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## Building Cancer Control Capacity in Health Professionals Through Telementoring: A Survey Study of a Cancer Prevention and Survivorship Care ECHO Program

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### Abstract

Project Extension for Community Healthcare Outcomes (Project ECHO<sup>®</sup>) was developed to democratize knowledge among health professionals in underserved communities. Evidence supporting the use of this model for cancer control is limited. Using surveys adapted from Moore's evaluation framework, we evaluated the training outcomes of an ECHO program on cancer prevention and survivorship care. The study provides preliminary evidence that the ECHO model is a feasible way to build cancer control capacity among the healthcare workforce.

### Keywords

Telemedicine; Education; Continuing; Population health

### Introduction

The American Cancer Society (ACS) estimates that in 2021, approximately 39,010 and 13,460 Indiana residents in the United States will be diagnosed with cancer and die of cancer, respectively. (1) To reduce the cancer burden and care disparities, Indiana University (IU) Fairbanks School of Public Health and the Indiana Cancer Consortium launched a Cancer Prevention and Survivorship Care ECHO program (Cancer ECHO) in September 2019.

Through a multi-point videoconferencing tool, the ECHO model serves as a virtual platform for health professionals to receive cost-free continuing education. Leveraging local expertise, curriculum presentations and case-based learning are provided in each session.

(2) Little evidence supports the effectiveness of using this model in the context of cancer

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prevention and survivorship. The objective of this study is to evaluate the training outcomes of the program during its first year of implementation.

## Methods

This study is a part of a more extensive evaluation project. We assessed outcomes of Cancer ECHO with 30 anonymous surveys. We included 14 program participants who have at least attended Cancer ECHO sessions once between September 17, 2019, and September 16, 2020, as well as 16 non-participants who are the program's target audience. Participants rated satisfaction on a 5-point scale (1=far short of expectations, 5=far exceeds expectations). Participants and non-participants were asked to rate their knowledge, confidence, and practice improvement during the year-long intervention period on a 5-point scale (1=definitely not, 5=definitely yes). We sought to compare the program participants' changes from the Cancer ECHO with the non-participants' changes from other routine sources. This study was approved by the IU Institutional Review Board committee.

## Results

Twenty-two biweekly sessions were held in the first year with 147 unique individuals. They were from 19 counties in Indiana and various locations in the United States, Lebanon, Nigeria, and Kenya. There was an average of 14.5 professionals with 2.5 primary care providers in each session.

Figure 1 summarizes the survey results. The program meets 100% of and exceeds 73% of participants' expectations. The results showed program participants have higher self-ratings on knowledge, confidence, and practice improvement than non-participants. 79% versus 67%, 58% versus 34%, and 58% versus 47% of the participant and non-participant respondents answered 'definitely yes' or 'probably yes' to their improvement in these respective categories. Among them, 50% versus 20%, 29% versus 7%, 23% versus 7% of the participants, and non-participants respondents answered 'definitely yes'.

## Conclusions

The study provides preliminary evidence that the ECHO model is a feasible way to train healthcare workers and build cancer control capacity among healthcare professionals.

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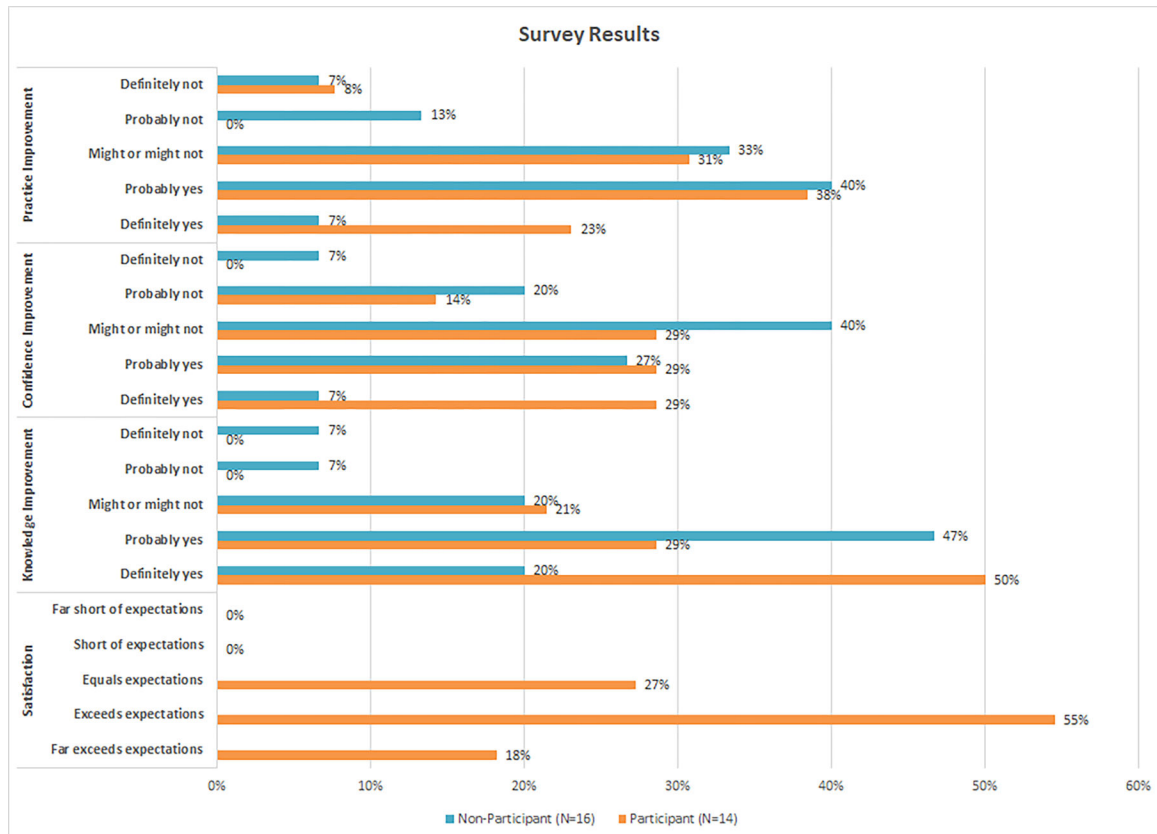
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**Figure 1-- Survey Results of The Self-Reported Satisfaction and Knowledge/Confidence/Practice Improvement**