NHSN Antimicrobial Use and Resistance (AUR) Module Reporting for the CMS Promoting Interoperability (PI) Program

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Antibiotic Stewardship Office Hours
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Session Overview

- **CMS PI Program for NHSN AUR Module FAQs:**
  - Requirement details
  - Data submission requirements
  - Logistics
  - Deadlines
- **Q&A Panel:**
  - Abigail Viall
  - Arjun Srinivasan
  - Melinda Neuhauser
  - Amy Webb

Disclaimer

- Slides are based on:
  - Details in the FY2023 Hospital Inpatient Prospective Payment System (IPPS) final rule
  - Materials published for current CY 2023 PI Program measures

- CMS has not yet published materials for CY 2024 PI Program measures (e.g., AUR)

- CMS is currently in the midst of its FY2024 rule making cycle, so it is possible some things will change (though no changes to the AUR measure are currently proposed)

Frequently Asked Questions: Requirement details

Question 1

Are AUR Module data required for the CMS PI Program? If so, when does that start?

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

Question 2

How do facilities find out if their hospital participates in the CMS Promoting Interoperability (PI) Program?

Most facilities participate in the CMS PI Program

- Reach out to person(s) in charge of quality reporting within the facility
- Critical access hospitals **are** eligible to participate

- Facilities not paid under the CMS Hospital Inpatient Prospective Payment System (IPPS) are **not** included in the CMS PI Program
  - Includes but is not limited to:
    - Inpatient rehab hospitals
    - Inpatient psych hospitals
    - Long term acute care hospitals

Question 3

Is there anything due in CY 2023?

Bonus points only for AUR in CY 2023

- For CY 2023, AUR reporting is within the Public Health Registry Reporting
  - Facilities can receive **5 bonus points** for being in active engagement with NHSN to submit AUR data

- For CY 2024, AUR reporting moves out of the Public Health Registry Reporting measure and becomes it's own **required** measure

Question 4

What does “active engagement” mean?

Two ways to be in active engagement with NHSN

- Option 1 – Pre-production and validation
  - Registration within NHSN
  - Testing & validation of the CDA files
- Option 2 – Validated data production
  - Submitting production AU & AR files to NHSN
    - CY 2023 – 90 continuous days of AUR data submission
    - CY 2024 – 180 continuous days of AUR data submission

- **Note:** Beginning in CY 2024, facilities can only spend one calendar year in Option 1 (pre-production and validation)

Question 5

Will hospitals be expected to separately attest to meeting reporting requirements or exclusion criteria for AU and AR?

No. AUR is a single measure for CMS PI Program

- No partial credit for reporting either AU or AR

- If the facility isn't in active engagement for both AU and AR, they have to have an applicable exclusion or report "No"
  - Attesting "No" means the facility would not get credit for the AUR measure and would fail to satisfy the Public Health and Clinical Data Exchange Objective

Question 6

What are the exclusions for the AUR measure?

Three exclusions currently

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.

Question 7

Does CDC/NHSN provide data to CMS?

No – AUR Measure is attestation based

- CDC/NHSN does not provide any data to CMS for this reporting measure
  - Goal of CMS PI Program is to increase interoperable healthcare data exchange

- Facilities must attest to CMS that they are in active engagement with NHSN
  - Attest within the CMS Hospital Quality Reporting (HQR) system: https://hqr.cms.gov/hqrng/login

- **NHSN provides documentation to facilities to use as proof**

Frequently Asked Questions: Data submission requirements

Question 8

What is the reporting period for the CMS PI Program?

It depends…

- On the calendar year
  - CY 2023 – 90 continuous days *(bonus points only)*
  - CY 2024 – 180 continuous days

- On facility's designated EHR reporting period
  - Facility must use the same 90/180 day period for **ALL** CMS PI Program measures
  - AU and AR data must be reported for the same 90/180 days

Question 9

How often are AUR data submitted to NHSN?

Monthly data submission

- Recommend: Upload within 30 days following the completion of the month
  - Per CMS PI Program guidance: Facilities should report data on an ongoing basis during EHR reporting period

- Files zipped; can be separate AU and AR or combined depending on zip file size
- Manual or DIRECT upload into NHSN

- How to upload CDA files into NHSN: https://www.youtube.com/watch?v=T4DLtimpB5M

Question 10

Does the measure include a requirement to report data from specific patient care locations?

Report data from all locations

- Attestation is at the facility level

- NHSN encourages submission from all inpatient & three outpatient (ED, pediatric ED, 24hr observation) where numerator and denominator data can be accurately electronically captured
  - Also includes procedural areas like operating rooms

Question 11

Is there a requirement for which vendor software to use?

Using a commercial vendor is most efficient

- Most facilities use commercial software vendor
  - EHR vendor or surveillance software vendor
  - Vendors that have met NHSN validation standards:
    - AU: https://www.cdc.gov/nhsn/cdaportal/sds/au-vendor-list.html
    - AR: https://www.cdc.gov/nhsn/cdaportal/sds/ar-vendor-list.html
  - CEHRT that has been updated to meet 2015 Edition Cures Update criteria
- Possible to use "homegrown" vendor solution but not recommended

CEHRT: certified electronic health record technology
https://www.healthit.gov/topic/certification-ehrs/2015-edition-cures-update-test-method

Frequently Asked Questions: Logistics

Question 12

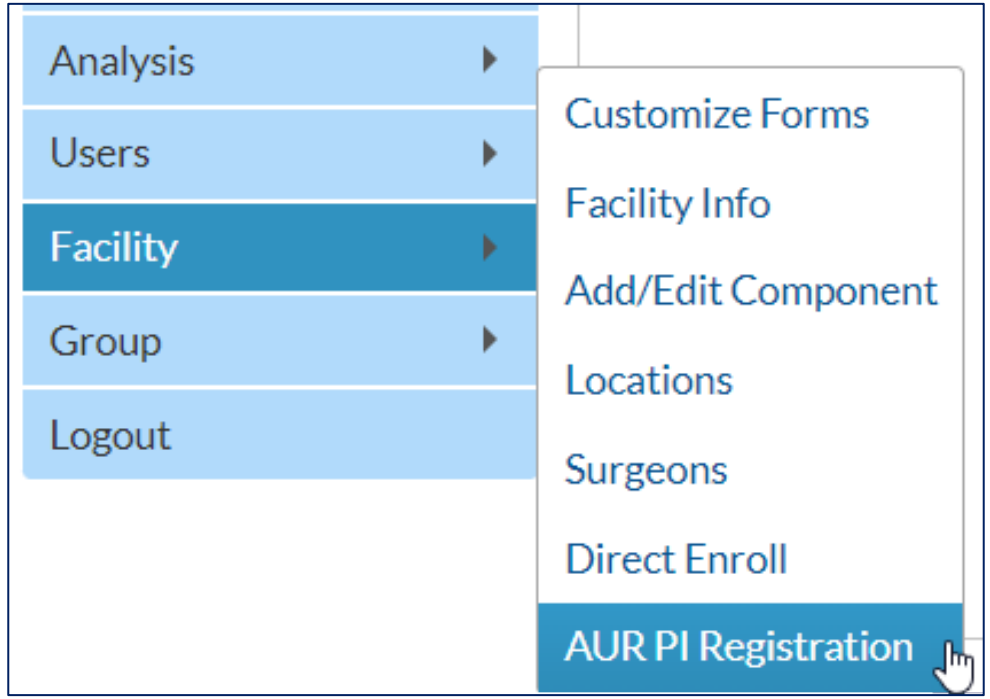
What do facilities need to do to meet the AUR reporting piece of the CMS PI Program?

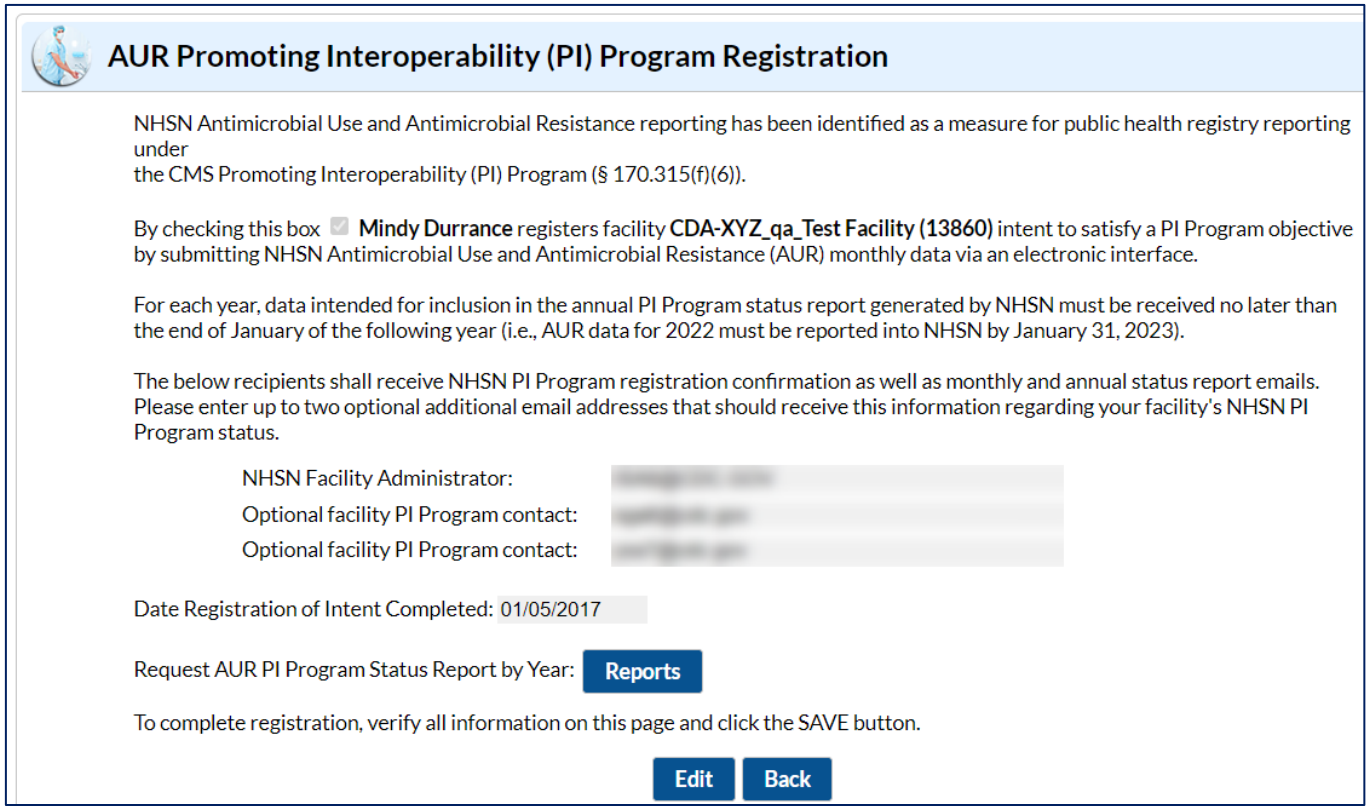
Prerequisites for submitting AUR data for the CMS PI Program

1. Figure out your vendor software situation
   - Certified by ONC and listed on the HealthIT webpage: https://chpl.healthit.gov/#/search
     - Refer to the bonus slides at the end of this slide deck
   - Validated by NHSN and listed on the NHSN SDS webpages: https://www.cdc.gov/nhsn/cdaportal/sds/au-vendor-list.html & https://www.cdc.gov/nhsn/cdaportal/sds/ar-vendor-list.html
2. Review Quick Reference Guide: https://www.cdc.gov/nhsn/pdfs/cda/PHDI-Facility-Guidance-508.pdf
3. Determine if your facility has done any of the following steps already
   - Over 900 facilities have already completed step 1 (registration of intent)

Step 1 – Registration of intent to submit data

- **Only the NHSN Facility Administrator can complete this step**
- Can add up to two additional email addresses to receive the monthly AUR submission reports





Step 2 – Testing and validation of AUR CDA files

- 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)

Step 2 – Testing and validation of AUR CDA files

If your facility is already submitting production AU and AR data, you can skip this step.

Step 3 – 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 on a monthly basis
- NHSN will automatically email the NHSN Facility Administrator and optional email contacts a monthly report outlining data submission status

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

Question 13

What if the facility is already reporting AU and/or AR data but they didn’t complete steps 1 & 2?

Must complete registration within NHSN

- Follow the steps to complete registration of intent to submit AUR data within NHSN: https://www.cdc.gov/nhsn/pdfs/cda/PHDI-Facility-Guidance-508.pdf
  - Required in order to receive the emailed monthly status reports

- If already sending production AU and AR data, you do not need to complete the Testing & Validation step
  - Facilities attest to the most advanced stage (registration/testing & validation or production data)
  - Attest to submitting production data

Frequently Asked Questions: Deadlines

Question 14

When do facilities need to register & send test files to attest to “Option 1 – Preproduction & Validation” for CY 2024?

It varies…

- Registration should be completed within 60 days of the start of the EHR reporting period
  - Note: Facilities should make sure they have test and/or production test files (or almost ready) prior to registering within NHSN
  - After registering, NHSN immediately sends a request for test files
  - Facilities should respond to NHSN requests within 30 days
    - **Failure to respond twice within an EHR reporting period would result in the facility not meeting the measure**
- Ask that facilities register and submit test files **no later than November 1, 2024***
  - Allows the NHSN team to process the test files

*Pending CMS guidance

Question 15

When do facilities need to report AUR data to attest to “Option 2 – Validated Data Production” for CY 2024?

No later than January 31, 2025

- NHSN automatically sends out status letters on the first day of every month

- Final annual letter sent out on February 1 showing previous year's submissions
  - **Submit all relevant AUR data to NHSN no later than January 31, 2025 to be included on the annual report sent to facilities on February 1**

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

Question 16

Can facilities start now?

Yes! Start now!

- Facilities can begin these steps now
  - Be mindful of the 60 day response clause (i.e., don't register before having test files)
- Being in active engagement with NHSN AUR reporting in CY 2023 provides 5 bonus points in the CMS PI Program Public Health and Clinical Data Exchange Objective
  - Option 1 – Pre-production and validation
  - Option 2 – Validated data production

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Question 17

But I have so many more questions!

AUR Module Resources

- NHSN Helpdesk: NHSN@cdc.gov
- AUR Module website: https://www.cdc.gov/nhsn/psc/aur/index.html
- AUR Trainings: https://www.cdc.gov/nhsn/training/patient-safety-component/aur.html

CMS-related questions:

- QualityNet help desk: QnetSupport@cms.hhs.gov or 1-866-288-8912
- Resource Library | CMS

Q&A

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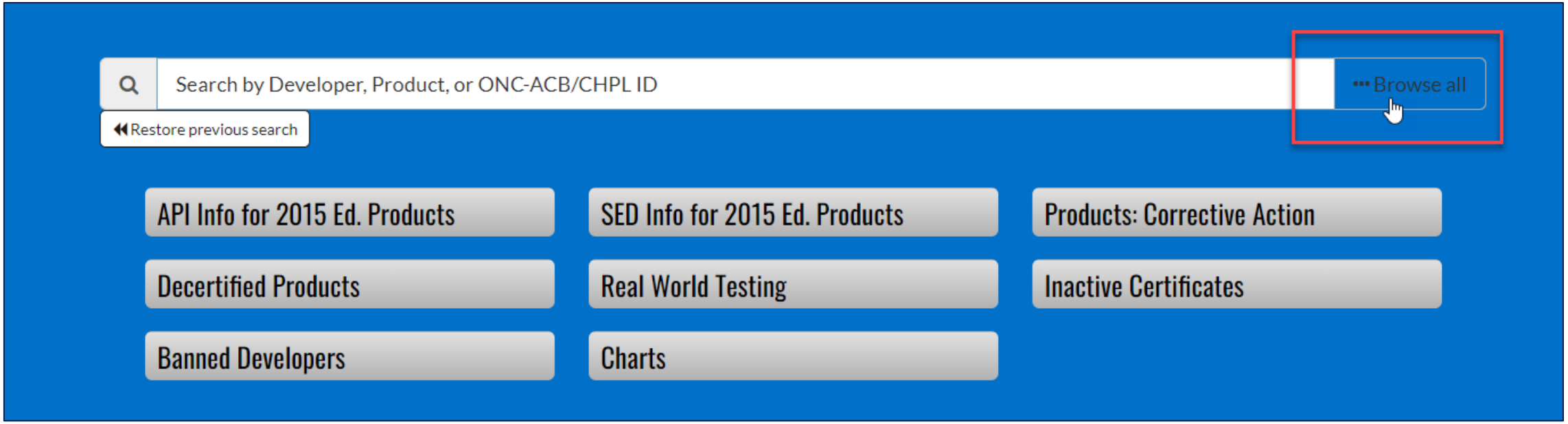
Looking up your vendor on the ONC list_1

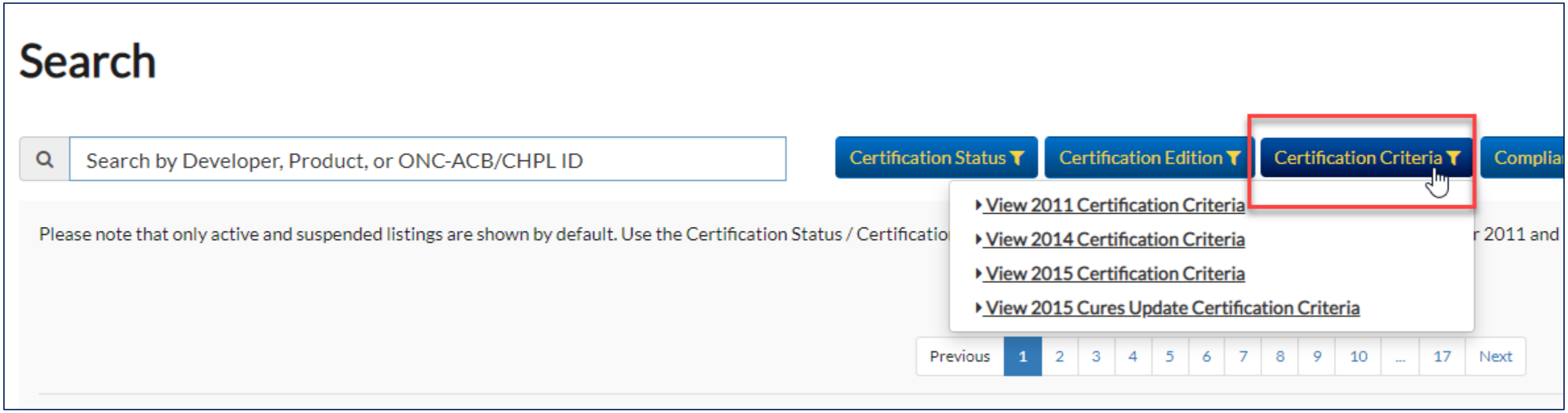
- https://chpl.healthit.gov/#/search
- Click Browse All



Searching for Vendors

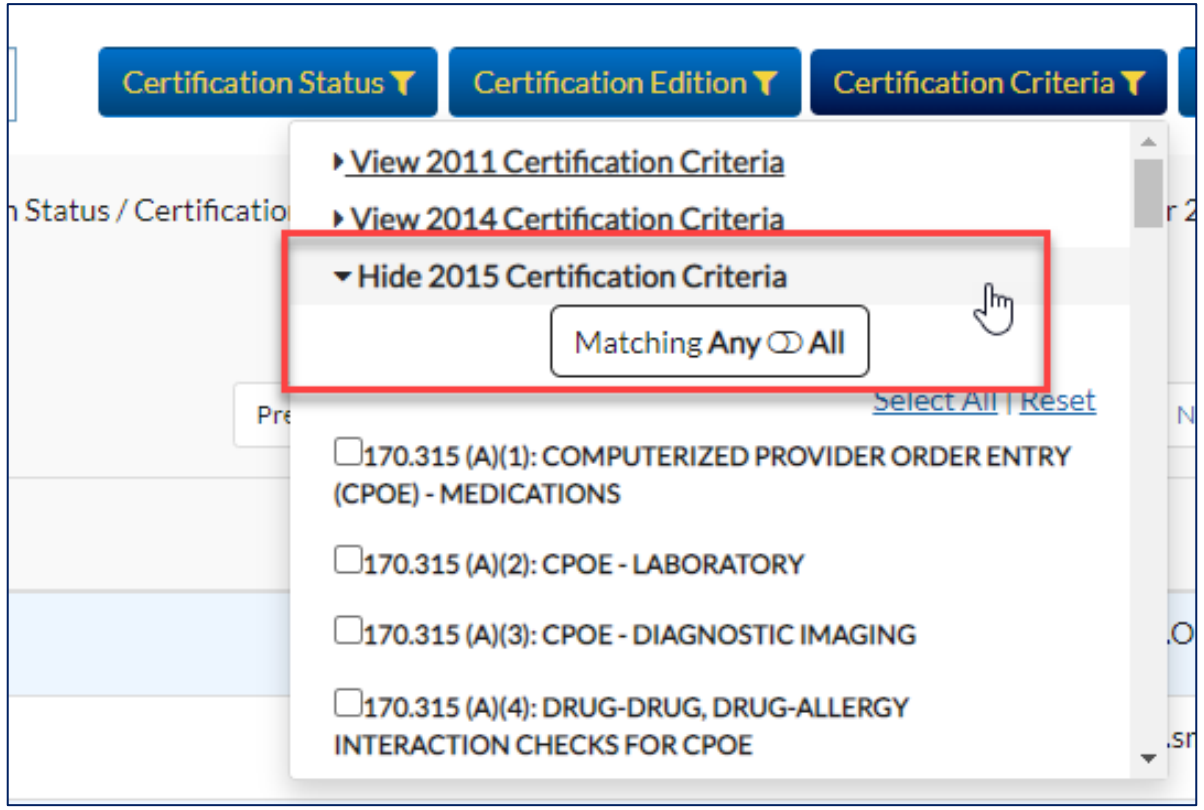
Looking up your vendor on the ONC list_2

- Click Certification Criteria



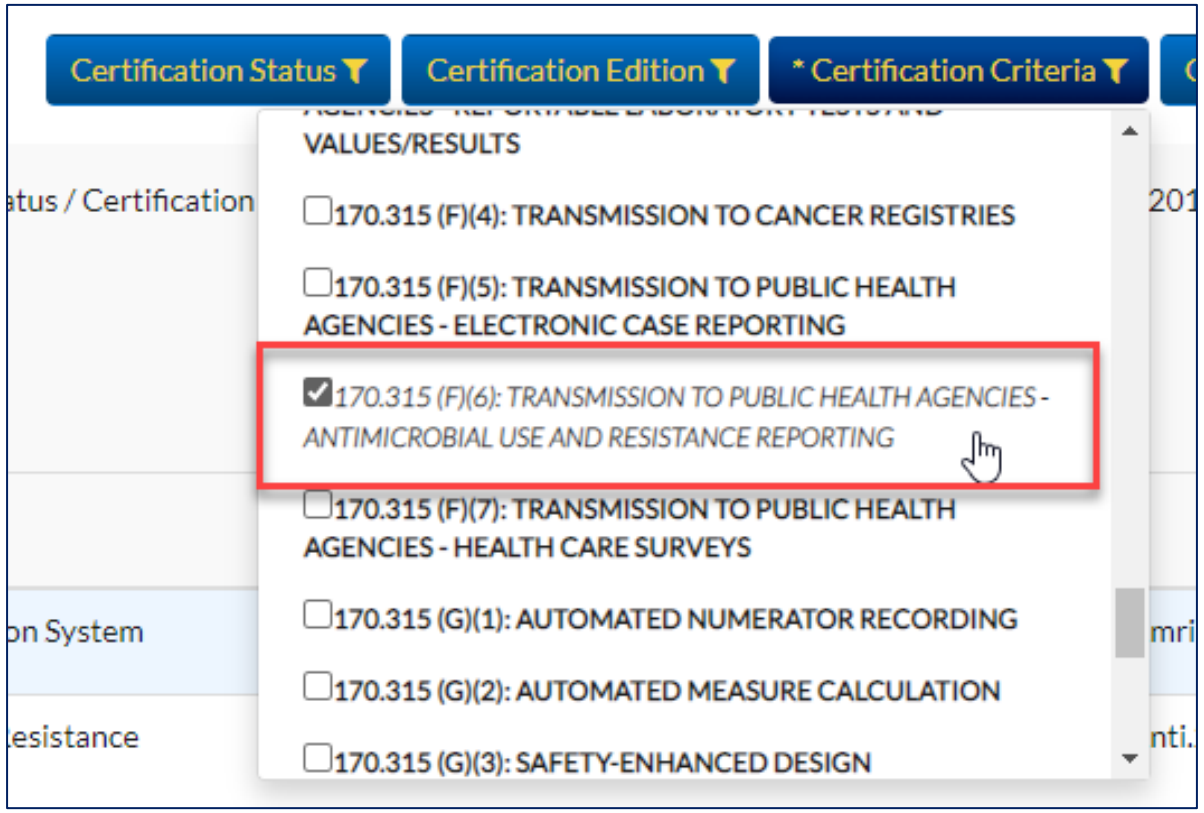
Looking up your vendor on the ONC list_3

- Click View 2015 Certification Criteria



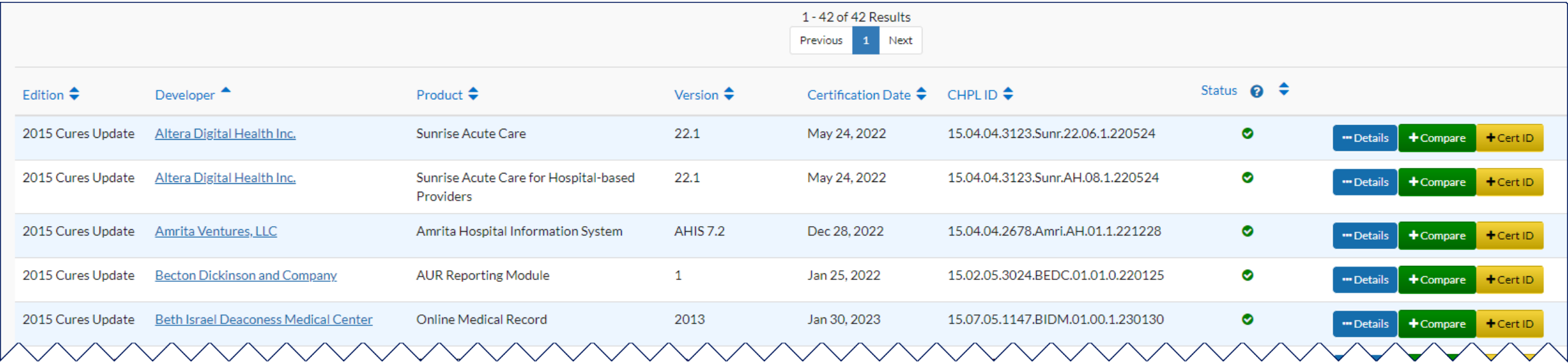
Looking up your vendor on the ONC list_4

- Click the checkbox for criteria: 170.315 (F)(6)



Looking up your vendor on the ONC list_5

- 42 vendor products are listed



1 - 42 of 42 Results

Previous 1 Next

Edition	Developer	Product	Version	Certification Date	CHPL ID	Status	
2015 Cures Update	Altera Digital Health Inc.	Sunrise Acute Care	22.1	May 24, 2022	15.04.04.3123.Sunr.22.06.1.220524		Details Compare Cert ID
2015 Cures Update	Altera Digital Health Inc.	Sunrise Acute Care for Hospital-based Providers	22.1	May 24, 2022	15.04.04.3123.Sunr.AH.08.1.220524		Details Compare Cert ID
2015 Cures Update	Amrita Ventures, LLC	Amrita Hospital Information System	AHIS 7.2	Dec 28, 2022	15.04.04.2678.Amri.AH.01.1.221228		Details Compare Cert ID
2015 Cures Update	Becton Dickinson and Company	AUR Reporting Module	1	Jan 25, 2022	15.02.05.3024.BEDC.01.01.0.220125		Details Compare Cert ID
2015 Cures Update	Beth Israel Deaconess Medical Center	Online Medical Record	2013	Jan 30, 2023	15.07.05.1147.BIDM.01.00.1.230130		Details Compare Cert ID

Antibiotic Use | CDC

antibioticuse@cdc.gov

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

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