Using NHSN AUR Module for the CMS Promoting Interoperability Program

Background
The NHSN Antimicrobial Use (AU) and Antimicrobial Resistance (AR) (AUR) Module reporting has been identified as one option to meet the Public Health Registry reporting element within the CMS Medicare Promoting Interoperability (PI) Program for eligible hospitals and critical access hospitals. For the specific regulation mentioning the NHSN AUR Module, refer to the certification criterion (§ 170.315(f)(6)) in the Medicare and Medicaid Programs; Electronic Health Record Incentive Program-Stage 3 and Modifications to Meaningful Use in 2015 Through 2017 final rule. Refer to the CMS Promoting Interoperability Program webpages for calendar year-specific submission requirements.

Eligible hospitals and critical access hospitals participating in the Promoting Interoperability Program can proceed through the steps outlined in this document.

Note: Facilities not participating in the Promoting Interoperability Program do not need to complete the steps outlined in this document. AU and AR data can continue to be voluntarily submitted into NHSN as normal.

Prerequisites
In order to use submission into the NHSN AUR Module to meet the PI Program requirements, eligible hospitals must meet the following prerequisites:

- Have the required data systems or electronic access to the required data elements for the NHSN AUR Module:
  - Electronic Medication Administration Record (eMAR) or Bar Coding Medication Administration (BCMA) system for capturing antimicrobial administrations
  - Electronic Laboratory Information System (LIS) for capturing antimicrobial susceptibility results
  - Electronic Admission, Discharge, Transfer (ADT) system for capturing patient movement within the facility
- Use vendor technology that has been certified:
  - The vendor certification process involves producing valid CDA (Clinical Document Architecture) files to be used for uploading the AU and AR data into NHSN. More information about the vendor certification process can be found on the HealthIT website and the NHSN website.
- Fulfill the basic requirements for submission of data into NHSN:
  - Hospital is enrolled in NHSN
  - Hospital has mapped NHSN locations
  - Hospital has requested and entered an NHSN Facility OID
  - Hospital has completed AUR Module training and entered monthly reporting plans within NHSN

Step 1 – Registration of Intent to Submit Data
The eligible hospital must first register the facility’s intent to submit AU and AR data into NHSN. Facilities should NOT register intent to submit data until they have verified that the vendor being used has been certified.
• After logging into the NHSN facility, click “Facility” then “AUR MU3 Registration” on the left hand navigation bar:

![Facility Navigation](image)

• On the AUR Meaningful Use 3 Registration page, read the text and check the box to automatically add your name and the facility name to the form:

> By checking this box, registers facility intent to satisfy a Meaningful Use 3 objective by submitting NHSN Antimicrobial Use and Antimicrobial Resistance (AUR) monthly data via an electronic interface.

• Add up to two optional email addresses for individuals, aside from the NHSN Facility Administrator, who will be involved in the PI Program process and who will need copies of submission documentation:

<table>
<thead>
<tr>
<th>NHSN Facility Administrator:</th>
<th><a href="mailto:FacAdmin@test.com">FacAdmin@test.com</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Optional facility MU3 contact:</td>
<td><a href="mailto:ExtraEmail1@test.com">ExtraEmail1@test.com</a></td>
</tr>
<tr>
<td>Optional facility MU3 contact:</td>
<td><a href="mailto:ExtraEmail2@test.com">ExtraEmail2@test.com</a></td>
</tr>
</tbody>
</table>

• Verify all information is correct and click the “Save” button.
• Click “Yes” on the pop-up alert to confirm your facility’s registration of intent to submit AU and AR data.

![Confirmation Alert](image)

• The NHSN Facility Administrator and the Optional Facility MU3 Contacts will receive an automated confirmation email from NHSN that should be saved for your records.
  - This email also contains the instructions to proceed to Step 2: Testing and Validation of the AUR CDA Files.

Note: Only the NHSN Facility Administrator can view and complete this task. Also, the NHSN application and the screenshots below still display the old program name: Meaningful Use Stage 3 (MU or MU3). The NHSN Team is working to get these pages updated with the new program name.
Step 2 – Testing and Validation of the AUR CDA Files

Eligible hospitals participating in the PI Program should proceed through the NHSN testing and validation steps even if AU and AR data are already being submitted to NHSN. Upon receipt of the NHSN invitation to begin testing and validation, facilities will complete the below steps. Facilities should not complete the steps below until Step 1 is complete and the facility has received an email invitation to proceed.

- Three test CDA files are to be emailed to the NHSN CDA Helpdesk (NHSNCDA@cdc.gov) according to the specifications outlined in the invitation letter.
  - Antimicrobial Use Summary CDA
  - Antimicrobial Resistance - Numerator CDA
  - Antimicrobial Resistance - Denominator CDA
- As the NHSN CDA Helpdesk receives and validates the test files, details will be returned to the facility via email describing any errors that were identified during the validation process. The facility will work with their vendor to correct the errors and resend the updated test CDA file(s).
- When all three test CDA files pass validation, the facility will receive an email indicating that all test files have passed and that AU and AR data can now be uploaded into the NHSN production environment. This email should be saved for your records.

Step 3 – Submission of Production AUR Data into NHSN

Once the testing and validation steps are complete, the facility will be invited to submit AU and AR data into the NHSN production environment. Prior to uploading AU and AR CDA files, the facility must add the appropriate information to their monthly reporting plans.

On the first day of every month, the NHSN Facility Administrator and Optional Facility MU3 Contacts will receive an automated email with a monthly summary of AU and AR data submission:

<table>
<thead>
<tr>
<th>Month/Year</th>
<th>Antimicrobial Use Summary</th>
<th>Antimicrobial Resistance Events</th>
<th>Antimicrobial Resistance Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>01/2021</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>02/2021</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Further, on February 1 of each year, the NHSN Facility Administrator and Optional Facility MU3 Contacts will receive an automated email with an annual report summarizing the submission of AU and AR data to NHSN for the previous calendar year. Facilities should be sure to save these emails for their records.

In addition to the automated reports, NHSN Facility Administrator has the ability to generate an ad-hoc report summarizing submission of AU and AR data to NHSN following these steps:

- After logging into the NHSN facility, click “Facility” then “AUR MU3 Registration” on the left hand navigation bar.
- On the AUR Meaningful Use 3 Registration page, click “Reports”:
  - On the Request for AUR MU3 Status Report page, select the year of report desired then click “View Report”:
  - Once generated, the report can be emailed, printed, or downloaded.
Additional Resources

Questions?

- Email the NHSN CDA Helpdesk for technical questions: NHSN@cdc.gov
- Email the general NHSN Helpdesk for all other questions: NHSN@cdc.gov

NHSN Promoting Interoperability Webpage: https://www.cdc.gov/nhsn/cdaportal/datainteroperability.html

Meaningful Use Certified Health IT Product List: https://chpl.healthit.gov/#/search

CDC Public Health Data Interoperability Webpage: https://www.cdc.gov/datainteroperability/index.html
