

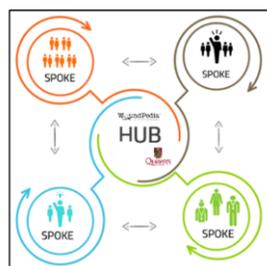
Background Project ECHO Ontario Skin and Wound Care (SWC) is an innovative interprofessional online educational model that provides remote practitioners access to experts from across Ontario, Canada. It offers a new virtual model in this field of work. The learning model features synchronous online sessions with deidentified patient case discussions. Community providers and specialists learn with and from each other, acquire knowledge and skills, increase competency, and foster a community of practice. This was initially an in-person 2-day skills bootcamp; however, public health restrictions due to COVID-19 required the development of a method to teach the necessary skills online. The assessments provided constructive, practical, and actionable feedback that allowed participants to further develop their SWC skills. In the first two years, this program has impacted 441 healthcare providers from 25 professions. We assessed the impact of the training program on participants' knowledge, clinical skills, and management of patients.

Teaching Skills Development Online: Project ECHO Ontario Skin and Wound Adapting to COVID-19

Project Aim To develop and evaluate a virtual skills bootcamp model, during a global pandemic where healthcare practitioners could not meet in person.

Methods

A series of 9 professionally facilitated, edited and peer reviewed demonstration videos focused on different skill domains and learning outcomes were utilized in the ECHO SWC bootcamp (n=80). Participants watched the videos until they felt confident in performing the skills. They then used infrared thermometers, wound care supplies and instructional materials delivered to them by mail to video record themselves applying the skills on volunteers. A team of 11 healthcare SWC experts reviewed the videos and assessed participant performance using a rubric developed by the ECHO SWC team. The bootcamp was evaluated through a pre-post survey. Two-tailed t-tests were used to examine significant differences in all the domains of knowledge examined before and after the training.

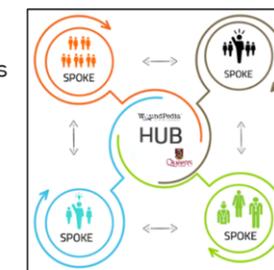


Project ECHO Ontario Skin and Wound: An Effective Model for Interprofessional Education in Skin and Wound Care

Project Aim To develop and evaluate an interprofessional educational model for healthcare providers managing persons with skin and wound issues.

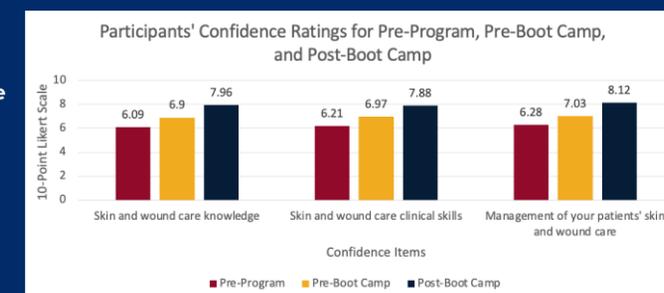
Methods

The program consisted of eight sessions in each cycle (1 & 2) for three cohorts (48 sessions total). The program evaluation for each cohort consisted of pre and post ECHO program and post individual session surveys (n=224) that included up to 22 knowledge domains. Quantitatively, a two-tailed t-test was used to assess whether there were significant increases in participants' knowledge and confidence levels with identified learning objectives. A content analysis was applied to the qualitative data in NVivo using a thematic approach.



Results

- 100%** Agreed that the overall goals of the program had been met
- 99%** Through the program their overall educational needs had been addressed



Overall, 74% of participants indicated that they would make changes to their practice after attending an ECHO session. There was significant change in all three measures of confidence (knowledge, clinical skills, and management of patients) from pre-program to post-program measures (t=-5.175, p<0.001). There was a statistically significant increase in 18 of 22 domains of knowledge for all sessions. Participants indicated that the key strengths of the program sessions included knowledgeable facilitators, evidence-based information, interprofessional collaboration, and topic diversity. Overall weaknesses included internet difficulties, physician-focused topics, timing, and scheduling.

Lessons Learned for Practice

Project ECHO SWC model improved self-efficacy of interprofessional healthcare providers. This innovative model was very effective during the pandemic due to its virtual platform that enhanced interprofessional collaboration, knowledge, and skills development.

Results

- 91%** Felt their learning needs were met
- 87%** Would make changes in their practice as a result
- 87%** Felt the teaching methods were effective
- 91%** Felt there were no barriers to applying the new knowledge to their practice

There was a statistically significant increase in 26 of 27 knowledge domains examined for participants' self-perceived knowledge from pre- to post-test. Participants met or exceeded standards (rated proficient or adequate by reviewers) on 17 of 21 rubric assessment domains.

The kit including learning materials both hard copy and on USB, access to experts and mentors, the equipment provided was important to assist in changes to practice.

Lessons Learned for Practice

The virtual ECHO SWC bootcamp was an effective way to provide hands-on skills training for participants as an alternative to in-person training. For the first time every bootcamp participant was evaluated on every wound care skill. This is a highly successful interprofessional program for educating healthcare professionals during the pandemic.