National Healthcare Safety Network (NHSN) Antimicrobial Use and Resistance (AUR) Module Updates for Reporting in 2025

NHSN AUR Team

Office Hours Call
Fall 2024

Agenda

- 2025 AUR Module reporting updates
- 2025 Promoting Interoperability Program updates
- Commonly asked questions for AUR reporting and the Promoting Interoperability Program
- Resources
- Q&A

AU Option: Overview and Criteria for Reporting

Stephanie Sutton

AU Option Data Element - Numerator

- **Antimicrobial Days (days of therapy): Sum of days for which any amount of specific agent was administered to a patient**
  - 96 antimicrobials are sub-stratified by route of administration*
    - Intravenous (IV)
    - Intramuscular (IM)
    - Digestive (oral → rectal)
    - Respiratory (inhaled)
  - Only medication administration data (eMAR/BCMA)

*Please exclude any other routes of administration from AU Option Reporting

AU Option Data Element - Denominators

- **Days present: Number of days during which a patient spent any time in a specific location or facility**
  - Reported for all individual locations and facility-wide inpatient (FacWideIN) only
  - Days present ≠ Patient days
    - Days present used for AU Option only
- **Admissions: Number of patients admitted to an inpatient location in the facility**
  - Reported in FacWideIN only
  - Same definition used for AR Option

AU Option Summary Data

- **Monthly aggregate, summary-level data by location**
  - All inpatient locations individually
  - All inpatient locations combined (FacWideIN)
  - 3 outpatient locations (ED, pediatric ED, 24-hour observation)
  - Use same mapped locations throughout all of NHSN
- **Data are aggregated prior to sending to NHSN**
- **No patient-level data shared with NHSN for AU Option**
- **Requires accurate/complete electronic capture of both the numerator and denominator for the given location**

2025 AUR Module Reporting Updates - AU Option

- **The following antimicrobials will be added:**
  - Cefepime/enmetazobactam
  - Ceftobiprole medocaril
  - Pivmecillinam
- **The following antimicrobial will be removed:**
  - Chloramphenicol

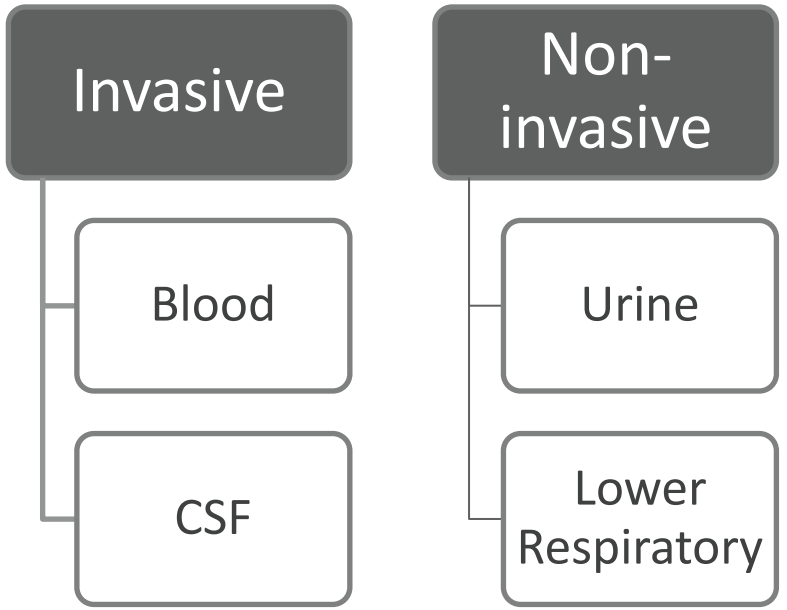
Planned Version	Defect /CR	Value	Code	displayName	codeSystem	Valueset AURPH
13.0	82397	2675987	CEFENMET	CEFENMET - Cefepime/Enmetazobactam	2.16.840.1.113883.6.88	X
13.0	82397	2691334	CEFTOMED	CEFTOMED - Ceftobiprole medocaril	2.16.840.1.113883.6.88	X
13.0	82397		~~CHLOR~~	~~CHLOR - Chloramphenicol~~	~~2.16.840.1.113883.6.88~~	
13.0	82397	102745	PIVMEC	PIVMEC - Pivmecillinam	2.16.840.1.113883.6.88	X

AR Option: Overview and Criteria for Reporting

Stephanie Sutton

AR Option Data Elements - Numerator (2024)

- **AR Event data: isolate-level susceptibility results for specific organisms**
- **Qualifying isolate criteria for an AR Event:**
  - Collected in an eligible location/unit
  - Collected from one of four specimen types:
    - Blood
    - Cerebrospinal fluid (CSF)
    - Urine
    - Lower Respiratory
  - Eligible organism identified
  - Antimicrobial susceptibility testing (AST) must be completed
    - Qualifies for submission regardless of susceptibility results



- **Reported for:**
  - All inpatient locations and 3 outpatient location types (ED, pediatric ED, & 24-hour observation area)

AR Option Data Elements - Denominator

- **Patient Days: Number of patients present in the facility at the same time on each day of the month (“daily census”)**
  - Reported for facility-wide inpatient (FacWideIN) only
- **Admissions: Number of patients admitted to an inpatient location in the facility (Same as AU Option)**
  - Reported for FacWideIN only
- **Encounters: A visit to an eligible outpatient location**
  - Reported for an individual outpatient locations (ED, pediatric ED, & 24-hour observation area) only
- **Summary records are not submitted for:**
  - Individual inpatient locations
  - Combined outpatient locations or outpatient locations beyond thoued mapped as the three location types above

2025 AUR Module Reporting Updates - AR Option Pathogens

- **Pathogens**
  - Add Group A *Streptococcus*
  - Expanding to genus (and all species codes)
    - *Candida*
    - *Citrobacter*
    - *Klebsiella*
    - *Proteus*
- **Refreshing the AR Option Pathogen Roll-up Workbook**

2025 AUR Module Reporting Updates - AR Option Specimens

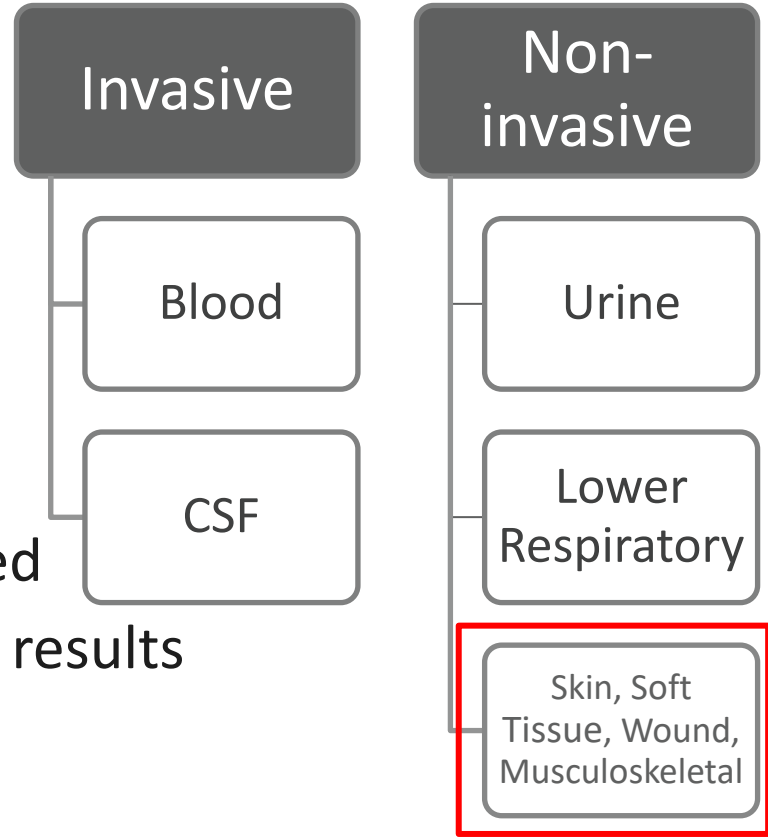
- **Specimen Sources**
  - Add new specimen sources:
    - Skin
    - Soft tissue
    - Wound
    - Musculoskeletal
  - Add indwelling catheter specimen back to the list

2025 AUR Module Reporting Updates - AR Option AST

- **Antimicrobial susceptibility testing (AST)**
  - Drug panels updated to reflect CLSI testing recommendations
  - Phenotype definitions will be updated accordingly
  - Group A *Streptococcus* will share a panel with Group B *Streptococcus*
  - Add *Pseudomonas aeruginosa* urine panel
  - *Candida* isolates can be reported without AST

AR Option Data Elements - Numerator (2025)

- **AR Event data: isolate-level susceptibility results for specific organisms**
- **Qualifying isolate criteria for an AR Event:**
  - Collected in an eligible location/unit
  - Collected from one of **eight** specimen types
  - Eligible organism identified
  - Antimicrobial susceptibility testing (AST) must be completed
    - Qualifies for submission regardless of susceptibility results
    - Candida isolates can be reported **without** AST
- **Reported for:**
  - All inpatient locations and 3 outpatient location types (ED, pediatric ED, & 24-hour observation area)



2025 AUR Module Reporting Updates - AR Option

- **Denominators:**
  - Admissions: definition clarified to match AU Option
  - Encounter definition clarified: A visit to an eligible outpatient location counts as a single encounter. The patient can **contribute an encounter as soon as they have had an initial interaction with a medical professional (for example, the beginning of triage)**. The patient can contribute an encounter regardless of whether the patient is placed in a bed.
- **Admission status:**
  - Updated admission status (no) text to include reference to transfer to another facility: Report False (No) if the specimen was collected in an outpatient location and the **patient was transferred to another facility** or discharged and did not return to an inpatient location within 24 hours.

2023 NHSN Annual Survey

*6. Does your facility use commercial or laboratory developed tests for rapid molecular detection of antimicrobial resistance markers in bacterial bloodstream infections? Examples of commercially available systems include BioFire FilmArray, Luminex Verigene, etc.

☐ Yes

☐ No [If checked, skip questions 7 and 8]

6a. If Yes, which test panel(s) does your facility use? (check all that apply)

☐ Accelerate PhenoTest BC	☐ BioFire FilmArray BCID	☐ BioFire FilmArray BCID II
☐ Cepheid Xpert MRSA/SA BC	☐ GenMark ePlex BCID-GP	☐ GenMark ePlex BCID-GN
☐ GenMark ePlex BCID-FP	☐ Luminex Verigene BC-GP	☐ Luminex Verigene BC-GN

☐ MALDI-TOF MS directly from positive blood culture (e.g., SepsiTyper)

☐ MALDI-TOF MS based antimicrobial resistance detection

☐ T2Biosystems T2Bacteria	☐ T2Biosystems T2Candida	☐ T2Biosystems T2Resistance

☐ Other Commercial Test(s) (Leave Comment) _____

☐ Other Laboratory Developed Test(s) (Leave Comment) _____

2025 AR Option Reporting Mid-year Updates

- **Rapid molecular detection of antimicrobial resistance markers will be added to AR Event reporting**
  - Hospitals will be able to report results of genotypic testing performed by the lab along with the traditional phenotypic AST results in a single AR Event File
  - AR Option will be updated to use the R4-D3 HL7 Implementation Guide (IG)
    - For 2025 AR Option reporting, vendors and hospitals will be able to use either the R3 (current IG) or the R4-D3 IG
    - Rapid molecular detection of antimicrobial resistance markers results cannot be reported if using the R3 IG

Medicare Promoting Interoperability Program AUR Module Updates

Amy Webb

Disclaimer

- **Slides & answers are based on:**
  - Details in the Federal Register :: Medicare and Medicaid Programs and the Children's Health Insurance Program; Hospital Inpatient Prospective Payment Systems for Acute Care Hospitals and the Long-Term Care Hospital Prospective Payment System and Policy Changes and Fiscal Year 2025 Rates; Quality Programs Requirements; and Other Policy Changes
  - CMS published fact sheet containing CY 2025 PI Program updates: FY 2025 Hospital Inpatient Prospective Payment System (IPPS) and Long-Term Care Hospital Prospective Payment System (LTCH PPS) Final Rule –- CMS-1808-F | CMS

CMS PI Program

- **Requires eligible hospitals and critical access hospitals to report on objectives and measures to be considered a meaningful EHR user and avoid a downward payment adjustment**
- **Program Requirements | CMS**

TABLE IX.F.-01.: PERFORMANCE-BASED SCORING METHODOLOGY FOR EHR REPORTING PERIODS IN CY 2024

Objective	Measure	Maximum Points	Required/Optional
Electronic Prescribing	e-Prescribing	10 points	Required
	Query of Prescription Drug Monitoring Program (PDMP)	10 points	Required
Health Information Exchange	Support Electronic Referral Loops by Sending Health Information	15 points	Required (eligible hospitals and CAHs must choose one of the three reporting options)
	-AND-		
	Support Electronic Referral Loops by Receiving and Reconciling Health Information	15 points	
	-OR-		
	Health Information Exchange Bi-Directional Exchange	30 points	
	-OR-		
	Enabling Exchange under the Trusted Exchange Framework and Common Agreement (TEFCA)	30 points	
Provider to Patient Exchange	Provide Patients Electronic Access to Their Health Information	25 points	Required
Public Health and Clinical Data Exchange	Report the following five measures: • Syndromic Surveillance Reporting • Immunization Registry Reporting • Electronic Case Reporting • Electronic Reportable Laboratory Result Reporting • Antimicrobial Use and Resistance (AUR) Surveillance	25 points	Required
	Report one of the following measures: • Public Health Registry Reporting • Clinical Data Registry Reporting	5 points (*bonus*)	Optional

2023-16252.pdf (govinfo.gov) Page 627

PI Program eligibility & NHSN AUR reporting

- **Reach out to person(s) in charge of quality reporting within the facility and/or C-suite**

		CMS Promoting Interoperability	
		Eligible	**Not eligible**
NHSN AUR Module	**Accept data from**	• Acute care hospitals • Critical access hospitals	• Inpatient rehab hospitals (IRF) • Inpatient psych hospitals (IPF) • Long term acute care hospitals (LTCH/LTAC/LTACH) • Rural Emergency Hospital (REH)
	Do not accept data from	None	Non-hospital facilities, for example: • Outpatient dialysis clinics • Ambulatory surgery centers • Long term care facilities (skilled nursing/nursing home)

AUR Module data are required in CY 2024

- **Beginning in CY 2024, AUR Module data are required under the Public Health and Clinical Data Exchange Objective of the CMS PI Program**
- **Applies to eligible hospitals and critical access hospitals that participate in the CMS PI Program**
- **Measure includes submission of both AU and AR Option data**
- **For CY 2024 facilities attest to either:**
  - Being in active engagement with NHSN to submit AUR data or,
  - Claim an applicable exclusion

https://www.cms.gov/regulations-and-guidance/legislation/ehrincentiveprograms

Two ways to be in active engagement with NHSN

- **Option 1 – Pre-production and validation**
  - Registration within NHSN
  - Working on testing & validation of Clinical Document Architecture (CDA) files
- **Option 2 – Validated data production**
  - Registration within NHSN
  - Submitting production Antimicrobial Use (AU) Option & Antimicrobial Resistance (AR) Option files to NHSN
    - CY 2024 – 180 continuous days of AUR data submission
      - Also known as: EHR Reporting Period
- **Note: Definitions of active engagement are set within the PI Program & are the same for other Public Health and Clinical Data Exchange Objective PI Program measures**

Three exclusions for CY 2024

1. **Does not have any patients in any patient care location for which data are collected by NHSN during the EHR reporting period; or**

2. **Does not have electronic medication administration records (eMAR)/barcoded medication administration (BCMA) records or an electronic admission discharge transfer (ADT) system during the EHR reporting period; or**

3. **Does not have an electronic laboratory information system (LIS) or electronic ADT system during the EHR reporting period.**

Exclusion examples for CY 2024

1. **Example: If *Candida* isolates are sent out for identification and/or AST and return to the facility via PDF or fax then the facility does not have interoperable data and should claim the exclusion.**

2. **Example: If *Candida* isolates cannot be speciated then those isolates are not eligible for AR Option reporting. Facility should not claim PI Program exclusion.**

3. **Example: If *Candida* isolates are speciated but do not have AST performed, then those isolates are not eligible for AR Option reporting. Facility should not claim PI Program exclusion.**

Overview of changes for CY 2025 PI Program

- AUR Surveillance measure is being split into two separate measures: AU Surveillance and AR Surveillance
- AU Surveillance and AR Surveillance are considered new measures for CY 2025 – facilities have an extra year for Option 1
- Exclusions have been separated & one new exclusion added

TABLE IX.F.-03: SUMMARY OF PERFORMANCE-BASED SCORING FOR EHR REPORTING PERIODS IN CY 2025 AND SUBSEQUENT YEARS

Objective	Measure	Maximum Points	Required/Optional
e-Prescribing	e-Prescribing	10 points	Required
	Query of PDMP	10 points	Required
HIE	Support Electronic Referral Loops by Sending Health Information	15 points	Required (eligible hospitals and CAHs must choose one of the three reporting options)
	-AND-		
	Support Electronic Referral Loops by Receiving and Reconciling Health Information	15 points	
	-OR-		
	HIE Bi-Directional Exchange	30 points	
	-OR-		
	Enabling Exchange under TEFCA	30 points	
Provider to Patient Exchange	Provide Patients Electronic Access to Their Health Information	25 points	Required
Public Health and Clinical Data Exchange	Report the following six measures: • Syndromic Surveillance Reporting • Immunization Registry Reporting • eCR • Electronic Reportable Laboratory Result Reporting • AU Surveillance* • AR Surveillance*	25 points	Required
	Report one of the following measures: • Public Health Registry Reporting • Clinical Data Registry Reporting	5 points (*bonus*)	Optional

Notes: The Security Risk Analysis measure, SAFER Guides measure, and attestations required by section 106(b)(2)(B) of the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) are required but will not be scored. Reporting eCQMs is required but will not be scored. Eligible hospitals and CAHs must also submit their level of active engagement for measures under the Public Health and Clinical Data Exchange objective. Participants may spend only one EHR reporting period at Option 1: Pre-production and Validation level per measure and must progress to Option 2: Validated Data Production level for the following EHR reporting period. See the FY 2023 IPPS/LTCH PPS final rule (87 FR 49337) for more details about active engagement.

*Signifies a finalized measure in this FY 2025 IPPS/LTCH PPS final rule. For details on our finalized modifications to the AUR Surveillance measure, which we have separated into an AU Surveillance measure and an AR Surveillance measure, we refer readers to section IX.F.2 of this final rule.

Splitting into AU and AR Surveillance Measures

- **In CY 2025, eligible hospitals and CAHs must be in active engagement or claim an eligible exclusion for each measure**
  - Both are still required measures for the PI Program
- **Hospitals can be at different levels of engagement for each measure**
  - Example 1: Hospital can attest to Option 2 for AU Surveillance and Option 1 for AR Surveillance
  - Example 2: Hospital can attest to Option 1 for AU Surveillance and claim an exclusion for AR Surveillance

AU and AR considered new measures for PI Program

- **With the split, CMS is considering AU Surveillance and AR Surveillance brand new measures for CY 2025**
- **Hospitals are allowed to spend CY 2025 in Option 1 (Pre-production and testing) before moving to Option 2 in CY 2026**
  - Hospitals attesting to Option 1 in CY 2024 for AUR Surveillance can attest to Option 1 again in CY 2025 for both AU and AR Surveillance if that reflects their true status

CY 2025 exclusions by measure: AU Surveillance

1. **Does not have any patients in any patient care location for which data are collected by NHSN during the EHR reporting period**

2. **Does not have an eMAR/BCMA electronic records or an electronic ADT system during the EHR reporting period**

3. **(New) Does not have a data source containing the minimal discrete data elements that are required for reporting.**

CY 2025 exclusions by measure: AR Surveillance

1. **Does not have any patients in any patient care location for which data are collected by NHSN during the EHR reporting period**

2. **Does not have an electronic LIS or electronic ADT system during the EHR reporting period**

3. **(New) Does not have a data source containing the minimal discrete data elements that are required for reporting.**

Exclusion examples for CY 2025

1. **Example: If *Candida* isolates are sent out for identification and/or AST and return to the facility via PDF or fax then the facility does not have interoperable data and should claim the exclusion.**

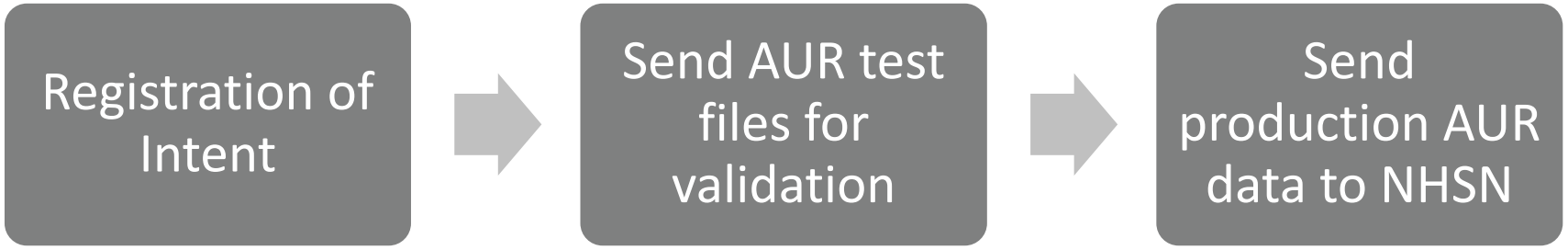
2. **Example: If *Candida* isolates cannot be speciated then those isolates are still eligible for AR Option reporting in CY 2025. Facility should not claim PI Program exclusion.**

3. **Example: If *Candida* isolates are speciated but do not have AST performed, then those isolates are eligible for AR Option reporting in CY 2025. Facility should not claim PI Program exclusion.**

Must have an exclusion for each measure separately

- **Because AU and AR are two separate measures for CY 2025, your hospital must meet an exclusion for each measure or be in active engagement**
  - Example 1: Hospital inpatient units were closed for construction. Hospital can claim exclusion 1 for both AU and AR surveillance measures.
  - Example 2: Hospital does not receive AST results from external lab in discrete fields. Hospital can claim exclusion 3 for AR Surveillance but must be in active engagement to report AU data to NHSN.

What to do in CY 2025



- **If your hospital already registered intent (in any previous calendar year), no further registration is needed**
- **If your hospital already sent test files (in any previous calendar year), no further test files are needed**
- **If your hospital is already sending production AU and AR data, continue sending production AU and AR data**

Same deadlines apply in CY 2025

- **Registration (if not already completed): register intent within 60 days of the start of your EHR Reporting Period**
- **Test files (if not already completed): reply to NHSN request for test files within 60 days of the request**
  - If test files are not yet ready when NHSN requests them, reply with a status update
  - No further status updates are needed
  - If your hospital would like an official letter from NHSN with your testing results in CY 2025, send files no later than November 1, 2025
- **Production data: report AU and AR data on an ongoing basis during your EHR Reporting period**

Commonly Asked Questions

Michelle Fedrick

Question 1

Do facilities need to send NHSN test files for validation for "Option 1 – Pre-Production and Validation" if they use a validated vendor?

Yes – Send test files if attesting to Option 1

- **If attesting to “Option 1 – Pre-production and Validation”, send test files regardless of the vendor used to submit AUR data**

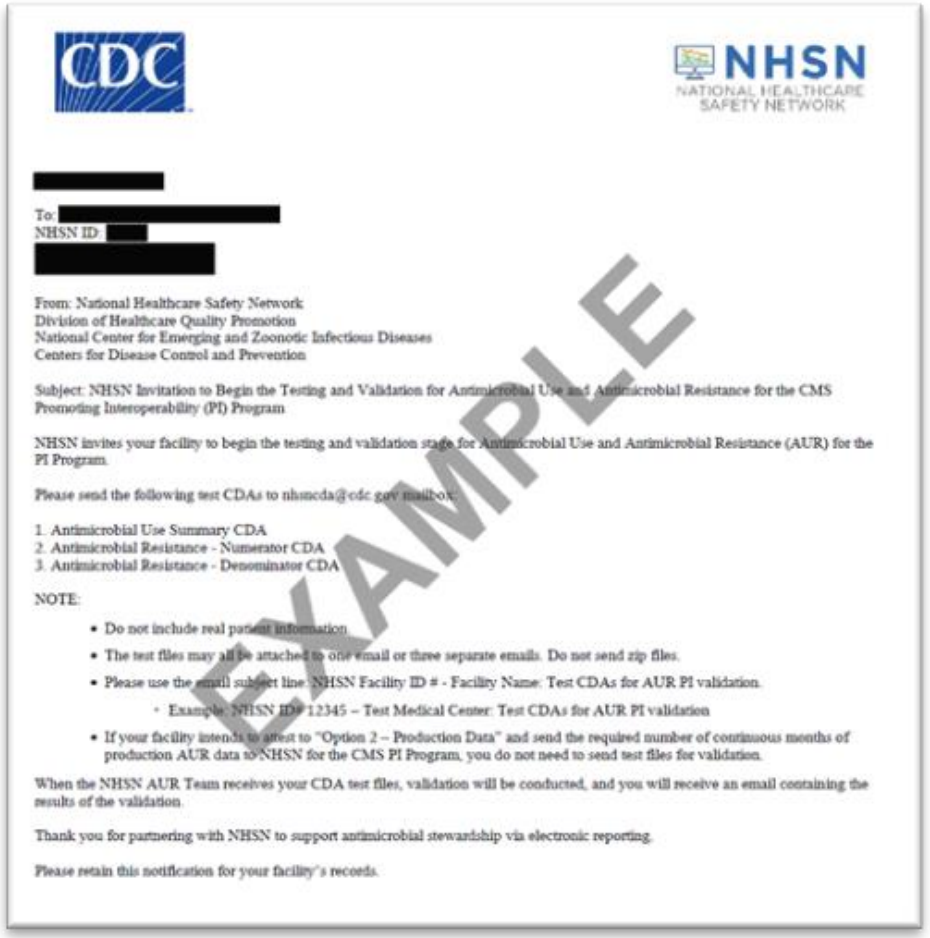
- **If attesting to “Option 2 – Validated Production Data”, do not send test files for validation**

Question 2

My facility is attesting to “Option 2 – Validated Data Production”, why do I keep getting automated email requests for test files?

All facilities receive an automated request for test files

- **The NHSN app automatically sends 2 emails when you register intent to submit AUR Module data for the purposes of the CMS PI Program:**
  - Instructions for submitting test files for “Option 1 – Pre-Production and Validation” (sent on the day you register)
  - A reminder to submit test files if your facility has not submitted files after 30 days
  - No need to reply to these emails if planning to send Production data



CDC

NHSN
NATIONAL HEALTHCARE SAFETY NETWORK

[redacted]

To: [redacted]
NHSN ID: [redacted]

From: National Healthcare Safety Network
Division of Healthcare Quality Promotion
National Center for Emerging and Zoonotic Infectious Diseases
Centers for Disease Control and Prevention

Subject: NHSN Invitation to Begin the Testing and Validation for Antimicrobial Use and Antimicrobial Resistance for the CMS Promoting Interoperability (PI) Program

NHSN invites your facility to begin the testing and validation stage for Antimicrobial Use and Antimicrobial Resistance (AUR) for the PI Program.

Please send the following test CDAs to nhsncda@cdc.gov mailbox:

1. Antimicrobial Use Summary CDA
2. Antimicrobial Resistance - Numerator CDA
3. Antimicrobial Resistance - Denominator CDA

NOTE:

- Do not include real patient information.
- The test files may all be attached to one email or three separate emails. Do not send zip files.
- Please use the email subject line: NHSN Facility ID # - Facility Name: Test CDAs for AUR PI validation.
  - Example: NHSN ID# 12345 – Test Medical Center: Test CDAs for AUR PI validation
- If your facility intends to attest to "Option 2 – Production Data" and send the required number of continuous months of production AUR data to NHSN for the CMS PI Program, you do not need to send test files for validation.

When the NHSN AUR Team receives your CDA test files, validation will be conducted, and you will receive an email containing the results of the validation.

Thank you for partnering with NHSN to support antimicrobial stewardship via electronic reporting.

Please retain this notification for your facility's records.

SAMPLE

Question 3

What files are required for the testing and validation stage, and where do I get the files?

Testing and validation of AUR CDA files

- **Work towards generating the files within your vendor system**
- **Send 3 files total for 2024; 1 test file for each file type:**
  - AU
  - AR Event (numerator)
  - AR Denominator
- **Ask your vendor for these**
- **Send to NHSNCDA@cdc.gov**

NHSN invites your facility to begin the testing and validation stage. Please send the following test CDAs to the nhsncda@cdc.gov mailbox:

1. Antimicrobial Use Summary CDA
2. Antimicrobial Resistance - Numerator CDA (aka AR Event)
3. Antimicrobial Resistance - Denominator CDA (aka AR Summary)

Important notes about test files

1. **Send a new email/open a new ticket**
   - Do not reply to existing/old tickets
2. **Send 1 email/ticket per NHSN orgID**
   - Do not send files for multiple facilities in 1 email/ticket
3. **Send relevant files**
   - 2024 – combined AUR Surveillance measure
     - Send all 3 files if you'd like a letter saying you've passed validation
     - Send all 3 files even if you're already submitting production AU data
   - 2025 – separated AU and AR Surveillance measures
     - Send files for specific measure (2 for AR and/or 1 for AU)
4. **Send as separate .xml files (not a .zip file)**

Question 4

I received an email that my facility's test CDAs have passed validation and that we can now send production data. Where do we send production data?

Submission of production data

Subject: NHSN AUR Promoting Interoperability (PI) Program Testing and Validation Completed - Ready to Send AUR CDAs to Production

Your facility's Antimicrobial Use Summary, Antimicrobial Resistance – numerator, and Antimicrobial Resistance - denominator (AUR) test CDAs have passed validation.

You may now send all AUR CDAs to the NHSN production environment.

Monthly AUR submission status reports will be automatically generated and emailed to the facility administrator and optional emails listed on the PI Registration page within your NHSN facility.

- **Send production AUR data to NHSN monthly**
- **NHSN will automatically email the NHSN Facility Administrator and optional PI contacts a monthly report outlining data submission status**

Month/Year	Antimicrobial Use Summary	Antimicrobial Resistance Events	Antimicrobial Resistance Summary
01/2024	Yes	Yes	Yes
02/2024	Yes	Yes	Yes
03/2024	No	No	No

Important notes about submitting production data

1. **Facilities should upload data on an ongoing basis during their EHR Reporting Period**
2. **Facilities can report data for months beyond the 180-day EHR Reporting Period**
3. **While the attestation is at the hospital-level, NHSN encourages facilities to submit AUR data from all inpatient locations individually, Facility-wide inpatient (FacWideIN), and select outpatient locations (ED, pediatric ED, 24hr observation area)***
    a. Work with your Infection Control team to review/map locations

*Only locations where numerator and denominator can be accurately captured

Question 5

Where/how do facilities get documentation of active engagement status?

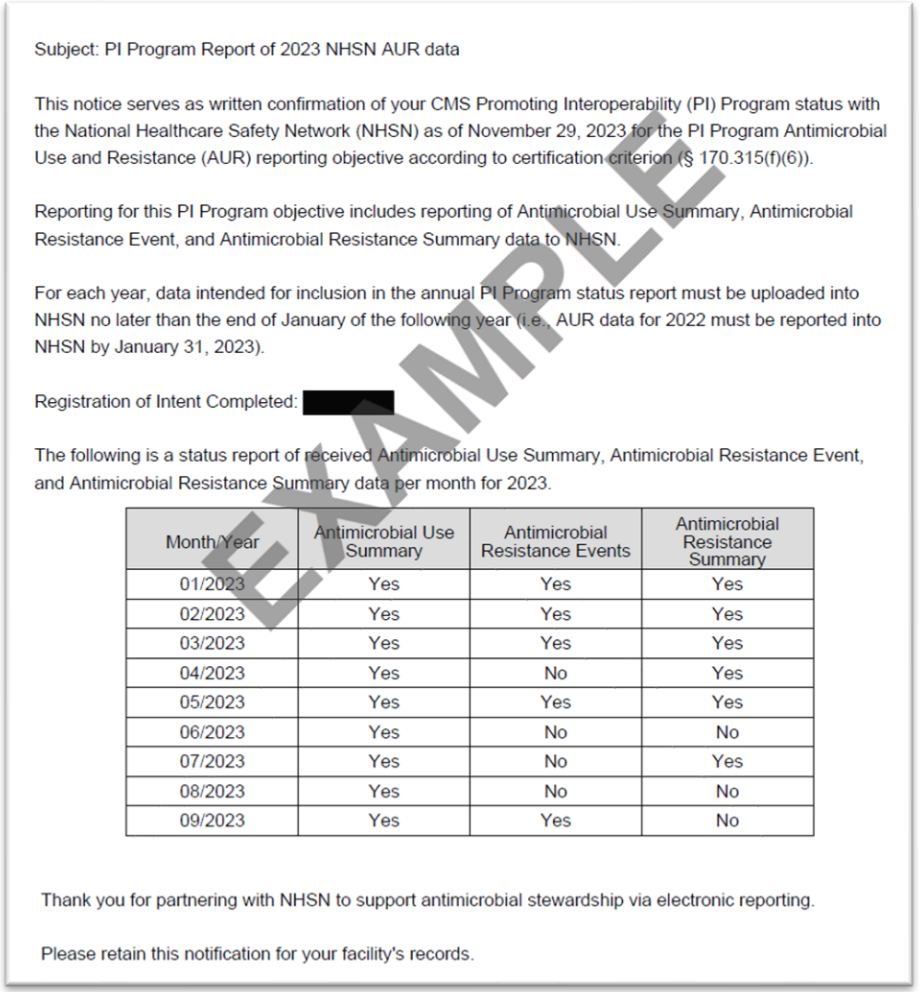
Option 1 Documentation/Verification of Facility Status

- **Option 1 – Pre-production & Validation**
  - First:
    - Email that you've successfully registered & to send test files
    - Sent to NHSN FacAdmin and any optional PI Program users
  - Second:
    - Email that your test files pass validation
      - Sent to NHSN FacAdmin and any optional PI Program users
      - Only sent after relevant files (AU and/or AR Event, AR Summary) are validated by NHSN

      OR
    - Emails that your facility sent to NHSN as your status updates

Option 2 Documentation/Verification of Facility Status

- **Option 2 – Validated Data Production**
  - Monthly email showing AUR data submission status
    - Sent to NHSN FacAdmin and any optional PI Program contacts
    - Generated the 1st day of each month
    - Annual letter generated February 1st
  - Ad hoc letters can also be generated at any time by the FacAdmin
    - https://www.cdc.gov/nhsn/pdfs/cda/PHDI-Facility-Guidance-508.pdf



Subject: PI Program Report of 2023 NHSN AUR data

This notice serves as written confirmation of your CMS Promoting Interoperability (PI) Program status with the National Healthcare Safety Network (NHSN) as of November 29, 2023 for the PI Program Antimicrobial Use and Resistance (AUR) reporting objective according to certification criterion (§ 170.315(f)(6)).

Reporting for this PI Program objective includes reporting of Antimicrobial Use Summary, Antimicrobial Resistance Event, and Antimicrobial Resistance Summary data to NHSN.

For each year, data intended for inclusion in the annual PI Program status report must be uploaded into NHSN no later than the end of January of the following year (i.e., AUR data for 2022 must be reported into NHSN by January 31, 2023).

Registration of Intent Completed: [redacted]

The following is a status report of received Antimicrobial Use Summary, Antimicrobial Resistance Event, and Antimicrobial Resistance Summary data per month for 2023.

Month/Year	Antimicrobial Use Summary	Antimicrobial Resistance Events	Antimicrobial Resistance Summary
01/2023	Yes	Yes	Yes
02/2023	Yes	Yes	Yes
03/2023	Yes	Yes	Yes
04/2023	Yes	No	Yes
05/2023	Yes	Yes	Yes
06/2023	Yes	No	No
07/2023	Yes	No	Yes
08/2023	Yes	No	No
09/2023	Yes	Yes	No

Thank you for partnering with NHSN to support antimicrobial stewardship via electronic reporting.

Please retain this notification for your facility's records.

Question 6

When and where do facilities complete the PI Program attestations?

Attest within the CMS HQR system

- **Facilities provide AUR attestation within CMS HQR system once a year for the previous year (due the last day in February)**
  - Example: Submit attestations for CY 2024 by **February 28, 2025**
  - Note: This date is subject to change due to weekends, federal holidays, or other changes proposed and finalized in CMS regulations. Date changes are communicated by CMS.
- **All CMS PI Program measures are included in the attestation process**
- **Review CMS PI Program Resource Library for more information: https://www.cms.gov/medicare/regulations-guidance/promoting-interoperability-programs/resource-library**

Question 7

When and where do facilities submit exclusions for the PI Program?

Exclusions are submitted within the CMS HQR system

- **NHSN can provide guidance but ultimately CMS must decide whether a specific scenario meets exclusion criteria**
  - Participants must submit their exclusions through the CMS Hospital Quality Reporting (HQR) system
  - Exclusions are submitted during the HQR open period (January 1 – last day February)

HQR system: https://hqr.cms.gov/hqrng/login

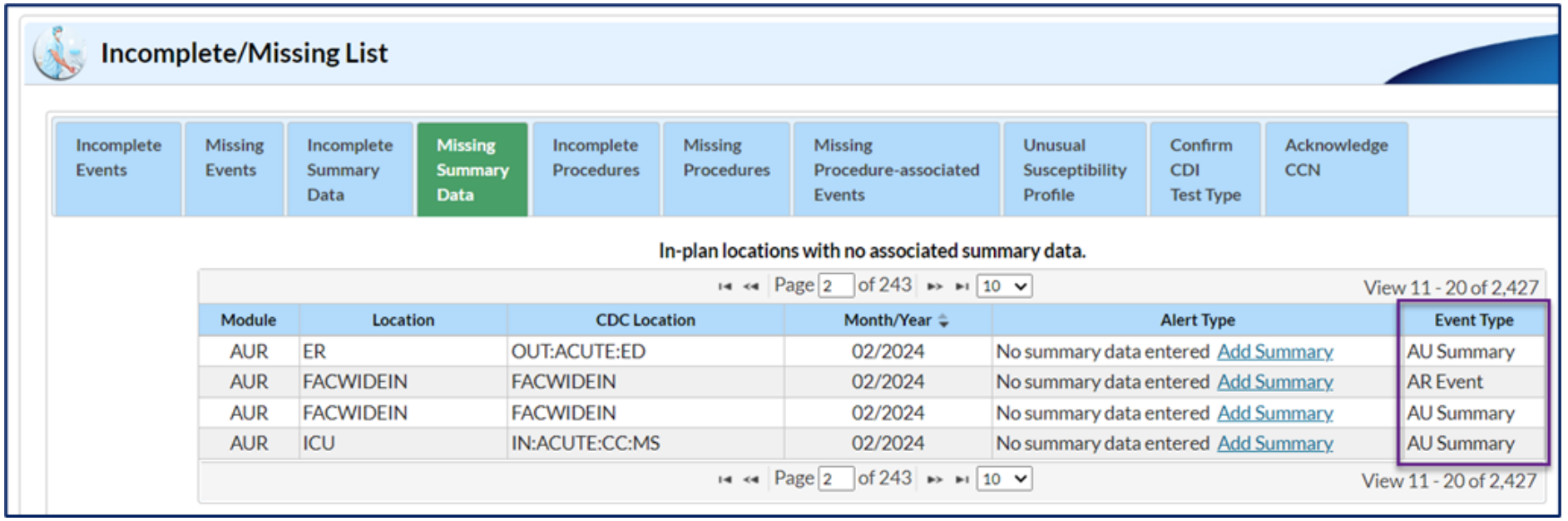
HQR User guide: https://www.cms.gov/files/document/hqr-user-guide.pdf

Question 8

I can see AUR items showing up on the Missing Data Alerts when I log into NHSN, but I've uploaded my AUR data and the monthly AUR submission status report emailed to me shows "Yes" for all reporting. Why is there a discrepancy?

Alerts for Missing Summary Data

- **Facilities add AUR to their NHSN Monthly Reporting Plans**
- **Then upload AUR data**
  - All locations listed in the Monthly Reporting Plan included in the upload?
    - Yes: no missing summary data alerts are generated
    - No: missing summary data alerts are generated

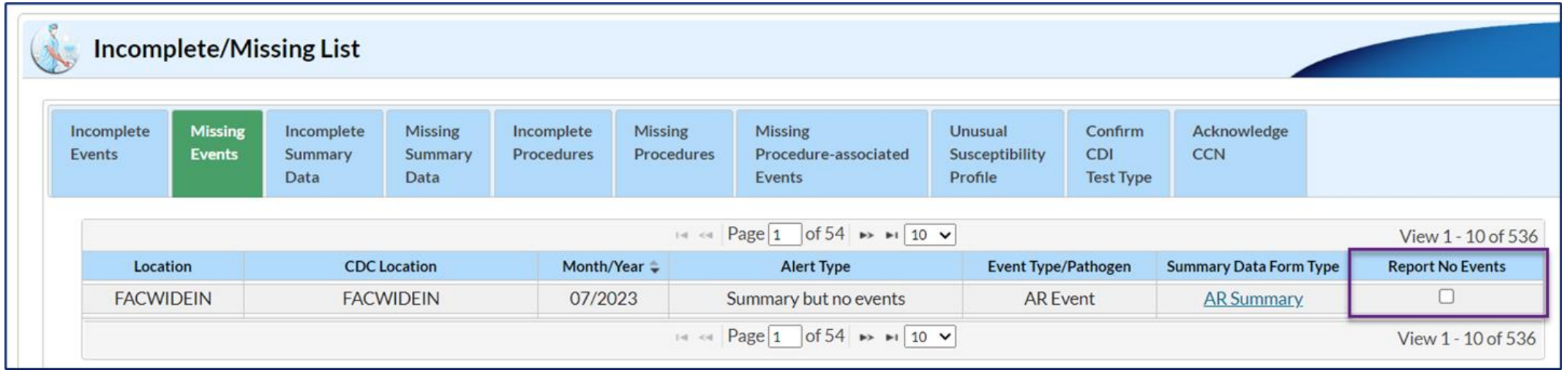


Clear alerts by uploading data

- **Why do I have missing data?**
  - Zip file may not have included all location types or data types
  - Individual files may have failed, and you didn't notice during upload
- **Try the upload again**
  - Pay attention to the number of files in the .zip and whether any fail
- **Work with your vendor representative**
  - Find missing files
  - Resolve errors in files
- **Try the upload again**
- **Goal is to have zero missing data alerts**

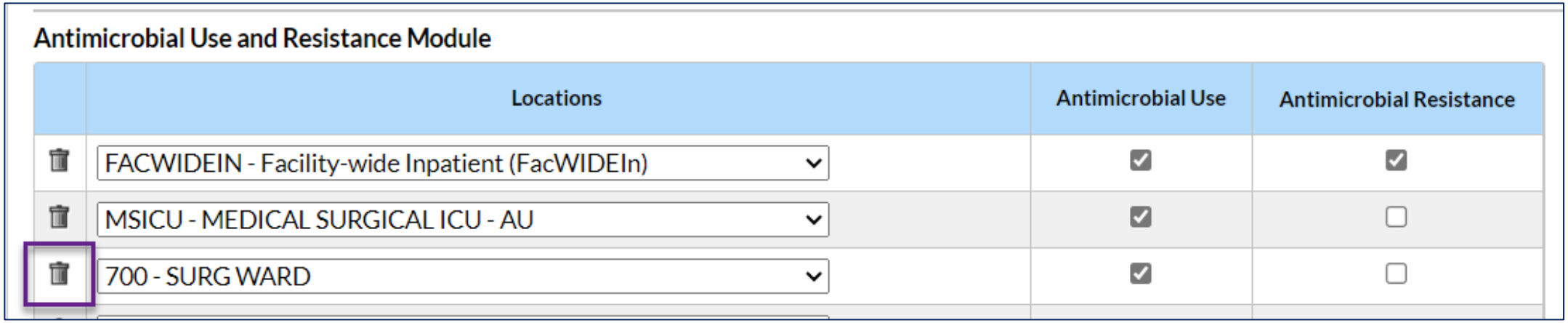
Alerts for Missing AR Event data

- **Do you have isolates that qualify as AR Events?**
  - Yes: find & upload them
  - No: click the “Report No Events” box
    - https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/aur/AR-QRG-NoEvents-508.pdf



Clear alerts by updating Monthly Reporting Plan

- **In some circumstances, you may not be able to report data for a location in your reporting plan**
  - E.g., cannot accurately capture numerator or denominator data
- **Remove that location from the reporting plan**
  - Click the garbage can icon to remove a whole row
  - See AU FAQs for more info: https://www.cdc.gov/nhsn/faqs/faq-au.html



Question 9

Does the AUR Measure include a requirement for reporting data from specific patient care locations?

AUR measure location requirements

- **Within the PI Program, AUR measure requires the eligible hospital or CAH to submit data for the inpatient and emergency department (Place of Service 21 and 23)**

- **NHSN strongly encourages the submission of data from all NHSN-defined inpatient locations (including procedural areas like operating rooms), facility-wide inpatient (FacWideIN), and select outpatient acute care settings (specifically, outpatient emergency department [ED], pediatric ED, and 24-hour observation area) from which the numerator and denominator data can be accurately captured.**

Question 10

What if my hospital switches EHR vendors during the calendar year?

If your facility switches EHR vendors…

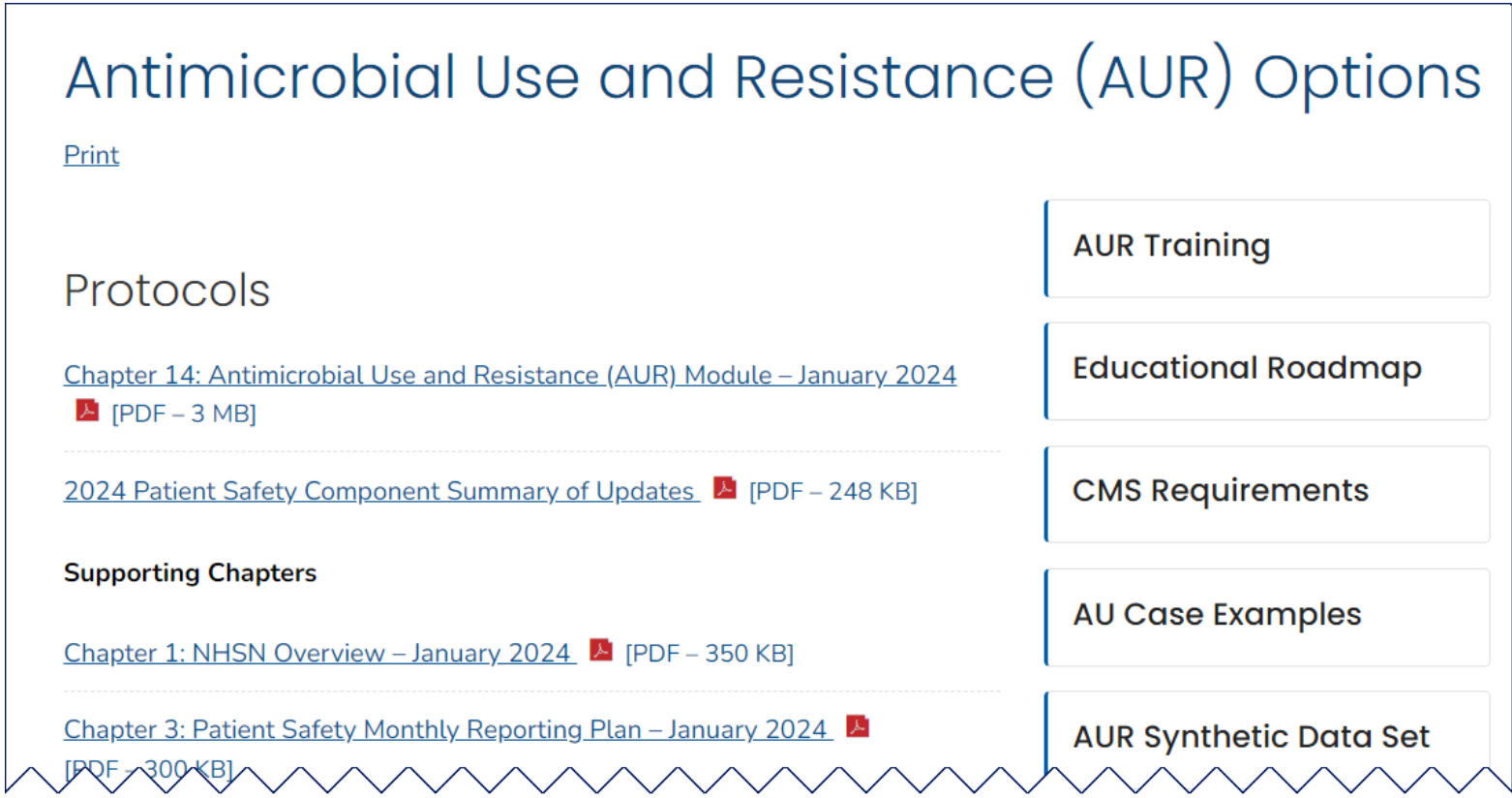
- **For NHSN purposes, we encourage facilities to submit the validated AUR data they have available.**
- **For the Medicare PI Program, if a hospital switches vendors, they still need to submit data for their chosen 180-day EHR reporting period.**
- **NOTE: Registration of intent to submit AUR data to NHSN is only completed once ever! So, if you switch EHR vendors, you do not need to register or submit test files again.**

Resources

Amy Webb

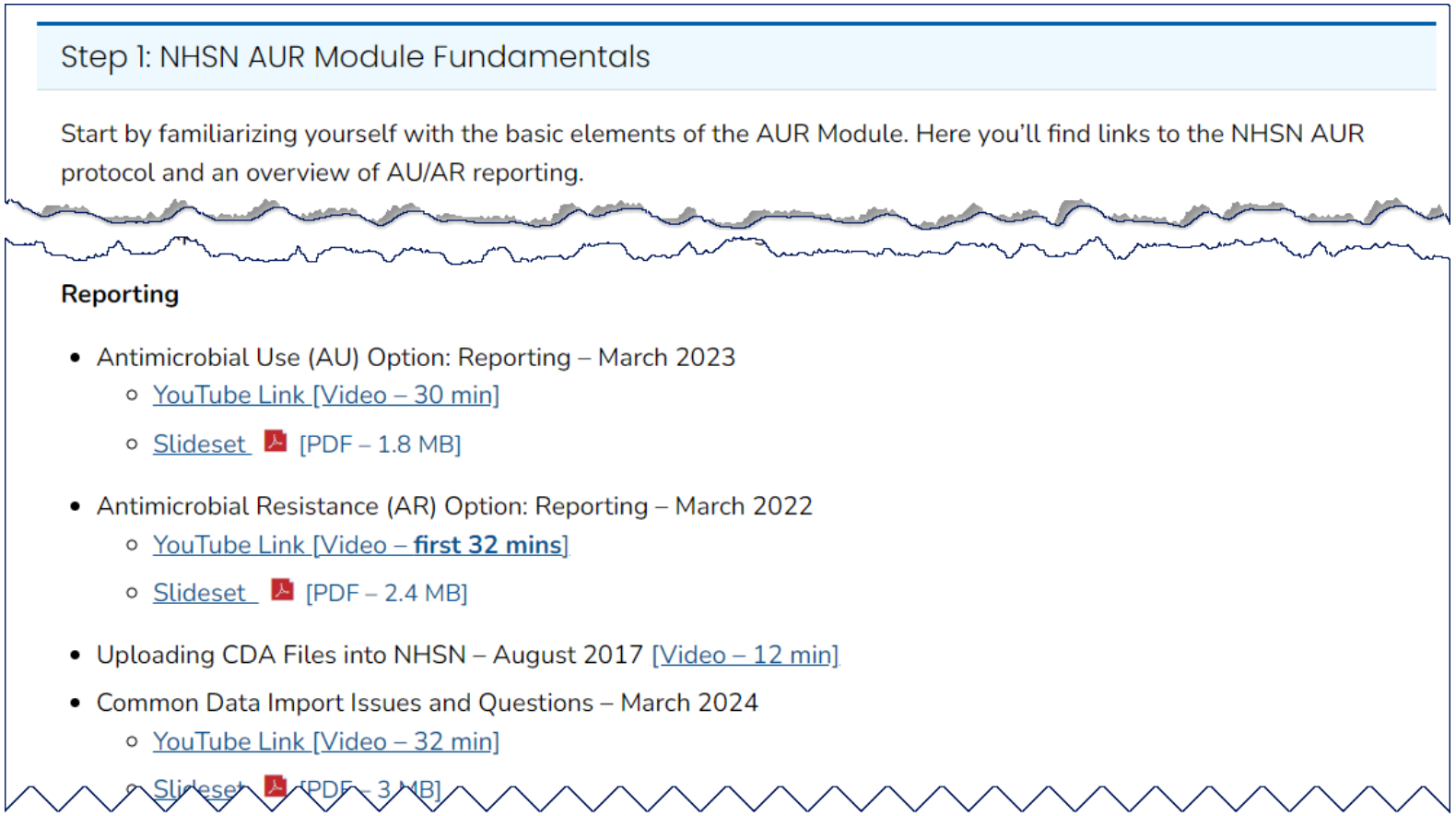
AUR Module Homepage

- **AUR | PSC | NHSN | CDC**
  - Updated protocol
  - Links to FAQs



AUR Training & Educational Roadmap

- [AUR Training | PSC | NHSN | CDC]
- [AUR | PSC RoadMap | NHSN | CDC]



Step 1: NHSN AUR Module Fundamentals

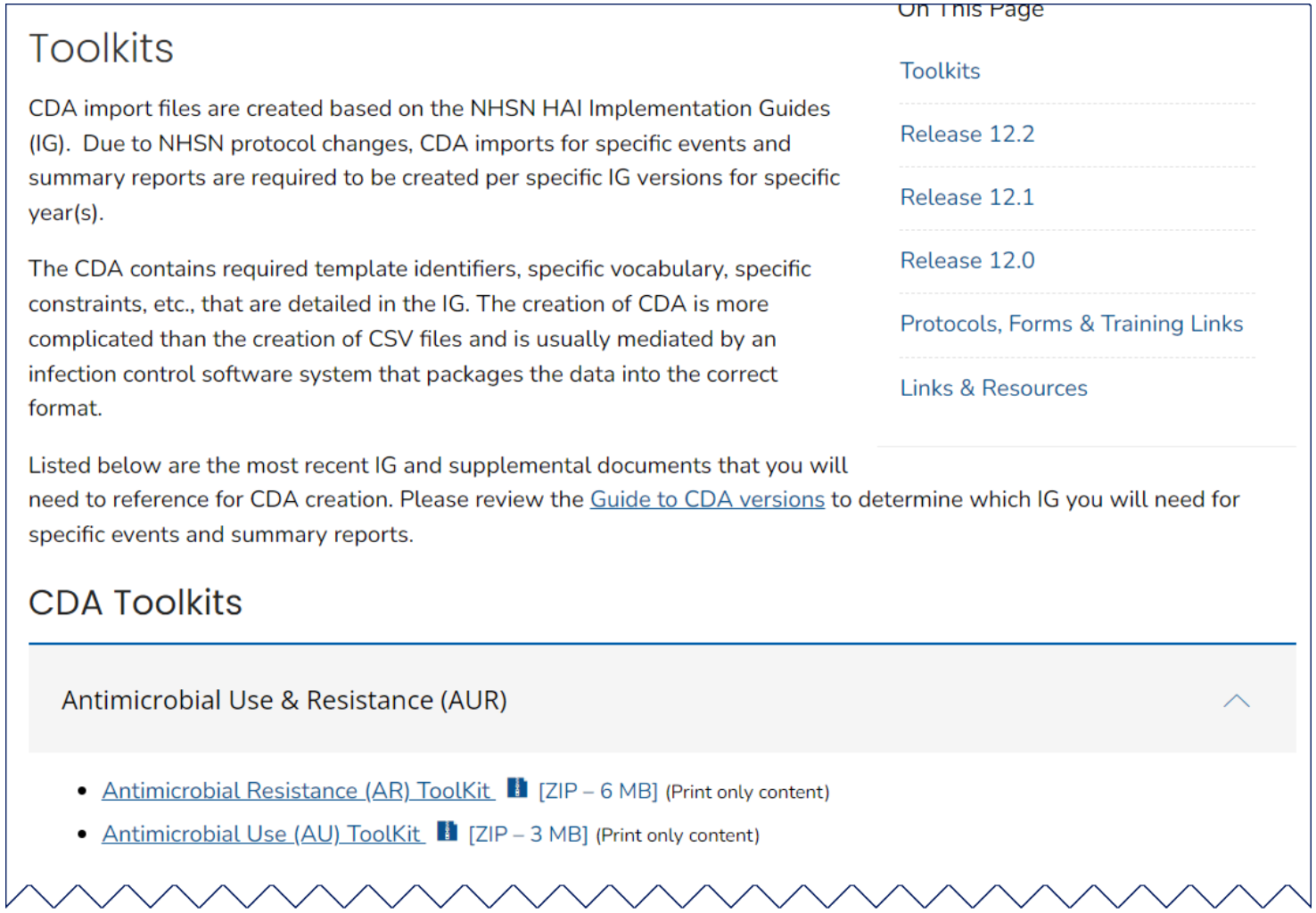
Start by familiarizing yourself with the basic elements of the AUR Module. Here you'll find links to the NHSN AUR protocol and an overview of AU/AR reporting.

Reporting

- Antimicrobial Use (AU) Option: Reporting – March 2023
  - YouTube Link [Video – 30 min]
  - Slideset [PDF – 1.8 MB]
- Antimicrobial Resistance (AR) Option: Reporting – March 2022
  - YouTube Link [Video – **first 32 mins**]
  - Slideset [PDF – 2.4 MB]
- Uploading CDA Files into NHSN – August 2017 [Video – 12 min]
- Common Data Import Issues and Questions – March 2024
  - YouTube Link [Video – 32 min]
  - Slideset [PDF – 3 MB]

CDA Toolkits

- [Implementation Toolkits & Resources | NHSN | CDC]



On This Page

Toolkits

Release 12.2

Release 12.1

Release 12.0

Protocols, Forms & Training Links

Links & Resources

Toolkits

CDA import files are created based on the NHSN HAI Implementation Guides (IG). Due to NHSN protocol changes, CDA imports for specific events and summary reports are required to be created per specific IG versions for specific year(s).

The CDA contains required template identifiers, specific vocabulary, specific constraints, etc., that are detailed in the IG. The creation of CDA is more complicated than the creation of CSV files and is usually mediated by an infection control software system that packages the data into the correct format.

Listed below are the most recent IG and supplemental documents that you will need to reference for CDA creation. Please review the Guide to CDA versions to determine which IG you will need for specific events and summary reports.

CDA Toolkits

Antimicrobial Use & Resistance (AUR)

- Antimicrobial Resistance (AR) ToolKit [ZIP – 6 MB] (Print only content)
- Antimicrobial Use (AU) ToolKit [ZIP – 3 MB] (Print only content)

Q&A

AUR Team

CMS Help Desk

- **For questions regarding the Medicare Promoting Interoperability Program, you can submit your questions directly to the CMS Questions & Answers tool at: https://cmsqualitysupport.servicenowservices.com/qnet_qa?id=ask_a_question**

- **You can also contact the CCSQ help desk for assistance at QnetSupport@cms.hhs.gov or 1-866-288-8912.**

Thank you!

Reach out to us at the NHSN Helpdesk

With SAMS access:
https://servicedesk.cdc.gov/nhsncsp

Without SAMS access:
NHSN@cdc.gov

For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov