

Attendance and Learning Outcomes of Statewide Infection Prevention and Control Education and Support Webinars Initiative During the COVID-19 Pandemic: The Nebraska Experience

Rebecca Martinez, BA, BSN, RN, CIC¹, Mounica Soma, MHA, MSPM¹, Josette McConville, BSN, RN, CIC¹,
L. Kate Tyner, BSN, RN, CIC¹, Matthew Donahue, MD², Muhammad Salman Ashraf, MBBS^{1,2,3}, and Daniel M. Brailita, MD^{1,3}

(1) Nebraska Infection Control Assessment and Promotion Program, Nebraska Medicine, Omaha, NE; (2) Nebraska Department of Health and Human Services Healthcare-Associated Infections and Antimicrobial Resistance Program, Nebraska DHHS, Lincoln, NE; (3) Division of Infectious Diseases, University of Nebraska Medical Center, Omaha, NE

Corresponding Author:
Daniel M. Brailita, MD
dabrailita@unmc.edu
985400 Nebraska Medical Center
Omaha, NE 68198-5400

BACKGROUND

- In October 2020, the Nebraska Infection Control Assessment and Promotion program (ICAP), funded by the Nebraska Department of Health and Human Services (DHHS) through a CDC grant, launched a statewide initiative providing infection prevention and control (IPC) education and guidance through weekly webinars to long-term care (LTC) facilities. In March 2021, this was expanded to include a twice monthly webinar for acute care (AC) and outpatient facilities.
- ICAP infection preventionists (IPs) and medical directors developed the content of webinars in collaboration with Nebraska DHHS.
- Webinar recordings and slides were made accessible on the ICAP website.
- Webinar reminders were shared with facilities through the ICAP email distribution list.
- We investigated factors driving attendance and learning outcomes among IPs of 2 groups AC and LTC.

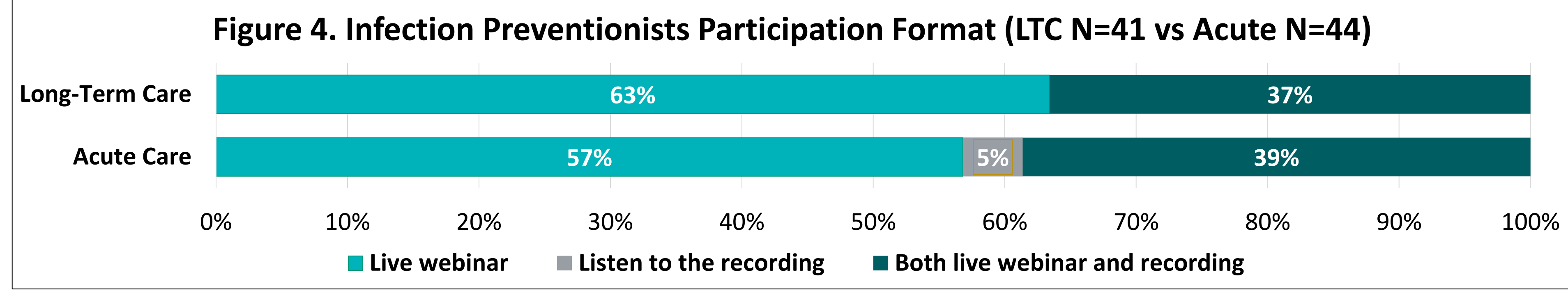
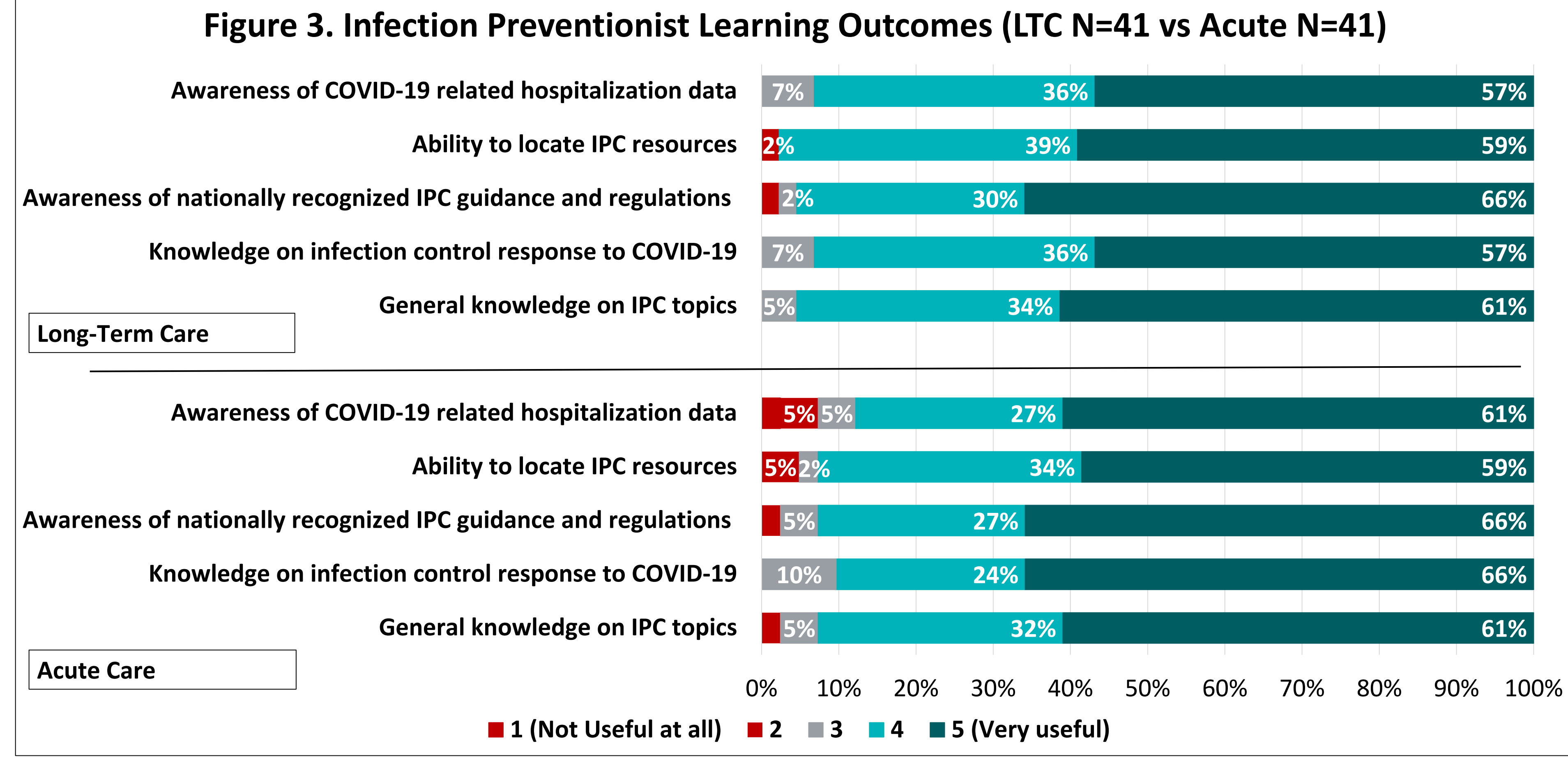
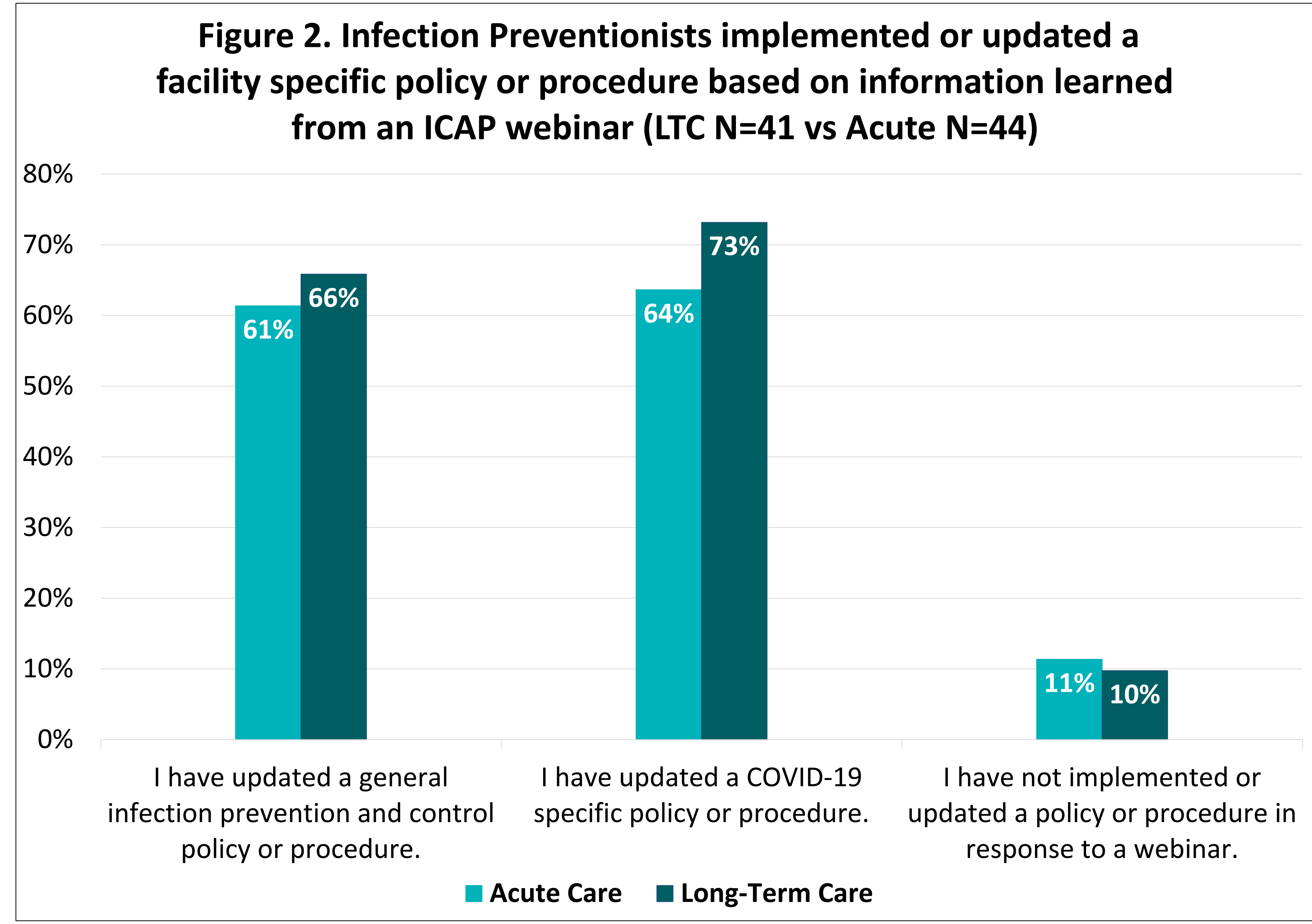
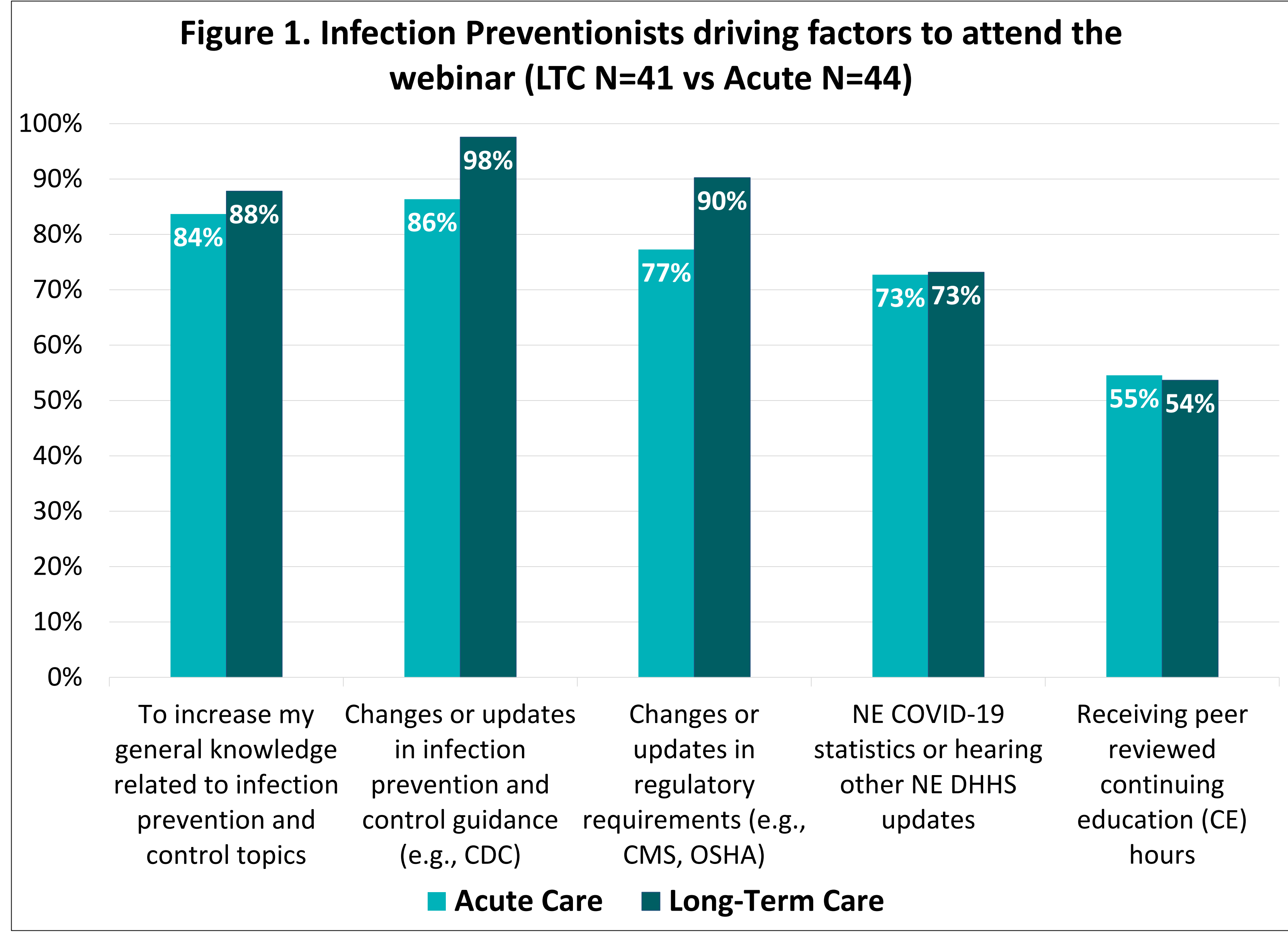
METHODS

- Attendance was recorded for each webinar and compared between LTC and AC considering webinar focus and known denominators of Nebraska LTC and acute facilities.
- A comprehensive survey regarding learning outcomes and factors driving participation was built using Research Electronic Data Capture (REDCap). The online survey was sent to webinar contacts in early 2023.
- Responses from IPs working in AC and LTC were compared by independent two-sample T-Test with Pooled and Satterthwaite distribution using SAS version 9.04.01. Factors driving decision were scored on a 0-1 scale while learning outcomes on 1-5 scale.
- Descriptive analysis evaluated frequency of other demographic variables and quantitative questions using Microsoft Excel.

Table 1. Comparative results of the infection preventionist responses among two groups

I. Factors driving infection preventionists decision to attend the webinar			
What drives your decision to attend the webinar?	Acute Care (Mean)	Long-Term Care (Mean)	p-value*
To increase my general knowledge related to infection prevention and control topics	0.932	0.878	0.0939
Changes or updates in infection prevention and control guidance (e.g., CDC)	0.864	0.976	<.0001
Changes or updates in regulatory requirements (e.g., CMS, OSHA)	0.773	0.902	0.03
Nebraska COVID-19 statistics or hearing other Nebraska DHHS updates	0.727	0.732	0.981
Receiving peer reviewed continuing education (CE) hours	0.545	0.537	0.9852
II. Infection preventionists opinion on the usefulness of webinar			
In your opinion, how beneficial/informational are the webinars?	Acute Care (Mean)	Long-Term Care (Mean)	p-value*
Overall content of the webinar	4.636	4.561	0.0671
Changes/updates in IPC guidance & regulatory requirements	4.659	4.634	0.8737
Nebraska COVID-19 statistics or Nebraska DHHS updates	4.545	4.293	0.0076
Subject matter expert topics related to IPC	4.682	4.561	0.0455

Note. CDC, Centers for Disease Control and Prevention; CMS, Centers for Medicare and Medicaid Services; OSHA, Occupational Safety and Health Administration; DHHS, Department of Health and Human Services; IPC, Infection Prevention and Control
* A p-value of less than 0.05 is considered statistically significant



RESULTS

- On average, 69 (range 42 to 110) facility IP leaders attended AC webinars and 160 (range 123 to 526) attended LTC webinars between October of 2020 and January of 2023.
- Of the 96 AC and 429 LTC operational facilities, 50% of AC and 25% of LTC facilities responded to the survey. LTC IP's as a group consistently attended the webinar.
- Of the 51 AC and 170 LTC respondents, IPs constituted 86% (n=44) and 25% (n=42) respectively.
- LTC IPs were more likely than AC IPs to join the webinars to learn about changes in regulatory requirements and national IPC guidance (Table 1, Figure 1).
- More than 60% of IPs in both settings implemented a new policy or procedure based on the webinar, with LTC IP's implementing 5% more general IP and 9% more COVID-19 specific policies (Figure 2). 83.3% of LTC IPs and 52.3% of the AC IPs reported attending almost all webinars.
- IP self-rated learning outcomes were high (for AC preventionists, learning outcomes mean range was between 4.5 and 4.6, and for LTC preventionists, 4.3 to 4.6, on a 1 to 5 scale) (Figure 3).
- A live webinar was the format preferred by IP's for communicating changes (Figure 4).

CONCLUSIONS

- The statewide initiative aimed at delivering infection prevention education and guidance garnered a highly positive response from Nebraska facilities. This initiative proved instrumental in facilitating timely policy and procedural adaptations amidst the challenging landscape of the COVID-19 pandemic.
- Considering the favorable response to the webinar trainings, ICAP will continue to offer future IPC training topics in a similar fashion, driven by participant feedback and results from this survey.

DISCLOSURE

The authors have no relevant conflicts of interest with regard to the content of this poster.