

Meeting Minutes

Antimicrobial Stewardship Utah Healthcare Infection Prevention Governance Committee

Date: 10/05/2023

Attendees:

Alexandra Earl, Andy Pavia, Angela Weil, Brian Harris, Charisse Schenk, Claudia M Tellez Freitas, Devin Beard, Giulia De Vettori, Hannah Imlay, James Bekker, Jeanmarie Mayer, Linda Rider, Lindsay Taylor, Michelle Vowles, Tariq Mosleh

Agenda Topics:

Introductions

12:00–12:05 (Tariq Mosleh)

- Approve minutes from last meeting
- Introductions
- Outline agenda

Action Steps/Plan

- 12:05–12:50 (Tariq Mosleh)
 - "Measuring Dental Antibiotic Use in Wisconsin" Dr. Lindsay Taylor
 - AUR reporting for NHSN Devin Beard

Situational Awareness

12:50–1:00 (Tariq)

- Updates from partners
- Antimicrobial Stewardship Project ECHO
- Antimicrobial Awareness Week
- Next meeting: Elaine Bailey (Executive Director of MARR, Michigan Antibiotic Resistance Reduction Coalition)

Convene

Discussion:

Introductions

• Minutes approved by James Bekker and Devin Beard

Action Steps/Plan

- 1. "Measuring Dental Antibiotic Use in Wisconsin" Dr. Lindsay Taylor
 - a. Lindsay Taylor, MD, MS is the Antibiotic Stewardship Coordinator within the Healthcare-Associated Infections (HAI) Prevention Program at the Wisconsin Department of Health Services, Division of Public Health. She and her team are leading efforts to improve antibiotic use tracking and reporting in ambulatory and dental settings across Wisconsin. Harnessing these data for action, they plan to identify antibiotic use improvement targets and provide feedback directly to the individual prescribers. She is also an assistant professor at the University of Wisconsin School of

Medicine and Public Health where she is a practicing infectious disease physician and antibiotic steward. Her research focuses on improving antibiotic use in non-hospital settings.

Measuring Dental Antibiotic Use in Wisconsin

October 5, 2023

Lindsay Taylor, MD, MS Antimicrobial Stewardship Coordinator Wisconsin Healthcare-Associated Infections (HAI) Prevention Program



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- c. Antibiotic use is high in the U.S.
- d. U.S. dentists are the 4th leading antibiotic prescribing group
- e. Existing data is summarized at the regional level
- f. There is no existing dental antibiotic use tracking or reporting data
- g. Prior work consisted of oral health antibiotic toolkit that was published back in 2021
 - Includes penicillin allergy
 - ADA guidance
 - Dental antibiotic prophylaxis
 - Cannot track the impact of this toolkit
- h. Goals
 - Develop dental antibiotic use measures
 - Produce annual statewide report
 - Produce annual individual (dentist) reports
- i. Data sources
 - Dr. Talor's predecessor developed a connected with th Wisconsin Health Information Organization - they have an all-payers claim database that mainly contained outpatient medical claims data and filled pharmacy data
 - Insurance claims data
 - Partnered withDelta Dental of Wisconsin
 - Largest dental insurance in Wisconsin
 - Cover 2.4 million people in Wisconsins
 - Nearly 90% of dentists are within network
 - Should be able to capture nearly half the population of Wisconsin
 - Delta dental partners with BSG Analytics LLC
 - They manage all of their claims data
 - Linking the medical data sets and the pharmacy data sets, with they Delta data sets, they merged the data sets and now have a combined claims data sets

- Looking at dental claims and temporally linking them to pharmacy claims
- Dr. Taylor doesn't touch the data sets they are managed by partners

Exclusion and Inclusion

7,037,371 dental visits 2018-2021

57,911 (0.82%) visits associated with a filled antibiotic prescription

Excluded 4,005,970 visits: Claims only for preventative, diagnostic, or prophylactic services

6,324 (0.16%) visits associated with a filled antibiotic prescription

Included 3,031,401 visits: Qualifying dental claims

51,587 (1.70%) visits associated with a filled antibiotic prescription

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- k. They wanted to focus on only filled pharmacy prescriptions
- I. They pulled out only those that were oral
- m. Prescriptions that are only prescribed by dentists
- n. They linked them to a visit using a 3-day window before and after
- o. This is an area that they are revising for the next report
 - When speaking with the dentists, it is difficult to understand what the indication is from the claims data vs the medical claims data
 - With the claims data they only have a procedure code, which do not match well with the underlying syndrome that brought the patient in that day
 - The dentist experts in their workgroup have talked about creating a Qualifying Dental Claims Group and excluding claims for only preventative diagnostic or prophylaxis services (i.e., simply x-rays)
 - Moving forward, they would like to change it to include all dental services, all antibiotics prescribed by dentists instead of grouping by the procedure codes, grouping by duration of antibiotic prescription
 - They had over 3 million visits qualifying dental claims and 1.70% visits associated with a filled antibiotic prescription

Dental Antibiotic Visit Rate

Number of qualifying dental visits associated with an antibiotic prescription

X 1,000

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- The measure that the group decided to use to normalize for volume of dental visits was the dental antibiotic visit rate
- Due to it being low, they used 1,000

Number of qualifying dental visits



• Denominator of visits decreased because there wasn't as many routine dental check-ups

Penicillins were the most commonly prescribed antibiotic. Penicillins 10,218 Lincosamides 1,861 Macrolides 595 Cephalosporins 171 Nitroimidazole 126 Tetracyclines 78 s. Antifungal 37 The group looked at the different classes of antibiotics The average of antibiotics described per year and penicillins were the most commonly prescribed antibiotic class Nearly 21% of antibiotics were a second-line agent Usually prescribed when a patient reports a penicillin allergy • This is a target moving forward Visits with oral surgeons, endodontists, and periodontists were more likely associated with antibiotics. Oral surgeon Endodontist Periodontist Pedodontist Unknown General dentist Prosthodontist

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 The group wanted to look at to see if there are certain groups dental specialties were more likely to have antibiotics prescribed

 When a patient goes to an oral surgeon, endodontist, or periodontist, they are more likely to have an antibiotic associated with their visit when compared to a general dentist or a prosthodontist









- Refine dental measures
- Create prescriber-level
 measures and reports
- Dissemination and implementation of prescriber-level antibiotic use reports
- Distribute statewide antibiotic use report
- Explore penicillin allergy delabeling strategies
- So far a 12-month process
- Dr. Taylor would like to work with the data analyst to better understand the data and put it into useful measures
- 2. AUR reporting for NHSN Devin Beard
 - a. Antimicrobial use and resistance (AUR) data in National Healthcare safety network (NHSN)
 - b. Reporting has changed over time from 2020-2023
 - c. Antimicrobial resistance went from 15% in 2020 to 16% in 2023
 - The denominator has changed
 - d. Antimicrobial Use went from 63% to 34% in 2023
 - e. Do facilities need to confer AUR data sharing rights to DHHS?
 - No, DHHS is able to access any data reported into the Patient Safety Component
 - f. Beginning 2024, reporting to NHSN AUR module will be required under the Public Health and Clinical Data Exchange objective of the CMS Promoting interoperability Program
 - g. Standardized antimicrobial administration ratio (SAAR)

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SAAR = \frac{Observed}{Predicted} antimicrobial days of therapy
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Interpretation The SAAR is a ratio comparing observed AU to AU predicted by a baseline population. In general:
A SAAR >1.0 indicates greater antimicrobial use than predicted.
A SAAR =1.0 indicates antimicrobial use equivalent to predicted.
A SAAR <1.0 indicates less antimicrobial use than predicted.</li>
The nominal value of 1.0 using CDC's statistics calculator has been used to make comparisons (high vs. low vs. not different).
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 DHHS would like to analyze SAAR values to target outliers for support in their infection prevention and control (IPC) practices and Antimicrobial Stewardship programs - currently only 17 facilities reporting AUR data, so only 17 with a SAR value

Situational awareness

- Updates from partners
 - The U of U is still working on penicillin de-labeling
 - Hospital and facilities are getting ready to report AUR data if they haven't already
- Antimicrobial Stewardship Project ECHO
 - Next presentation is on October 18th by Dr. Elizabeth Monsees
 - "Nurses The Central Stewards of Antibiotic Safety"
 - o <u>https://physicians.utah.edu/echo/clinical-support-areas/post-acute-care</u>
- Antimicrobial Awareness Week
 - CDC toolkit for the 2023 materials has not yet been uploaded to their website
 - Tariq will send out a link to those once they have been released
- Next meeting: Elaine Bailey (Executive Director of MARR, Michigan Antibiotic Resistance Reduction Coalition)
 - <u>https://www.mi-marr.org/</u>
 - https://www.osap.org
 - Please review toolkits and let us know if you have any questions

Convene • Eve

- Every eight weeks
 - o **11/30/2023**
- Minutes will be posted to the HAI website
 - <u>https://epi.health.utah.gov/uhip-governance-minutes/</u>

Next Meeting Discussion/Questions

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