Updated January 2025

Using NHSN AUR Module for the Medicare Promoting Interoperability Program

Contents

Background

The NHSN Antimicrobial Use (AU) and Antimicrobial Resistance (AR) Option reporting module is used for meeting reporting requirements of the Public Health and Clinical Data Exchange Objective within the Medicare Promoting Interoperability Program. As noted in the CMS FY 2025 IPPS/LTCH PPS final rule (89 FR 69600 through 69605), for the Electronic Health Record (EHR) reporting period in 2025, the AUR Surveillance measure has been split into *two measures*: AU Surveillance and AR Surveillance. Eligible hospitals and critical access hospitals (CAHs) must be in active engagement with the CDC's NHSN for submitting AU and/or AR data during the self-selected 180-day EHR reporting period and receive a report from NHSN indicating successful submission of AU and/or AR data or claim an applicable exclusion(s). Eligible hospitals and CAHs are also required to report their level of active engagement (Option 1 or Option 2). For measure details, please see the applicable Medicare Promoting Interoperability Program Specification Sheets. Additionally, to meet Medicare Promoting Interoperability Program requirements, facilities must to use CEHRT updated to meet the 2015 Edition Cures Update criteria, including those outlined in 45 CFR 170.315(f)(6).

Beginning in the EHR reporting period in 2025, eligible hospitals and CAHs may also claim an applicable exclusion for one or both measures separately. Eligible hospitals and CAHs that claim an applicable exclusion for only AU or AR would either need to be in active engagement for the other measure or claim a separate exclusion. For example, if claiming an exclusion for the

AR Surveillance measure due to lack of access to discrete data elements, the eligible hospital or CAH must be in active engagement for the AU Surveillance measure or claim an applicable exclusion specific to the AU measure.

Eligible hospitals and CAHs that report a ''No'' response to either measure, fail to report any response, or fail to claim an applicable exclusion will not receive credit for the measure(s). These eligible hospitals and CAHs would fail to satisfy requirements of the Public Health and Clinical Data Exchange Objective and will earn a score of zero for the Medicare Promoting Interoperability Program.

This marks a change from Medicare Promoting Interoperability Program requirements for the EHR reporting period in 2024, where the AUR Surveillance Reporting measure was treated as a *single measure*. For the EHR reporting period in 2024, eligible hospitals and CAHs were required to be actively engaged with the CDC to report *both* Antimicrobial Use (AU) and Antimicrobial Resistance (AR) data, or to claim an applicable exclusion.

Refer to the CMS Promoting Interoperability Program webpages for additional information, including EHR reporting period-specific submission requirements.

Eligible hospitals and CAHs participating in the Medicare 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.

Active Engagement

Option 1 – Pre-production and Validation

To attest to "Option 1 – Pre-production and Validation":

- Eligible hospitals and CAHs must complete Registration of Intent (Step 1 below).
- Eligible hospitals and CAHs should be working towards creation of test files but don't need to complete that step during the EHR reporting period (Step 2 below).

Option 2 – Validated Data Production

To attest to "Option 2 – Validated Data Production":

- Eligible hospitals and CAHs must send AU and AR data for their self-selected 180-day EHR reporting period (Step 3 below).

Prerequisites

In order to use submission into the NHSN AUR Module to meet the PI Program requirements, eligible hospitals and CAHs 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 or homegrown technology that has been NHSN-validated and Assistant Secretary for Technology Policy (ASTP)/Office of the National Coordinator for Health Information Technology (ONC)-certified:
  - The NHSN vendor validation process involves using NHSN-provided synthetic data to confirm vendor/homegrown software can accurately compile and aggregate AU and AR data according the NHSN AUR Module protocol. See the lists of AU and AR NHSN validated vendor software.

  - The ASTP/ONC vendor certification process involves producing valid Clinical Document Architecture (CDA) files to upload 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
    - Facilities can find more information about where to check for the OID in NHSN in the AU FAQs under the Data Import section.
  - Hospital has completed AUR Module training and entered monthly reporting plans within NHSN

Step 1 – Registration of Intent to Submit Data

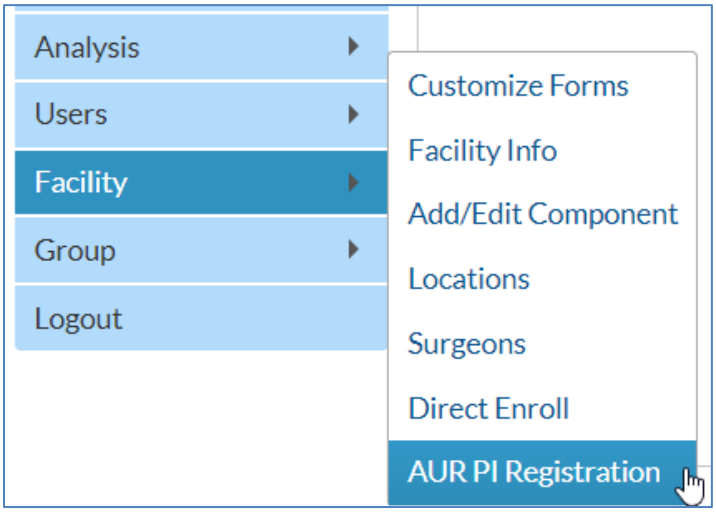
The eligible hospital or CAH must first register the facility's intent to submit AU and AR data into NHSN. Facilities should **NOT** register intent to submit data until they have verified that the vendor being used has been certified.

Important notes:

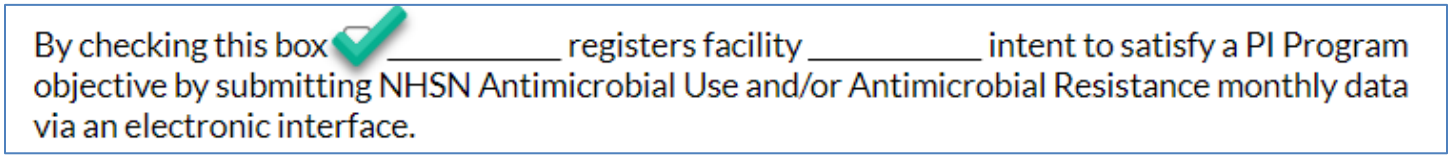
- Only the NHSN Facility Administrator can view and complete this task.
- All facilities must complete this step regardless of whether they are already sending production AU and AR data to NHSN.
- This step is completed once ever and cannot be undone.

Registration Steps

- After logging into the NHSN facility, click "Facility" then "AUR PI Registration" on the left-hand navigation bar:

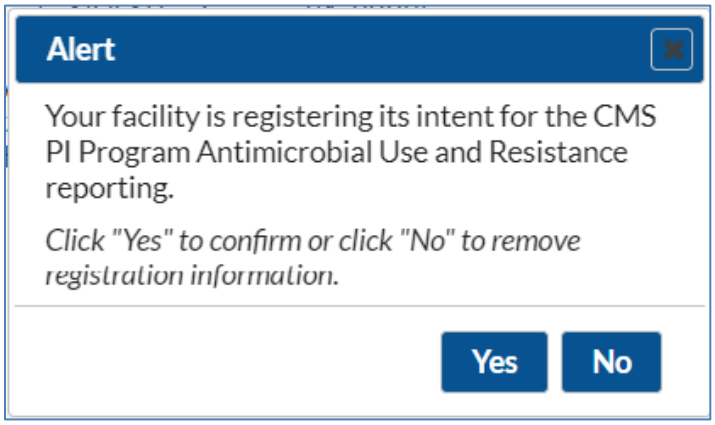


- On the AUR Promoting Interoperability (PI) Program Registration page, read the text and check the box to automatically add your name and the facility name to the form:
  - As of January 2025, this single registration allows your hospital to register intent for both the AU Surveillance and AR Surveillance measures. It is not possible to register intent for one measure without the other. AU and AR test files can be submitted separately according to the details in the email sent after completing registration if your facility intends to proceed with active engagement for only one of the measures.



- 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 receive copies of submission documentation:

- 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/or AR data.



- **The NHSN Facility Administrator and the Optional Facility PI Program Contacts will receive an automated confirmation email from NHSN that should be saved for your records**. This letter should be retained on site, but does not get submitted to CMS, unless requested.
    - This email also contains the instructions to proceed to Step 2: Testing and Validation of the AU and/or AR CDA File(s).

Step 2 – Testing and Validation of the AU and/or AR CDA Files

Eligible hospitals and CAHs participating in the Medicare Promoting Interoperability Program should then proceed through the NHSN testing and validation steps to validate AU files, AR files or both AU and AR files. Upon receipt of the NHSN invitation to begin testing and validation, facilities will complete the steps below. Facilities should not complete the steps below until Step 1 is complete, and the facility has received an email invitation to proceed.

Important Note: If your facility is already sending production for the measure(s) your facility in planning to attest to (Option 2), you do *not* need to complete this step. For example, if your facility is planning to attest to being in active engagement to submit AU Surveillance data (Option 2) and your facility has already been submitting AU data to NHSN, your facility does not need to complete the test file step.

Test file Steps

- Email the relevant test CDA files to the NHSN CDA Helpdesk (NHSNCDA@cdc.gov) applicable to the measure(s) your facility would like to attest to according to the specifications outlined in the invitation letter.
    - To attest to active engagement for the AU Surveillance measure only, send one test file:
        - Antimicrobial Use Summary CDA
    - To attest to active engagement for the AR Surveillance measure only, send two test files:
        - Antimicrobial Resistance - Numerator CDA (aka AR Event)
        - Antimicrobial Resistance - Denominator CDA (aka AR Summary)
    - To attest to active engagement for both the AU and AR Surveillance measures, send all three test files:
        - Antimicrobial Use Summary CDA

    - Antimicrobial Resistance - Numerator CDA (aka AR Event)
    - Antimicrobial Resistance - Denominator CDA (aka AR Summary)
- As the NHSN CDA Helpdesk receives and validates the test file(s), 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 relevant test CDA files pass validation, the facility will receive an email indicating that the test file(s) have passed and that AU and/or AR data can now be uploaded into the NHSN production environment. **This email should be saved for your records.** This letter should be retained on site, but does not get submitted to CMS, unless requested.

Once registration is complete, hospitals should work towards sending AUR files to the NHSN AUR Team for validation. Files sent to the NHSN AUR Team prior to November 1, will be processed in time for the facility to receive feedback prior to December 31. **However, eligible hospitals and CAHs are not required to submit files for validation during the calendar year. Hospitals can attest "Yes" to "Option 1 – Pre-production and Validation" as long as they are working towards the creation of AUR files within that calendar year.**

Step 3 – Submission of Production AUR Data into NHSN

Once the testing and validation steps are complete, the eligible hospital or CAH will be invited to submit AU and/or AR data into the NHSN production environment. Prior to uploading AU and/or AR CDA files, the facility must add the appropriate information to their monthly reporting plans. Please see this video on how to upload CDA files into NHSN.

As a reminder, for data to be accepted by the NHSN application, a facility is required to use vendor/homegrown software that has been validated by NHSN. See the lists of AU and AR validated vendor software.

Facilities that reach Step 3 can attest to meeting the CMS PI Program's "Option 2 – Validated Data Production."

Monthly & Annual AUR Submission Status Reports

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

Month/Year	Antimicrobial Use Surveillance Measure	Antimicrobial Resistance Surveillance Measure	
	Antimicrobial Use Summary	Antimicrobial Resistance Events	Antimicrobial Resistance Summary
01/2025	Yes	Yes	Yes
02/2025	Yes	Yes	Yes

Further, on February 1 of each year, the NHSN Facility Administrator and Optional Facility PI Program Contacts will receive an automated email with an annual report summarizing the submission of AU and/or AR data to NHSN for the previous calendar year. **Facilities should be sure to save these emails for their records.** This letter should be retained on site, but does not get submitted to CMS, unless requested.

Ad Hoc AUR Submission Status Reports

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

- After logging into the NHSN facility, click "Facility" then "AUR PI Registration" on the left-hand navigation bar.
- On the AUR Promoting Interoperability (PI) Program Registration page, click "Reports":

- On the Request for AUR PI Program 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

CMS Requirements – Acute Care Hospital: https://www.cdc.gov/nhsn/cms/ach.html#anchor_1687351074355

- Operational guidance
- Training webinar and slides
- FAQs
- Office Hours slides

ASTP/ONC Certified Health IT Product List: https://chpl.healthit.gov/#/search

NHSN AUR Module Webpage: https://www.cdc.gov/nhsn/psc/aur/index.html

NHSN CDA Vendor Submission Support Portal: https://www.cdc.gov/nhsn/cdaportal/index.html

Questions for NHSN?

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

Questions for CMS?

- Use the QualityNet Question and Answer tool available on the QualityNet.cms.gov website. To access the tool, click on the “Help” tab in the upper right-hand corner, then select “Question and Answer Tool Main Page,” then select “Ask a Question.” From there, choose “PI - Promoting Interoperability” from the Program dropdown menu.
- You may also contact CMS live Support Center Help Desk at (844) 472-4477.
- Medicare Promoting Interoperability Programs: https://www.cms.gov/regulations-and-guidance/legislation/ehrincentiveprograms