

Using NHSN AUR Module for the CMS Promoting Interoperability Program

Background

The NHSN Antimicrobial Use (AU) and Antimicrobial Resistance (AR) (AUR) Module reporting was identified as one option to meet the Public Health Registry reporting element within the Centers for Medicare and Medicaid Services (CMS) Medicare Promoting Interoperability (PI) Program for eligible hospitals and critical access hospitals (CAHs) in 2017. This option continues to be available in calendar year (CY) 2023, and facilities reporting to the NHSN AUR Module will receive 5 bonus points. For measure details, please see the applicable [Medicare Promoting Interoperability Program Specification Sheets](#).

Beginning in CY 2024, CMS [finalized changes](#) to the Medicare Promoting Interoperability Program for eligible hospitals and critical access hospitals (CAHs) that include a new AUR Surveillance measure under the Public Health and Clinical Data Exchange Objective. To obtain credit for calendar year 2024, eligible hospitals and CAHs must attest to being in active engagement with CDC's NHSN to submit AUR data for the EHR reporting period, or else claim an applicable exclusion. Further, to meet the CMS PI Program requirement, facilities must use CEHRT updated to meet 2015 Edition Cures Update criteria, including criteria at [45 CFR 170.315 \(f\)\(6\)](#).

Refer to the [CMS Promoting Interoperability Program webpages](#) for additional information, including CY-specific submission requirements.

Eligible hospitals and CAHs 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 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 [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 to the NHSN AUR Module protocol. See the lists of [AU](#) and [AR](#) NHSN validated vendor software. Note: Vendor/homegrown software is not required to be validated for AR submission until May 2023.

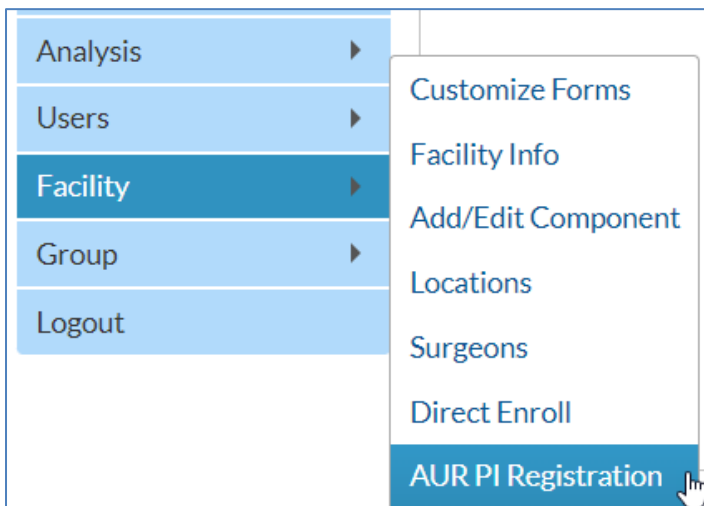
- The ONC vendor certification process involves producing valid Clinical Document Architecture (CDA) files to upload AU and AR data into NHSN. More information about the vendor certification process can be found on the [HealthIT website](#) and the [NHSN website](#).
- Fulfill the basic requirements 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 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: 1) Only the NHSN Facility Administrator can view and complete this task. 2) All facilities must complete this step regardless of whether they are already sending production AU and AR data to NHSN.

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



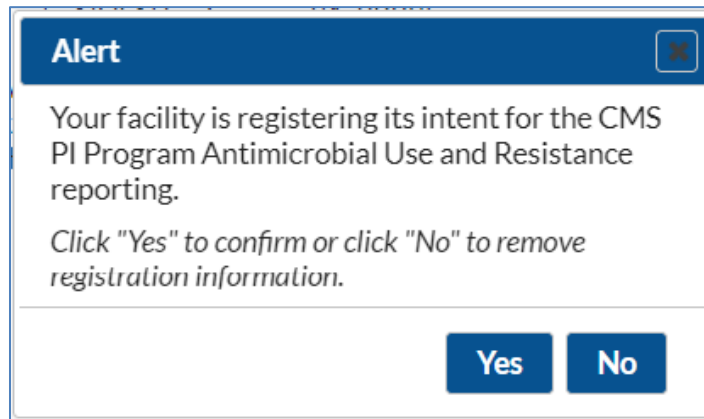
- On the AUR Promoting Interoperability (PI) Program Registration page, read the text and check the box to automatically add your name and the facility name to the form:

By checking this box _____ registers facility _____ intent to satisfy a PI Program 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 receive copies of submission documentation:

NHSN Facility Administrator:	<input type="text" value="FacAdmin@test.com"/>
Optional facility PI Program contact:	<input type="text" value="ExtraEmail1@test.com"/>
Optional facility PI Program contact:	<input type="text" value="ExtraEmail2@test.com"/>

- 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.



- 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 email also contains the instructions to proceed to Step 2: Testing and Validation of the AUR CDA Files.

Step 2 – Testing and Validation of the AUR CDA Files

Eligible hospitals and CAHs participating in the PI Program should then proceed through the NHSN testing and validation steps. 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 AU and AR data to NHSN, you do not need to complete this step.

- Email the three test CDA files 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.

Completing Steps 1 and 2 as outlined in this document meet the CMS criteria for attesting to Option 1 – Pre-production and validation.

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. 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. Note: Vendor/homegrown software is not required to be validated for AR submission until May 2023.

Facilities that reach Step 3 can attest to meeting the CMS PI Program’s Option 2 – Submitting production data.

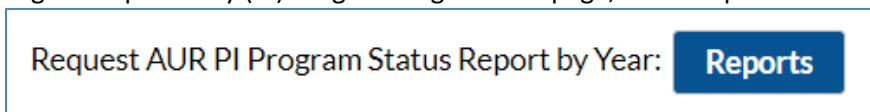
On the first day of every month, the NHSN Facility Administrator and Optional Facility PI Program Contacts will receive an automated email with a monthly summary of AU and AR data submission:

Month/Year	Antimicrobial Use Summary	Antimicrobial Resistance Events	Antimicrobial Resistance Summary
01/2022	Yes	Yes	Yes
02/2022	Yes	Yes	Yes

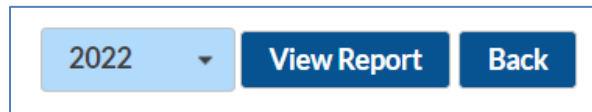
Further, on February 1 of each year, the NHSN Facility Administrator and Optional Facility PI Program Contacts will receive an automated email with an annual report summarizing the submission of AU and AR data to NHSN for the previous calendar year. Facilities should be sure to save these emails for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

In addition to the automated reports, the NHSN Facility Administrator has the ability to generate an ad-hoc report summarizing submission of AU and 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

Questions?

- 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
- Email/call the CMS QualityNet Helpdesk for questions related to PI Program participant requirements and ongoing deadlines: QnetSupport@cms.hhs.gov or 1-866-288-8912

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

CMS Promoting Interoperability Programs: <https://www.cms.gov/regulations-and-guidance/legislation/ehrincentiveprograms>

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

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

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>