

Meeting Recap: 2023 Nebraska Antimicrobial Stewardship Summit

Part 1: Morning Sessions



The 2023 Nebraska Antimicrobial Stewardship Summit was held on Friday, June 2, 2023 at the Embassy Suites Conference Center in La Vista, NE. The event was hosted by the Nebraska Antimicrobial Stewardship Assessment and Promotion Program (ASAP) in conjunction with the Nebraska Department of Health and Human Services and UNMC. Over 200 participants were in attendance and included physicians, advanced practice practitioners, pharmacists, infection preventionists, nurses, and others.

The day opened with a warm welcome from our Nebraska state epidemiologist, Dr. Matt Donahue.

Following Dr. Donahue, our keynote presentation on communication strategies for antibiotic stewards was delivered by Dr. Julia Szymczak, a sociologist from the University of Utah who has dedicated her career to studying the topic. Key points included:

- Stewards need more than proficiency in ID, microbiology, data analytics, and informatics; they also need social and communicative skills to implement change in complex organizations.
- In her studies interviewing hundreds of clinicians that interact with antibiotic stewards, Dr. Szymczak learned that positive interactions included:
 - Communicating information of value in a thoughtful manner
 - Attempting to understand where the provider is coming from
 - Created a shared sense of mission between the steward and provider



- Applying the 3 Cs of Stewardship (Context, Communication, and Collaboration) to encounters in the unique facility in which you work can improve interactions.

Following Dr. Szymczak's engaging presentation, we welcomed Dr. Salman Ashraf to give an update from the Nebraska Healthcare Associated Infections and Antimicrobial Resistance Program at Nebraska DHHS. Dr. Ashraf's discussion included:

- Trends in healthcare-associated infections
 - Nebraska has the highest SIR for surgical site infections (SSIs) following colon surgeries in the nation and the fourth highest following abdominal hysterectomies. Collaborative efforts are ongoing to decrease SSIs.
 - Nebraska critical access hospitals have the highest SIR for *C. difficile* Infections among all 50 states in the US in 2021 (with 36 facilities contributing to this report).
- Nebraska DHHS has funding assistance available to assist facilities in the implementation of NHSN AUR reporting.
- Trends in multidrug resistant organisms (CRE/CP-CRE, CRPA, *C. auris*)
 - CRE/CP-CRE and CRPA isolates are increasing in Nebraska
 - No isolates of *C. auris* have been identified in Nebraska recently, but all yeast isolates from normal sterile site need to be identified to the species level. *C. auris* is commonly misidentified in labs.
- CDC's updated guidance to prevention and response to MDROs
- Nebraska DHHS protocol for tracking targeted MDROs and keeping facilities informed
- LTCF support with infection prevention and control and antimicrobial stewardship efforts
- Healthcare-associated legionnaires' disease



Through the rest of the morning general session agenda, we heard expert updates from:

Dr. Bradley Langford, a pharmacist with Ontario Public Health who shared data showing COVID-19's impact on antibiotic use and resistance. Did you know...

- Unnecessary antibiotic use is estimated to be high in COVID-19 patients. Only 8.6% of hospitalized COVID-19 patients had a bacterial co-infection, but during the pandemic 74.6% of COVID-19 patients received antibiotics.
- There was a high prevalence of antibiotic-resistance in COVID-19 patients. Predictors for resistance include low and middle-income countries, ICU setting of care, comorbid diabetes, and receipt of IL-6 inhibitor therapy (i.e. tocilizumab).
- Moving forward, efforts must be made to increase focus on health equity, global trust and collaboration, and private-public partnerships. Stewards can bring attention to the importance of antibiotic stewardship, avoid antibiotic use in viral pneumonia, and leverage technology to extend reach.

Emily McCutchen, the manager of the Nebraska Public Health Laboratory gave an engaging presentation about the services NPHL provides to both healthcare facilities and citizens of the state of Nebraska. Highlights include:

- NPHL can aid labs with the impending danger of *Candida auris*. It was noted that healthcare and clinical labs must make sure their instruments are up to date to avoid misidentification of *C. auris*.
- NPHL educational efforts include lab alerts, newsletters, laboratory surveys, statewide laboratory calls, individual communications and trainings.
- Future directions and opportunities for NPHL include sequencing for clinical care, same-day sequencing, direct from specimen sequencing, and wastewater surveillance for resistant organisms.

During the lunch break and throughout the day, attendees had the chance to give their live impressions from the conference to Dr. Rick Starlin Dan German with Nebraska ICAP. Attendee and presenter interviews are being compiled into a podcast that will be shared on an upcoming Nebraska ICAP Dirty Drinks podcast episode scheduled for June 29.



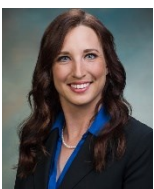
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Patient-care organizations in Nebraska also provided antibiotic stewardship information at several booths throughout the day. It was a great networking opportunity and a chance to learn about the various antibiotic stewardship services available for no cost to all facilities in Nebraska.



Check out our second post to learn more about the afternoon Summit sessions!

2023 session recordings will be available soon on the Nebraska ASAP YouTube channel: [Nebraska ASAP - YouTube](#)



Content provided by: Jenna Preusker, PharmD, BCPS – Nebraska ASAP Pharmacy Coordinator

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Part 2: Afternoon Sessions



Starting off the afternoon, Dr. Krishna Rao, a Nebraska native, returned virtually to his home state from the University of Michigan to share updates related to the gut microbiome and non-traditional therapies for the treatment of *Clostridioides difficile* infections, reminding us that some recurrent and difficult-to-treat infections may require us to think outside of traditional antibiotic therapy. Some key take home points included:

- We are at an inflection point in the management of *C. diff* infections, from changing diagnostic methods to treatments that include monoclonal antibodies, live biotherapeutics, and fecal transplants.
- Treatment focus is now not just initial cure but preventing recurrence. Newer directions in research that are focused on mechanisms of action show promise.
- FMT is one of several modalities used now in treating initial or recurrent CDI, but questions around efficacy and regulation remain.
- So, what about probiotics? Dr. Rao shared that probiotics are generally safe and well-tolerated, but regulation as supplements and safety concerns impede deployment. Probiotic clinical data has a lot of heterogeneity, low-quality of data, and safety concerns have precluded widespread deployment and recommendation by guidelines.

The final speakers in the general session joined us to share their practical experiences in diagnostic stewardship from right here in Nebraska. Dr. Renuga Vivekanandan and two of her infection preventionist colleagues, Becky Cook and Angel Pleuger shared their strategy at CHI for engaging frontline nursing and infection preventionist staff in diagnostic stewardship.

- Diagnostic Stewardship can reduce unnecessary lab orders, unnecessary antibiotic use, create a collaborative culture, and increase patient safety and outcomes.
- A multidisciplinary approach proved to be effective. Results were shared regionally to determine best practices and discuss lessons learned.
- Nursing driving initiatives for *C. diff* testing, CAUTI, and CLABSI prevention using standardized checklists resulted in improvement in CAUTI, CLABSI and *C. diff* rates at CHI.

During the afternoon, attendees had the option to attend sessions in breakout tracks, one with a focus on long-term care and one with an acute care and ambulatory focus.

In the long-term care track, Dr. Kara Jacobs-Slifka from the CDC led off the afternoon with a discussion of enhanced barrier precautions. Dr. Jacobs-Slifka provided a wealth of resources for facilities to refer to and recommended that when implementing enhanced barrier precautions, facilities should have a detailed implementation plan and expect surprises. She also noted that buy-in is critical and communication is key.

Dr. Robin Jump followed with a presentation on recognizing and treating infections in LTC residents. She described non-localizing signs and symptoms that may indicate infection in long-term care residents, ways to differentiate signs of

acute cystitis from other reasons for those symptoms and the introduction of antibiotic use protocols for infections common to older adults.

To wrap up the day in the long-term care track, Nebraska Infection Control Assessment and Promotion Program's (ICAP) own infection prevention supervisor, Kate Tyner, gave a practical presentation on the intersectionality of antibiotic stewardship and infection preventions, sharing several lessons learned through actual patient cases. Her take home message was to make it easy to do the right thing, through use of intake procedures, infection control and stewardship plans, IP notifications, and alerts to frontline staff.

In the acute care track, we were joined by Dr. Christopher Evans, a pharmacist from the Tennessee Department of Health. He addressed the new CMS requirements for hospitals to begin participating in the Antibiotic Use and Resistance module within NHSN while sharing Tennessee's progress and lessons learned over the last few years of their statewide initiative through use of a legislative mandate. His presentation recording will be a great resource to Nebraska hospitals beginning the AUR reporting process.

The second session featured UNMC Instructor, Dr. Jonathan Ryder, with an update on antifungal therapies. He discussed current and future opportunities for antifungal stewardship as well as novel antifungal agents and their potential niches in clinical use.



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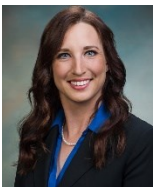
To wrap up the day in the acute care track, a pharmacist panel highlighted strategies for expanding the antimicrobial stewardship pharmacist workforce in the state of Nebraska.

dialogue featured Dr. Jenna Preusker from Nebraska ASAP, Dr. Scott Bergman from Nebraska Medicine, Dr. Danny Schroeder from Nebraska Medicine Bellevue, and Dr. Anthony Rodewald from Community Hospital in McCook.

Overall, the 2023 Nebraska Antimicrobial Stewardship Summit was a great success. We thank all of the attendees, the planning committee, and hosting organizations for a great day of furthering Nebraska's antibiotic stewardship education to save antibiotics so antibiotics can save lives. For those not able to attend, recordings of the presentations are being made available by Nebraska ASAP/ICAP for anyone to listen and learn. **Session recordings can be found at:**

We look forward to seeing everyone again next year at the 2024 Nebraska Antimicrobial Stewardship Summit to be held on Friday, May 31, 2024. Mark your calendars now!!

2023 session recordings will be available soon on the Nebraska ASAP YouTube channel: [Nebraska ASAP - YouTube](#)



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