

Antimicrobial Stewardship Practice Changes Following a Statewide Educational Conference in Nebraska

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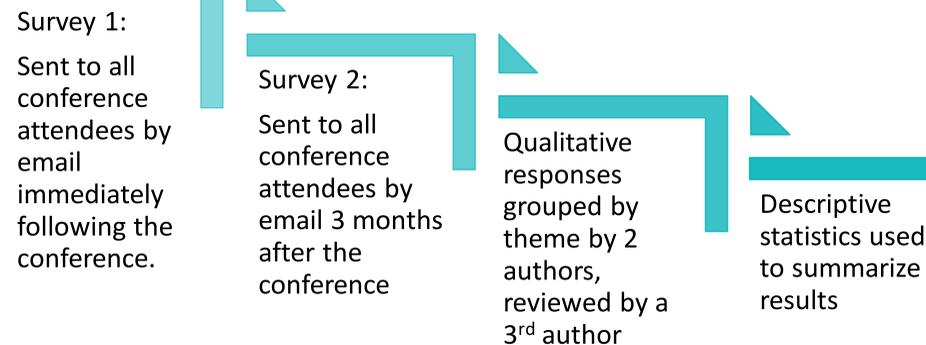
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Background

- In 2023, Nebraska held its 4th state antimicrobial stewardship (AS) educational conference, an annual one-day in-person event with continuing education offered for nurses, pharmacists, microbiology lab technicians, and physicians.
- One challenge of educational events is determining if content has been translated into practice.
- We sought to assess AS-related practice changes implemented by conference attendees.

Methods



Results

Demographics

Conference Attendance

- 203 professionals attended the conference from acute care hospitals, critical access hospitals, long-term care settings, and health departments
- 63 cities across the state had ≥1 attendee at the 2023 Nebraska Antimicrobial Stewardship Conference



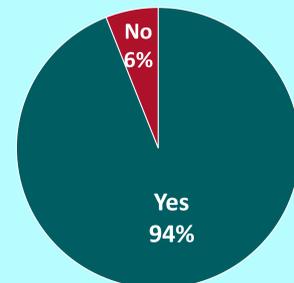
Professions of Survey Respondents

Profession	Survey 1 (n=148)	n (%)
Nurse	78	(53)
Pharmacist	46	(31)
Physician	12	(8)
Medical Lab Scientist	3	(2)
Nurse Practitioner	2	(1)
Other	7	(5)
Survey 2 (n=79)		n (%)
Nurse	38	(48)
Pharmacist	25	(32)
LPN	8	(10)
Physician	7	(9)
Nurse Practitioner	1	(1)

Survey 1 Results

Immediately Following the Conference

Do you intend to make practice changes following conference attendance? (n=136)

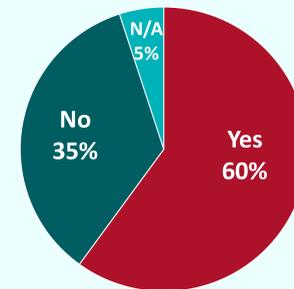


If yes, what changes do you intend to implement? (n=122)

Responses grouped by theme

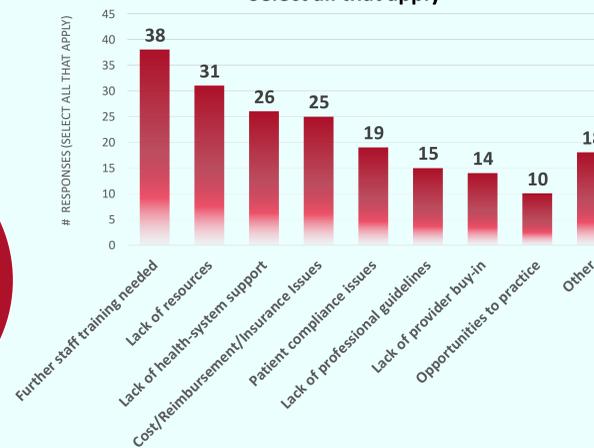
- Implement or improve use of AS tools and strategies (36)
- Improve and/or increase communication to internal and external stakeholders (33)
- Provide education to staff, providers, and patients (22)
- Improve my own antibiotic stewardship practices and knowledge (12)
- Implementation of NHSN AUR reporting (11)
- Implement diagnostic stewardship strategies (8)

Do you anticipate barriers to making the intended practice changes? (n=136)



If yes, what barriers do you anticipate? (n=81)

Select all that apply

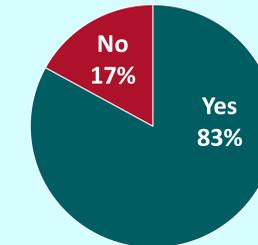


Survey 1 Knowledge Question Responses	Strongly Agree	Agree	Neither agree/disagree	Disagree	Strongly Disagree
I am better able to discuss antimicrobial stewardship principles and implementation strategies. (n=143)	61.5%	37%	0.7%	0%	0.7%
I am better able to identify the roles and responsibilities of the multidisciplinary team. (n=143)	59%	38%	1.4%	0%	0.7%
I am better able to describe the use of AS tools. (n=143)	60.8%	37.7%	0.7%	0%	0.7%
The format of this education was effective. (n=142)	62.7%	34.5%	1.4%	0.7%	0.7%
My level of knowledge was adequate before attending the NE Antimicrobial Stewardship Summit. (n=142)	22.5%	58%	16%	1.4%	1.4%
My level of knowledge was enhanced after attending the NE Antimicrobial Stewardship Summit. (n=142)	53.5%	44%	2%	0%	0.7%
My ability to treat patients was adequate before attending the NE Antimicrobial Stewardship Summit. (n=131)	26.7%	58%	12.2%	2.3%	0.8%
My ability to treat patients was enhanced after attending the NE Antimicrobial Stewardship Summit. (n=131)	55%	41.2%	3%	0%	0.8%
I would recommend attending the Nebraska Antimicrobial Stewardship Summit to others. (n=142)	64%	33.8%	1.4%	0%	0.7%

Survey 2 Results

3 Months Post-Conference

Did you successfully implement intended practice changes? (n=53)

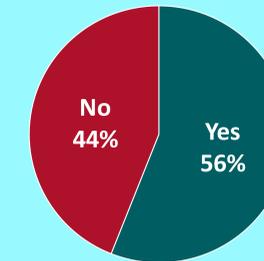


If yes, describe the practice changes that were made. (n=29)

Responses grouped by theme

- AS tool implementation (8)
- Enhanced communication strategies (7)
- Improved antibiotic tracking, monitoring, and review (7)
- Provided education and training (4)
- Policy and procedure updates (3)

Have you observed improved patient outcomes as a result of practice changes? (n=39)

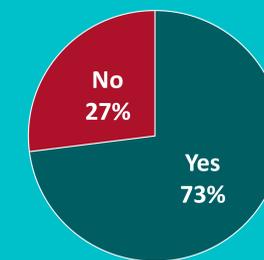


If yes, please describe any outcome improvements you have experienced. (n=20)

Responses grouped by theme

- Reductions in antibiotic use/shorter durations (11)
- Improved empiric prescribing practices (4)
- Improved provider receptiveness to antibiotic use recommendations (2)
- Increased education (2)
- Reduction in side effects (1)

Has the team's overall performance improved related to antibiotic stewardship? (n=37)



If yes, describe how this activity impacted your team's overall performance. (n=23)

Responses grouped by theme

- Improved collaboration and/or interdisciplinary communication (13)
- Increased staff, leadership, and provider engagement (6)
- Increased confidence in antibiotic recommendations (4)

Conclusions

In addition to improved knowledge and understanding for a variety of AS-related areas, attendees of the conference also reported a high rate of practice changes that led to perceived improvements in patient outcomes and team function. Additional positive outcomes may have been limited by the short time period between initial and follow-up surveys.