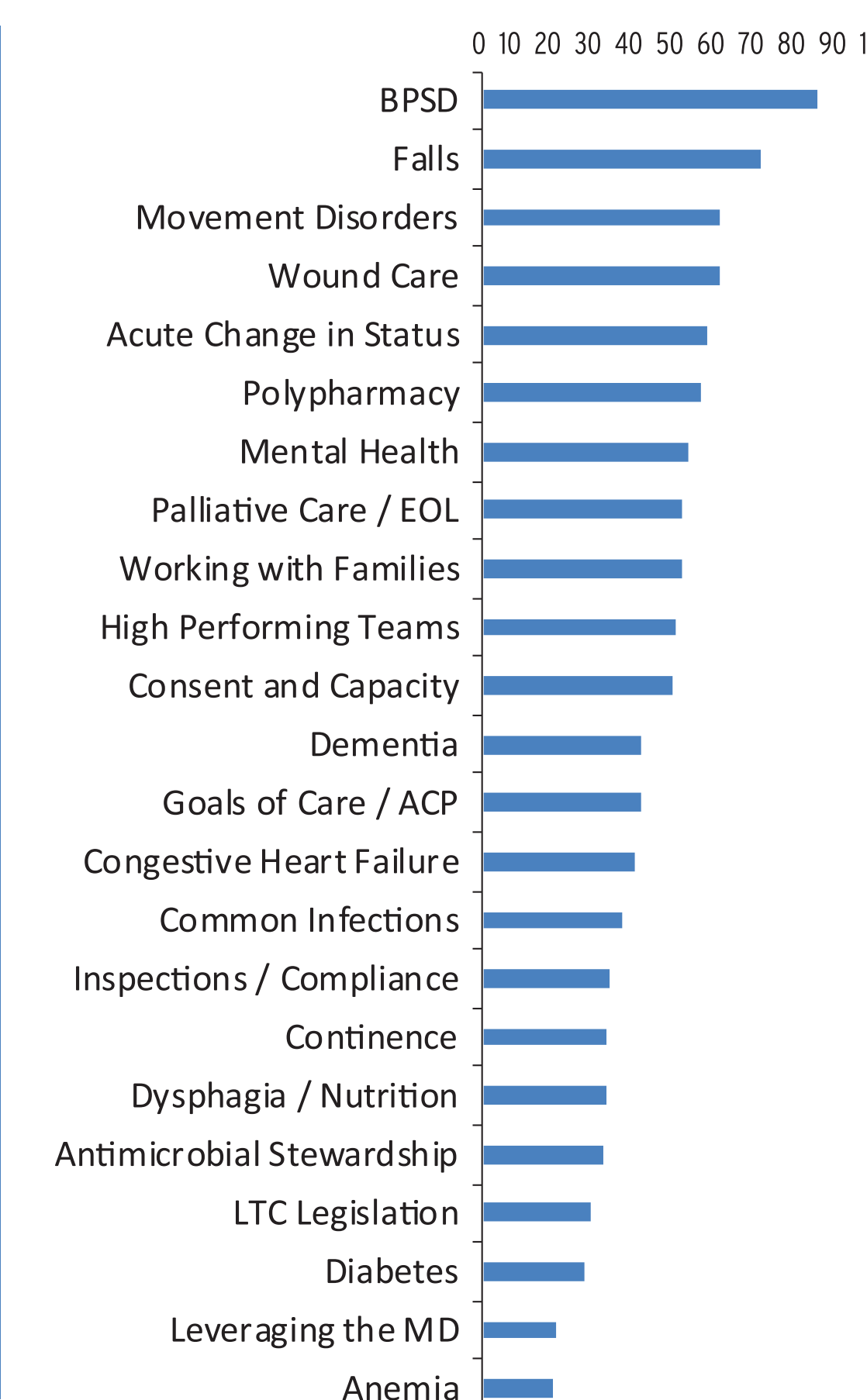
A Need for ECHO COE-LTC

Since initial implementation of ECHO COE in January 2018 we have had repeated requests for ECHO sessions focused on Long-Term Care. Although many topics from ECHO COE are also appropriate for LTC physicians and staff, there are unique needs that occur specifically in LTC. Our first ECHO COE-LTC is running weekly between January - March 2019.

Participating in a LTC focused ECHO offers multiple benefits, including:

- ECHO methodology can be successful in improving care of LTC residents with dementia and/or delirium related behaviours^{1,2}.
- Education framed around real case presentations
- Networking with peers and content experts
- Access to resources, website and community of practice
- A formalized learning and sharing network or community of practice could assist with the co-creation, dissemination, implementation and evaluation of tools and resources across LTC
- No cost Continuing Professional Development credits

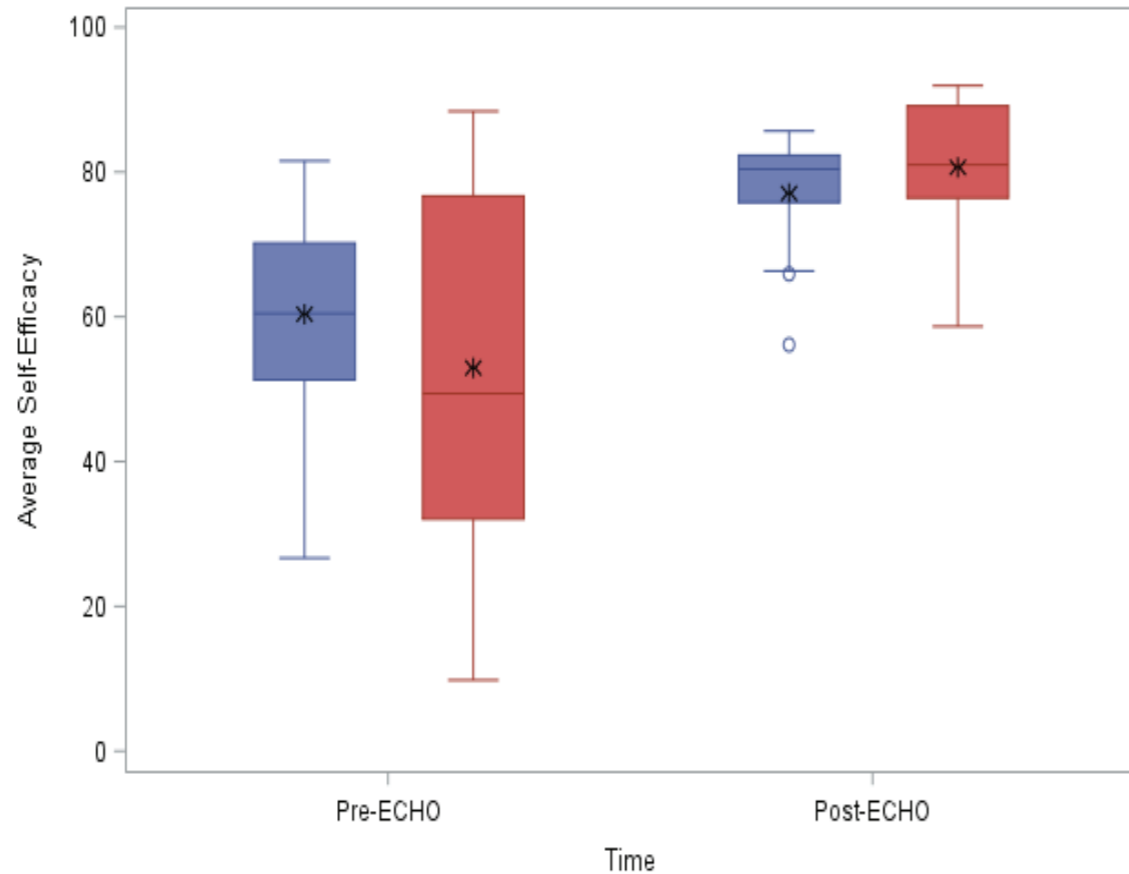
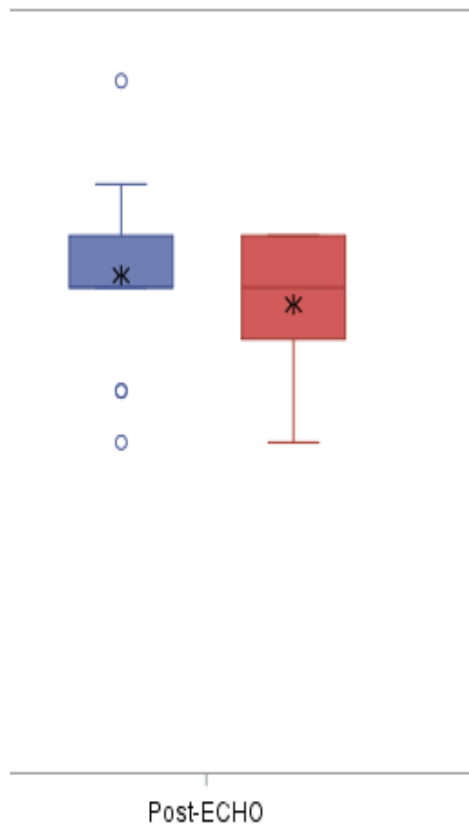
We surveyed medical directors, attending physicians, directors of care and other LTC interprofessional team members to determine what curriculum topics were most relevant and/or challenging for LTC. These findings will inform our curriculum. N=116.



Resources

- Catic AG., et al. ECHO-AGE: An Innovative Model of Geriatric Care for Long-Term Care Residents with Dementia and Behavioral Issues. JAMDA 15, 2014.
- Gordon S., et al. Impact of a Videoconference Educational Intervention on Physical Restraint and Antipsychotic Use in Nursing Homes: Results From the ECHO-AGE Pilot Study. JAMDA 17 (6), 2016.

<https://echo.unm.edu/>
<https://www.echoontario.ca/>
www.baycrest.echoontario.ca



Final Findings

- Overall, N=26 registrants at least 6/10 sessions. Analysis of these 26 participants.
- Both physicians and other health professionals showed a significant increase in self-efficacy (Wilcoxon signed-rank test $p=0.001$ and $p=0.001$ respectively).