

The Office of the National Coordinator for
Health Information Technology



**National Healthcare Safety Network (NHSN)
Antimicrobial Use and Antimicrobial Resistance
Reporting for Meaningful Use Stage 3**

**Joint Public Health Forum
&
CDC Nationwide Webinar**

November 17, 2016

Putting the **I** in Health **IT**
www.HealthIT.gov

Joint Public Health Forum & CDC Nationwide

<http://www.cdc.gov/ehrmeaningfuluse/joint-public-health-forum--cdc-nationwide.html>

Meaningful Use

- Meaningful Use
- Introduction
- Calendar
- Connect with Others -
- CDC Meaningful Use ListServ
- Meaningful Use Community -
- Public Health - EHR Vendors Collaboration Initiative
- Joint Public Health Forum & CDC Nationwide**
- Meaningful Use (MU) Public Health (PH) Reporting Requirements Task Force
- Community of Practice (CoP)
- ELR Task Force +
- Jurisdiction Meaningful Use Websites
- S & I Framework
- Reportable Conditions Knowledge Management System
- External Links

Meaningful Use

CDC > Meaningful Use > Connect with Others > Meaningful Use Community

Joint Public Health Forum & CDC Nationwide

[f](#) [t](#) [+](#)

Community Profile

The Office of the National Coordinator for Health IT (ONC) and the Centers for Disease Control & Prevention (CDC) jointly sponsor this initiative, which features monthly webinars to foster collaboration amongst the public health jurisdictions across the nation, in response to the widespread adoption of electronic health records (EHRs) for Meaningful Use.

The objectives for this initiative include:

- Identify common questions and concerns around meaningful use
- Provide updates on federal partner activities in preparing for meaningful use
- Allow public health jurisdictions to share useful practices and current progress
- Identify technical assistance needs and priorities

Note: Webinar pre-registration is required and the instructions to register are provided in the Monthly Webinar Registration section below.

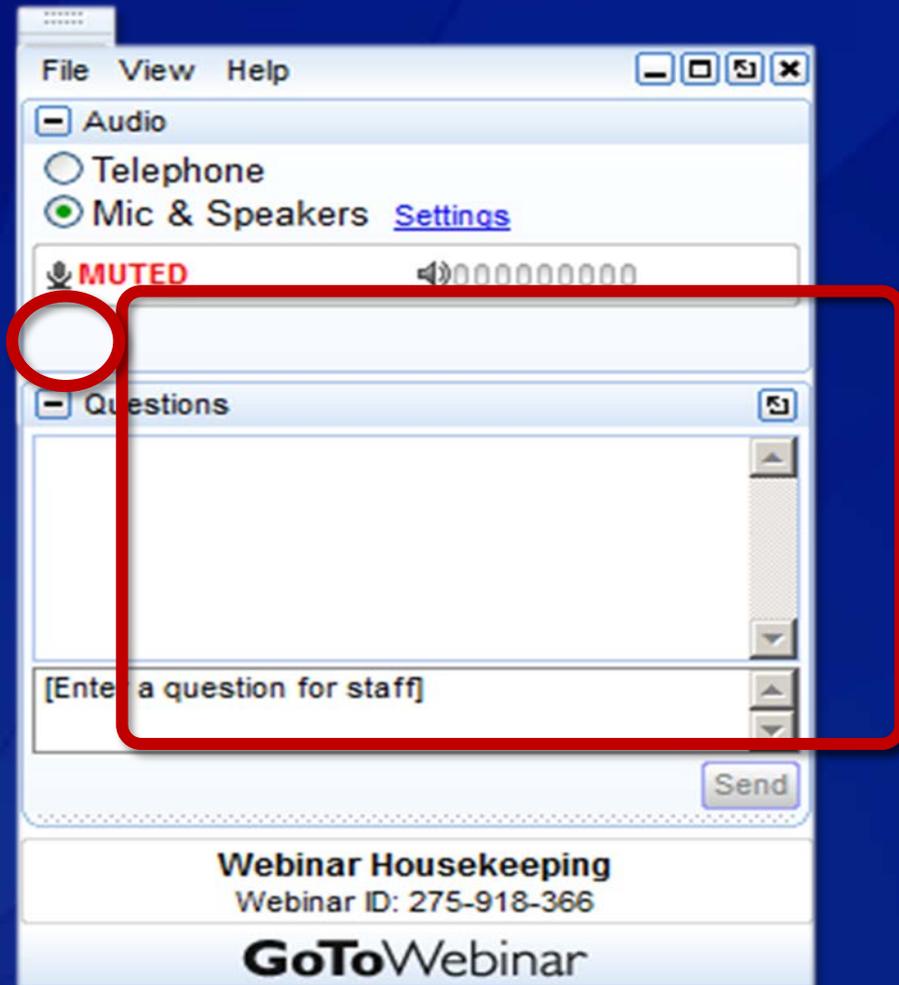
Please send in your feedback, questions, and/or suggestions for these Joint Public Health Forum & CDC Nationwide Webinars to the Meaningful Use Mailbox (meaningfuluse@cdc.gov).

Meeting Schedule and Webinar Information

Meeting Schedule:

Question and Answer Session

How to submit or ask questions for the panel members?



Submit or Ask Questions

- Submit your text question and comments using the Question Panel
- Please raise your hand to be unmuted for verbal questions.

National Healthcare Safety Network (NHSN) Antimicrobial Use and Antimicrobial Resistance Reporting for Meaningful Use Stage 3

November 17, 2016

Amy Webb & Mindy Durrance
Division of Healthcare Quality Promotion
National Center for Emerging and Zoonotic Infectious Diseases
Centers for Disease Control and Prevention

MU Stage 3 Requirement

Electronic Health Record Incentive Payment Program - Public Health Reporting Measures and Standards For Eligible Professionals (EPs), Eligible Hospitals (EHs), Critical Access Hospitals (CAHs) 2014 Edition, Certified Electronic Health Record Technology (CEHRT) and 2015 Edition CEHRT			
Stage/Year		Modified Stage 2 MU (2015-2017)	Stage 3 MU (2018, optional 2017)
ONC Regulation/ Certification Edition		2014 CEHRT	2015 CEHRT
MU Objective		Public Health Registry Reporting	Public Health and Clinical Data Registry Reporting
MU Eligible Entities (Numbers specify the minimum number of measures to meet)	(EPs-Eligible Professionals; EHs- Eligible Hospitals; CAHs-Critical Access Hospitals)	EPs in Stage 1, 2015: 1 EPs in Stage 2, 2015: 2 EPs in 2016 or 2017: 2 EHs, CAHs in Stage 1, 2015: 2 EHs, CAHs in Stage 2, 2015: 3 EHs, CAHs in 2016 or 2017: 3	EPs: 2 EHs: 4 CAHs: 4
Measure Name	Provider Type Availability	ONC-Adopted Standard (2014 CEHRT)	ONC-Adopted Standard (2015 CEHRT)
Public Health Registry Reporting	EP, EH, CAH	Not included in Modified Stage 2. See Measure 3-Specialized Registry Reporting.	Measure 4 Starting in 2018, only standard based transmissions will be accepted based on the standards listed below. Cancer case reporting from EPs to State Cancer Registry -HL7 CDA® Release 2 Implementation Guide: Reporting to Public Health Cancer Registries from Ambulatory Healthcare Providers, Release 1; DSTU Release 1.1, (U.S. Realm) (EPs Only) Antimicrobial use and resistance reporting to NHSN -HL7 Implementation Guide for CDA® Release 2 –Level 3: Healthcare Associated Infection Reports, Release 1, U.S. Realm (August 2013) (Eligible Hospitals/CAHs only) CDC/NCHS Health care surveys -HL7 Implementation Guide for CDA ® Release 2: National Health Care Surveys (NHCS), Release 1—US Realm, Draft Standard for Trial Use (December 2014)

Outline

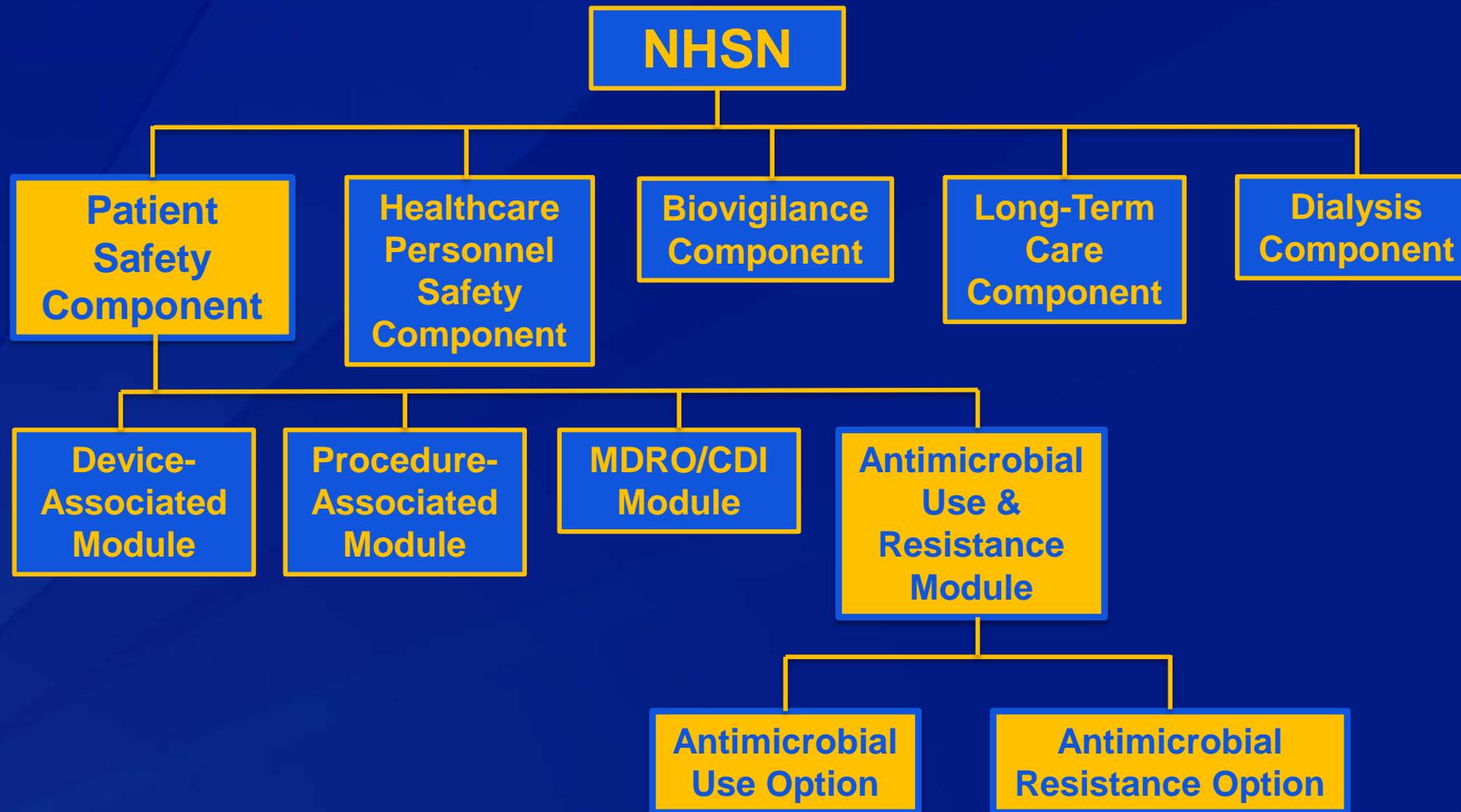
- ❑ **Overview of NHSN**
- ❑ **Reporting into the AUR Module**
 - AU Option
 - AR Option
- ❑ **Meaningful Use Stage 3 NHSN AUR Set Up & Reports**
- ❑ **Additional Resources**

OVERVIEW OF NHSN

National Healthcare Safety Network (NHSN)

- ❑ **A secure, Internet-based surveillance system managed by the CDC**
- ❑ **Collects mandated and voluntarily reported data on:**
 - Healthcare-associated infections (HAIs)
 - Antimicrobial use and resistance
 - Healthcare personnel influenza vaccination
 - Blood safety
- ❑ **Over 19,000 healthcare facilities enrolled in NHSN**

NHSN Structure



*NOTE: AUR Module is the ONLY part of NHSN that qualifies for MU3

ANTIMICROBIAL USE (AU) OPTION

NHSN Antimicrobial Use (AU) Option

- Released in 2011

- Purpose:

- Provide a mechanism for facilities to report and analyze antimicrobial usage as part of antimicrobial stewardship efforts at their facility
- Allow for risk-adjusted comparison of antimicrobial use to a national aggregate

Requirements for AU Data Submission Who Can Participate?

□ Hospitals* that have:

- Electronic Medication Administration Record (eMAR), or
- Bar Coding Medication Administration (BCMA) systems

AND

- Ability to collect and package data using HL7 standardized format:
Clinical Document Architecture
 - Participating 3rd party vendors: <http://www.sidp.org/aurvendors>
 - “Homegrown” vendors

*General acute care hospitals, long-term acute care hospitals (LTAC), inpatient rehabilitation facilities (IRF), oncology hospitals, critical access hospitals enrolled in NHSN

AU Data Elements

What Data Are Collected?

❑ Monthly aggregate, summary-level data

- All inpatient locations individually & combined (FacWideIN)
- 3 outpatient locations (ED, pediatric ED, 24 hour observation)

❑ Numerator: Antimicrobial days (Days of Therapy)

- 89 antimicrobials – includes antibacterial, antifungal, and anti-influenza agents
 - Sub-stratified by route of administration:
 - Intravenous (IV)
 - Intramuscular (IM)
 - Digestive (oral - rectal)
 - Respiratory (inhaled)

❑ Denominators:

- Days Present - number of days spent in specific unit or facility
 - Days present ≠ Patient days
- Admissions - number of patients admitted to the facility

What is Clinical Document Architecture (CDA)?

- ❑ **Standard that specifies:**
 - Structure and semantics of a clinical document
 - For information exchange between systems
- ❑ **HL7 (Health Level 7) provides an Implementation Guide**
 - “How to...”
- ❑ **Used for importing Antimicrobial Use, Antimicrobial Resistance, and Healthcare Associated Infection data into NHSN**

AU Data from eMAR/BCMA to CDA

1. eMAR/BCMA captures drug administration
2. Vendor or 'homegrown' system extracts and aggregates data elements
 - a) eMAR/BCMA administration data
 - b) ADT (admission, discharge, transfer data)
3. "Package" AU data into CDA files using an XML format

```
<!-- stratified data: Drug + route -->
- <entryRelationship typeCode="COMP">
  - <observation classCode="OBS" moodCode="EVN">
    <templateId root="2.16.840.1.113883.10.20.5.6.69"/>
    <code code="2524-7" displayName="Number of Therapy Days" codeSystemName="cdcNHSN" codeSystem="2.16.840.1.113883.6.277"/>
    <statusCode code="completed"/>
    <value value="0" unit="d" xsi:type="PQ"/>
    <methodCode code="2523-9" displayName="Respiratory tract route" codeSystemName="cdcNHSN" codeSystem="2.16.840.1.113883.6.277"/>
    <!-- how actually administered -->
  - <participant typeCode="CSM">
    <!-- antimicrobial Drug -->
    - <participantRole classCode="MANU">
      <code code="641" displayName="Amikacin" codeSystemName="RxNorm" codeSystem="2.16.840.1.113883.6.88"/>
    </participantRole>
  </participant>
</observation>
</entryRelationship>
```

Monthly AU Data Submission

- ❑ **Recommend: Upload within 30 days following the completion of the month**
- ❑ **1 CDA file per location & 1 CDA file for FacWideIN**
 - Example for a facility with 5 locations
 - 1 CDA for Adult Medical/Surgical ICU
 - 1 CDA for Adult Medical/Surgical Ward
 - 1 CDA for Pediatric Medical/Surgical Ward
 - 1 CDA for Labor & Delivery Ward
 - 1 CDA for Emergency Department
 - 1 CDA for FacWideIN (combination of all 4 inpatient locations above)
 - Each single CDA file contains numerator and denominator(s) for the given location
 - All CDA files are uploaded within 1 Zip file

ANTIMICROBIAL RESISTANCE (AR) OPTION

Antimicrobial Resistance (AR) Option

- ❑ Released in July 2014
- ❑ Purpose:
 - Facilitate evaluation of antimicrobial resistance data using standardized approach
 - Provide facilities with improved awareness of a variety of AR issues to aid in clinical decision making and prioritize transmission preventions efforts

Requirements for AR Data Submission Who Can Participate?

□ Hospitals* that have:

- Electronic Laboratory Information System (LIS) and
- Admission Discharge Transfer (ADT) System
- *Or electronic access to required data elements*

AND

- Ability to collect and package data using HL7 standardized format: Clinical Document Architecture
 - 3rd party vendor or “Homegrown” solution

*General acute care hospitals, long-term acute care hospitals, inpatient rehabilitation facilities, oncology hospitals, critical access hospitals enrolled in NHSN

AR Data Elements What Data Are Collected?

- ❑ **Numerator: Patient-level susceptibility results for specific organisms**
 - DOB, gender, date admitted to facility, location
 - Specimen collection date, specimen source
 - Blood, cerebral spinal fluid (CSF), urine, lower respiratory
 - Organism & antimicrobial susceptibility data for each antimicrobial required for the isolated organism/specimen type
 - Values for E-test, MIC, and Disk diffusion (KB)
 - Final lab interpretation
 - S, S-DD, I, R, NS, N

- ❑ **Denominator: Patient days & admissions (facility-wide only)**

AR Option – Eligible Organisms

- ❑ All *Acinetobacter* species
- ❑ *Candida albicans*
- ❑ *Candida auris*
- ❑ *Candida glabrata*
- ❑ *Citrobacter freundii*
- ❑ All *Enterobacter* species
- ❑ *Enterococcus faecalis*
- ❑ *Enterococcus faecium*
- ❑ *Enterococcus* spp. (when not specified to the species level)
- ❑ *Escherichia coli*
- ❑ Group B *Streptococcus*
- ❑ *Klebsiella oxytoca*
- ❑ *Klebsiella pneumoniae*
- ❑ *Morganella morganii*
- ❑ *Proteus mirabilis*
- ❑ *Pseudomonas aeruginosa*
- ❑ *Serratia marcescens*
- ❑ *Staphylococcus aureus*
- ❑ *Stenotrophomonas maltophilia*
- ❑ *Streptococcus pneumoniae*

AR Option – Organism/Agent Combinations

Organism	Specimen Type	Antimicrobial Agents
<i>Staphylococcus aureus</i>	Blood, Urine, Lower Respiratory, CSF	Azithromycin <u>Cefoxitin</u> Chloramphenicol Ciprofloxacin Clarithromycin Clindamycin <u>Daptomycin</u> Doxycycline Erythromycin Gentamicin Levofloxacin Linezolid Minocycline Moxifloxacin <u>Ofloxacin</u> Oxacillin or <u>Nafcillin^b</u> <u>Penicillin^a</u> <u>Quinupristin-dalfoprisin</u> Rifampin <u>Telithromycin</u> Tetracycline Trimethoprim-sulfamethoxazole Vancomycin
	Additional Agents for Urine	<u>Lomefloxacin</u> Nitrofurantoin <u>Norfloxacin</u> <u>Sulfisoxazole</u> Trimethoprim

- ❑ Selected antimicrobial agents are required to be reported for each of the organisms per specimen type
 - Full list can be found in the NHSN AUR Module Protocol: <http://www.cdc.gov/nhsn/PDFs/pscManual/11pscAURcurrent.pdf>

AR Option Event Reporting

- ❑ **Each** eligible organism isolated from an invasive source (blood or cerebrospinal fluid [CSF]) per patient, per 14 day period even across calendar months
- ❑ **First** eligible organism isolated from any eligible non-invasive culture source (lower respiratory or urine), per patient, per month

Please see NHSN AUR Module Protocol for further details:

<http://www.cdc.gov/nhsn/PDFs/pscManual/11pscAURcurrent.pdf>

Monthly AR Data Submission

- ❑ **Recommend: Upload within 30 days following the completion of the month**
- ❑ **1 CDA file per organism (AR Event) & 1 CDA file for denominator**
 - **Example:**
 - 50 separate CDA files for 50 separate AR Events identified per NHSN definitions in that month
 - 1 CDA for facility-wide denominators (patient days and admissions for all inpatient locations)
 - **All CDA files are uploaded within 1 Zip file**
 - **Maximum: 500 CDAs or file size of 1 MB per zip file**

Importing CDA Files into NHSN

- ❑ Manual upload
- ❑ Automatic upload from vendor/IT solution using DIRECT CDA Automation

Logged into DHQP Memorial Hospital (ID 10000) as ASCHNEIDER.
Facility DHQP Memorial Hospital (ID 10000) is following the PS component.

Import/Export Data

Events, Summary Data, Procedure Denominators ▼



Browse...

Submit

Back

Logged into DHQP Memorial Hospital (ID 10000) as ASCHNEIDER.
Facility DHQP Memorial Hospital (ID 10000) is following the PS component.

Direct CDA Automation Sign-up

CDA Automation will allow your facility to send CDA's to NHSN via your Health Information Service Provider. Please work with your CDA IT staff or vendor to obtain the information to complete the enrollment fields and enrollment process.

Facility ID: 10000

Object Identifier: 2.111.111.111.10000

Direct address from which your facility will be sending data.*:

(HISP) Health Information Service Provider name.*:

HISP-Technical Point of Contact email.*:

Facility-Technical Point of Contact email.*:

Status:

Remove Direct CDA Automation:

Submit

Back

**MEANINGFUL USE STAGE 3
NHSN AUR SET UP & REPORTS**

...MU3 may be demonstrated by the following options

- ❑ **Option.1 - Completed Registration of Intent to Submit Data**
- ❑ **Option.2 - Testing and Validation**
 - Built in process for NHSN application
- ❑ **Option.3 - Submission of Production Data**

Suggested Pre-requisite for NHSN MU3 Registration

- Ability to Submit AU and AR data into NHSN (or very close to submitting)

NHSN CDA Submission Support Portal (CSSP)

CDC > NHSN > NHSN CSSP

Getting Started

[f](#) [t](#) [+](#)

While it is possible for healthcare facilities to internally implement CDA for HAI reporting, NHSN recommends considering a software or electronic health record (EHR) vendor with demonstrated expertise in this area.

What is a “CDA implementer” and how do I locate one?

A CDA implementer is an organization with expertise in CDA standards and ability to develop software according to the CDC NHSN Healthcare Associated Infection (HAI) Implementation Guide (IG). Many

On this Page

- What is a “CDA implementer” and how do I locate one?
- Can my facility implement CDA reporting on our own?
- How should my facility get started?
- How should I complete the NHSN

High-level Task List

❑ Tasks for “Vendors” or “Do it yourself facilities” to complete prior to MU3 registration:

- Facility enrolled in NHSN, locations are mapped within NHSN, and monthly reporting plans exist for month/year of data to be transmitted
- Ability to collect the data
- Include business rules in coding and reporting
- Create the AU and AR CDAs based on the HL7 R1-Norm Implementation Guide
- Validate the CDAs using “AUR-MU3 Validation Tool” or the “Lantana Group Validator”
- Complete successful CDA import into a test facility via manual import
 - Option.2 - Testing and Validation
- Complete successful CDA import into a real facility
 - Option.2 - Testing and Validation
- Complete internal data validation
- NHSN teams work with CDA implementers throughout their process to successfully import CDAs
 - Helpdesk, individual conference calls, etc.

CDA Import Report

❑ MU3: Option.2 - Validation

- Occurs for each CDA zip file imported

❑ Successful Import

- Displayed in the “Valid” section

❑ Failed Import

- Displayed in the “CDA(s) Failed” section
 - Errors occur when...
 - CDA is not formatted correctly
 - Does not adhere to protocol business rules
 - Does not adhere to general NHSN business rules
 - Etc.

CDA Import Report: Zip File Name: AU.zip							
FACILITY:XYZ (dev) Medical Center Date of Import: 12/Nov/2016 09:57:06 EST							
Summary:							
Event ID	Total # attempted	Total # Passed Validation	Total # of Updates*				
Summary Data	2	1	0				
ImportDetails - Valid							
Line listing for each record that passed the validation.							
Facility ID:	Event Type	Event Date	NHSN ID	CDA File Name	setId	*setId Already Exists in the Database	CDA Processing Date/Time Stamp
10009	AU	5/2016	7817	D_R1Norm_AU_FACWIDEIN_MG_y2016_89_drugs.xml	2.16.840.1.113883.3.117.1.1.5.2.1.5.5-R1NormAU_sample2_May2016_89Drugs_0716	No	12/Nov/2016 09:57:06 EST
ImportDetails - CDA(s) Failed							
Line listing for each record that failed validation and did not import							
Facility ID:	Event Type	Event Date	CDA File Name	setId	*setId Already Exists in the Database	CDA Processing Date/Time Stamp	
10009	AU	8/2016	Defect-not in planLocation code R6_AU_1_Au_q2016_123C-MatWardICU.xml	2.16.840.1.113883.3.117.1.1.5.2.1.2.1-REAU_MATWard_1275_Aug2016-89Drugs_0923	No	12/Nov/2016 09:57:06 EST	
Reason for failure:							
1.1					Antimicrobial Use and Resistance Module not followed for this month, year, and location.		

MU3 Registration within NHSN

- ❑ **NHSN Facility Administrator is the only user able to register for AUR MU3 Intent**
 - Click “Facility” > “AUR MU3 Registration”
 - No other NHSN facility user will see the “AUR MU3 Registration” pages

*NOTE: Screenshots represent layout and functionality available in upcoming NHSN release scheduled for December 2016

The screenshot displays the NHSN Patient Safety Component Home Page. At the top, the CDC logo and text "Centers for Disease Control and Prevention CDC 24/7: Saving Lives, Protecting People™" are visible. Below this is the NHSN title "NHSN - National Healthcare Safety Network (apt-v-nhsn-test:8001)".

The main content area is titled "NHSN Patient Safety Component Home Page" and features a section "COMPLETE THESE ITEMS" with "ALERTS". Three alert cards are shown: "2 Incomplete Events", "134 Missing Events", and "2 Incomplete Items".

A navigation menu on the left includes "NHSN Home", "Alerts", "Reporting Plan", "Patient", "Event", "Procedure", "Summary Data", "Import/Export", "Surveys", "Analysis", "Users", "Facility", "Group", "Tools", and "Logout". The "Facility" menu is expanded, showing options like "Customize Forms", "Facility Info", "Add/Edit Component", "Locations", "Surgeons", "CDA Automation", and "AUR MU3 Registration". A red arrow points to the "AUR MU3 Registration" option.

Additional text on the page includes a privacy notice: "Quality: The voluntarily provided information obtained in this survey... individual, or the institution in accordance with Sections 304, 306" and a link to "Adobe Acrobat Reader for PDF files".

AUR MU3 Registration Screen

□ Begin by checking box



AUR Meaningful Use 3 Registration

NHSN Antimicrobial Use and Antimicrobial Resistance reporting has been identified as an option for public health registry reporting under Meaningful Use Stage 3 (§ 170.315(f)(6)).

By checking this box John Public registers facility XYZ (dev) Medical Center (10009) intent to satisfy a Meaningful Use 3 objective by submitting NHSN Antimicrobial Use and Antimicrobial Resistance (AUR) monthly data via an electronic interface.

Active engagement for this Meaningful Use 3 (MU3) objective includes monthly reporting of Antimicrobial Use Summary, Antimicrobial Resistance Events and Summary data to NHSN for a full calendar year.

Reporting to production must begin within 60 days of registration of intent.

For each year, data intended for inclusion in the annual MU3 status report must be received no later than the end of January of the following year (i.e., AUR data for 2017 must be reported into NHSN by January 31, 2018).

The below recipients shall receive NHSN MU3 registration confirmation as well as monthly and annual status report emails. Please enter up to two optional additional email addresses that should receive this information regarding your facility's NHSN MU3 status.

NHSN Facility Administrator: FacAdmin@Hosp.com
Optional facility MU3 contact: Email-1@hosp.com
Optional facility MU3 contact: Email-2@hosp.com

Auto-filled with FacAdmin email

Date Registration of Intent Completed: 01/06/2017

Request AUR MU3 Status Report by Year: [Reports](#)

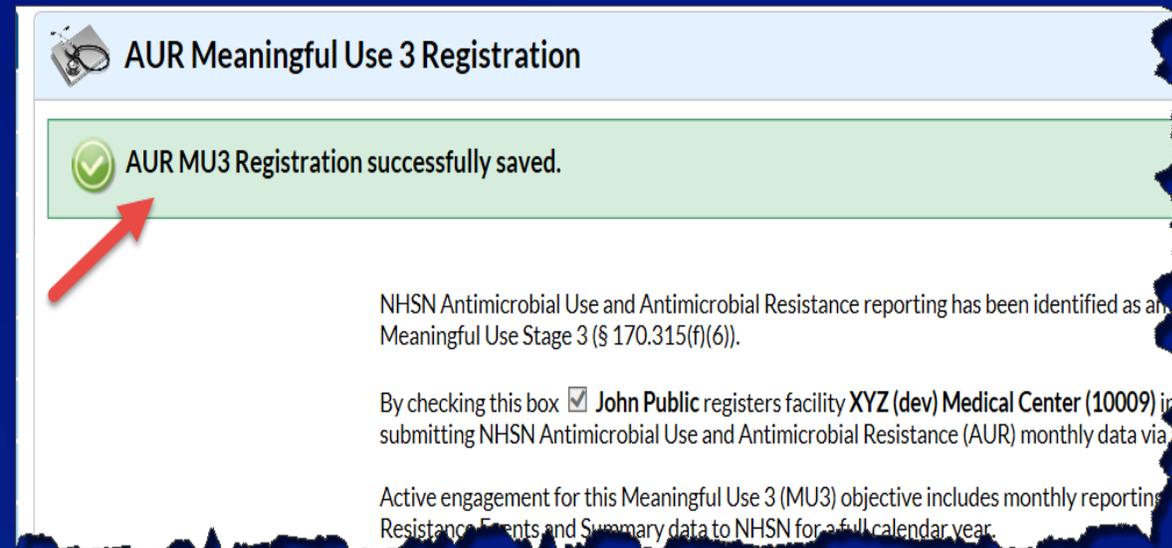
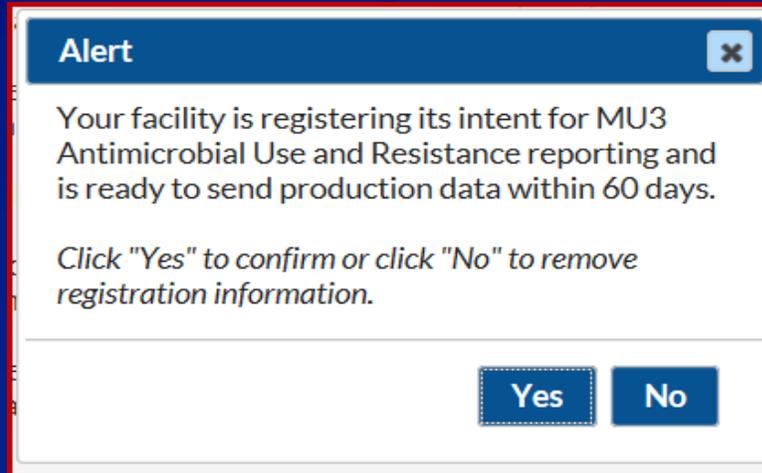
To complete registration, verify all information on this page and click the SAVE button.

[Edit](#)

[Back](#)

AUR MU3 Registration Confirmation

❑ User must confirm registration



❑ Completed registration cannot be removed

- Optional emails may be changed
- If NHSN Facility Administrator is re-assigned, email for AUR MU3 will be auto-updated

MU3 Option.1 - Completed Registration of Intent to Submit Data



□ Subject:

- ...registration of intent complete

□ Active engagement:

- Submit data for full calendar year

□ Next Steps:

- Reporting of production data must begin within 60 days



January 6, 2017

To: XYZ (dev) Medical Center
1234 Main St.
Oak Ridge, FL 32191

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: Meaningful Use 3 registration of intent complete for NHSN Antimicrobial Use and Resistance Reporting

As of January 6, 2017 the XYZ (dev) Medical Center, Oak Ridge, FL has completed their online registration of intent to submit Antimicrobial Use and Antimicrobial Resistance (AUR) data to the National Healthcare Safety Network (NHSN) according to certification criterion (§sect; 170.315(f)(6)).

Active engagement for this Meaningful Use 3 (MU3) objective includes monthly reporting of Antimicrobial Use Summary, Antimicrobial Resistance Event, and Antimicrobial Resistance Summary data to NHSN for a full calendar year.

Next Steps:

- Reporting of production data must begin within 60 days of registration of intent.
- For each year, data intended for inclusion in the annual MU3 status report must be received no later than the end of January of the following year (i.e., AUR data for 2017 must be reported into NHSN by January 31, 2018).

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

Please retain this notification for your facility's records.

Reports for NHSN AUR MU3

- ❑ **Distributed via email with attached report to:**
 - NHSN Facility Administrator
 - Optional NHSN MU3 emails
- ❑ **Methods:**
 - Automatic email
 - Ad-hoc request within NHSN
- ❑ **AUR data displayed by month for the requested year**

Reports for NHSN AUR MU3

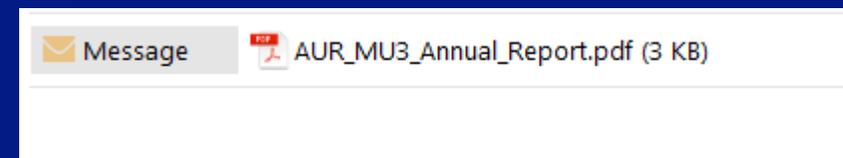
□ Monthly Report

- Example - if a user signs up in January 2017, a monthly auto-generated email with the report attached will be sent during the months of March 2017 through February 2018 displaying status of AUR 2017 data.



□ Annual Report

- Auto-generated email with the report attached will be sent on February 1 of following year
 - Example – status of 2017 data will be displayed on annual report that is generated on February 1, 2018
- Serves as the final query for the calendar year



Automated Report Schedule for NHSN AUR MU3

- Based on recommendation to upload data within 30 days following the completion of the month

Table 2 Automated report schedule

Run Automated report on 1st Day of each Month	Range of data queried	Report Type
Jan - 2017	NA	NA
Feb - 2017	NA	NA
Mar - 2017	Jan	Monthly
Apr - 2017	Jan - Feb / 2017	Monthly
May - 2017	Jan - March / 2017	Monthly
Jun - 2017	Jan - April / 2017	Monthly
Jul - 2017	Jan - May / 2017	Monthly
Aug - 2017	Jan - June / 2017	Monthly
Sep - 2017	Jan - July / 2017	Monthly
Oct - 2017	Jan - Aug / 2017	Monthly
Nov - 2017	Jan - Sept / 2017	Monthly
Dec - 2017	Jan - Oct / 2017	Monthly
Jan - 2018	Jan - Nov / 2017	Monthly
Feb - 2018	Jan - Dec / 2017	Annual

NHSN AUR MU3 Monthly Report

March 1, 2017

To: XYZ (dev) Medical Center
1234 Main St.
Oak Ridge, FL 32191

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: Meaningful Use 3 Status Report of 2017 for reporting NHSN Antimicrobial Use and Resistance data according to certification criterion (§ 170.315(f)(6)).

This notice serves as written confirmation of your Meaningful Use Stage 3 (MU3) **status** with the National Healthcare Safety Network (NHSN) as of **March 1, 2017** for the MU3 objective according to certification criterion (§ 170.315(f)(6)).

Active engagement for this MU3 objective includes monthly reporting of Antimicrobial Use Summary, Antimicrobial Resistance Event, and Antimicrobial Resistance Summary data to NHSN for a full calendar year.

For each year, data intended for inclusion in the annual MU3 status report must be received no later than the end of January of the following year (i.e., Antimicrobial Use and Resistance data for 2017 must be reported into NHSN by January 31, 2018).

Registration of Intent Completed: 01/06/2017

The following is a status report of received Antimicrobial Use Summary, Antimicrobial Resistance Event, and Antimicrobial Resistance Summary data per month for 2017.

Display of data for January

Month/Year	Antimicrobial Use Summary	Antimicrobial Resistance Events	Antimicrobial Resistance SummaryEvents
01/2017	Yes	Yes	Yes

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

Please retain this notification for your facility's records.

NHSN AUR MU3 Annual Report

MU3: Option.3 - Submission of Production Data

February 1, 2018 

To: XYZ (dev) Medical Center
1234 Main St.
Oak Ridge, FL 32191

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: Meaningful Use 3 Status Report of 2017 for reporting NHSN Antimicrobial Use and Resistance data according to certification criterion (§ 170.315(f)(6)).

This notice serves as written confirmation of your Meaningful Use Stage 3 (MU3) **status** with the National Healthcare Safety Network (NHSN) as of February 1, 2018 for the MU3 objective according to certification criterion (§ 170.315(f)(6)).

Active engagement for this MU3 objective includes monthly reporting of Antimicrobial Use Summary, Antimicrobial Resistance Event, and Antimicrobial Resistance Summary data to NHSN for a full calendar year.

For each year, **data intended for inclusion** in the annual MU3 status report must be received no later than the end of January of the following year (i.e., Antimicrobial Use and Resistance data for 2017 must be reported into NHSN by January 31, 2018).

Registration of Intent Completed: 01/06/2017

The following is a status report of received Antimicrobial Use Summary, Antimicrobial Resistance Event, and Antimicrobial Resistance Summary data per month for 2017.

Display of data for 12 months

Month/Year	Antimicrobial Use Summary	Antimicrobial Resistance Events	Antimicrobial Resistance SummaryEvents
01/2017	Yes	Yes	Yes
02/2017	Yes	Yes	Yes
03/2017	Yes	Yes	Yes
04/2017	Yes	Yes	Yes
05/2017	Yes	Yes	Yes
06/2017	Yes	Yes	Yes
07/2017	Yes	Yes	Yes
08/2017	Yes	Yes	Yes
09/2017	Yes	Yes	Yes
10/2017	Yes	Yes	Yes
11/2017	Yes	Yes	Yes
12/2017	Yes	Yes	Yes

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

Please retain this notification for your facility's records.

NHSN AUR MU3 Ad Hoc Report

- Facility Administrator may click the “Reports” button to begin ad hoc report request

 **AUR Meaningful Use 3 Registration**

NHSN Antimicrobial Use and Antimicrobial Resistance reporting has been identified as an option for public health registry reporting under Meaningful Use Stage 3 (§ 170.315(f)(6)).

By checking this box John Public registers facility XYZ (dev) Medical Center (10009) intent to satisfy a Meaningful Use 3 objective by submitting NHSN Antimicrobial Use and Antimicrobial Resistance (AUR) monthly data via an electronic interface.

Active engagement for this Meaningful Use 3 (MU3) objective includes monthly reporting of Antimicrobial Use Summary, Antimicrobial Resistance Events and Summary data to NHSN for a full calendar year.

Reporting to production must begin within 60 days of registration of intent.

For each year, data intended for inclusion in the annual MU3 status report must be received no later than the end of January of the following year (i.e., AUR data for 2017 must be reported into NHSN by January 31, 2018).

The below recipients shall receive NHSN MU3 registration confirmation as well as monthly and annual status report emails. Please enter up to two optional additional email addresses that should receive this information regarding your facility's NHSN MU3 status.

NHSN Facility Administrator: FacAdmin@Hosp.com
Optional facility MU3 contact: Email-1@hosp.com
Optional facility MU3 contact: Email-2@hosp.com

Date Registration of Intent Completed: 01/06/2017

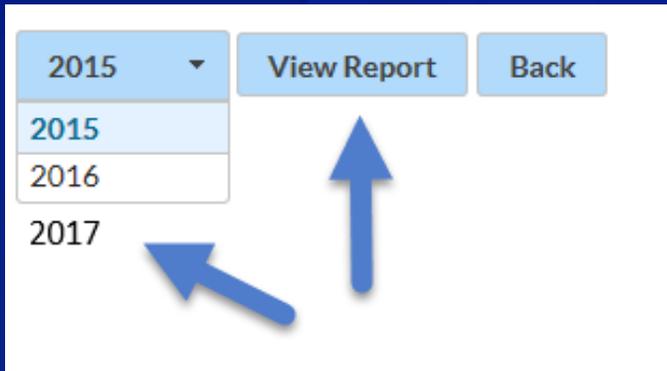
Request AUR MU3 Status Report by Year:

To complete registration, verify all information on this page and click the SAVE button.

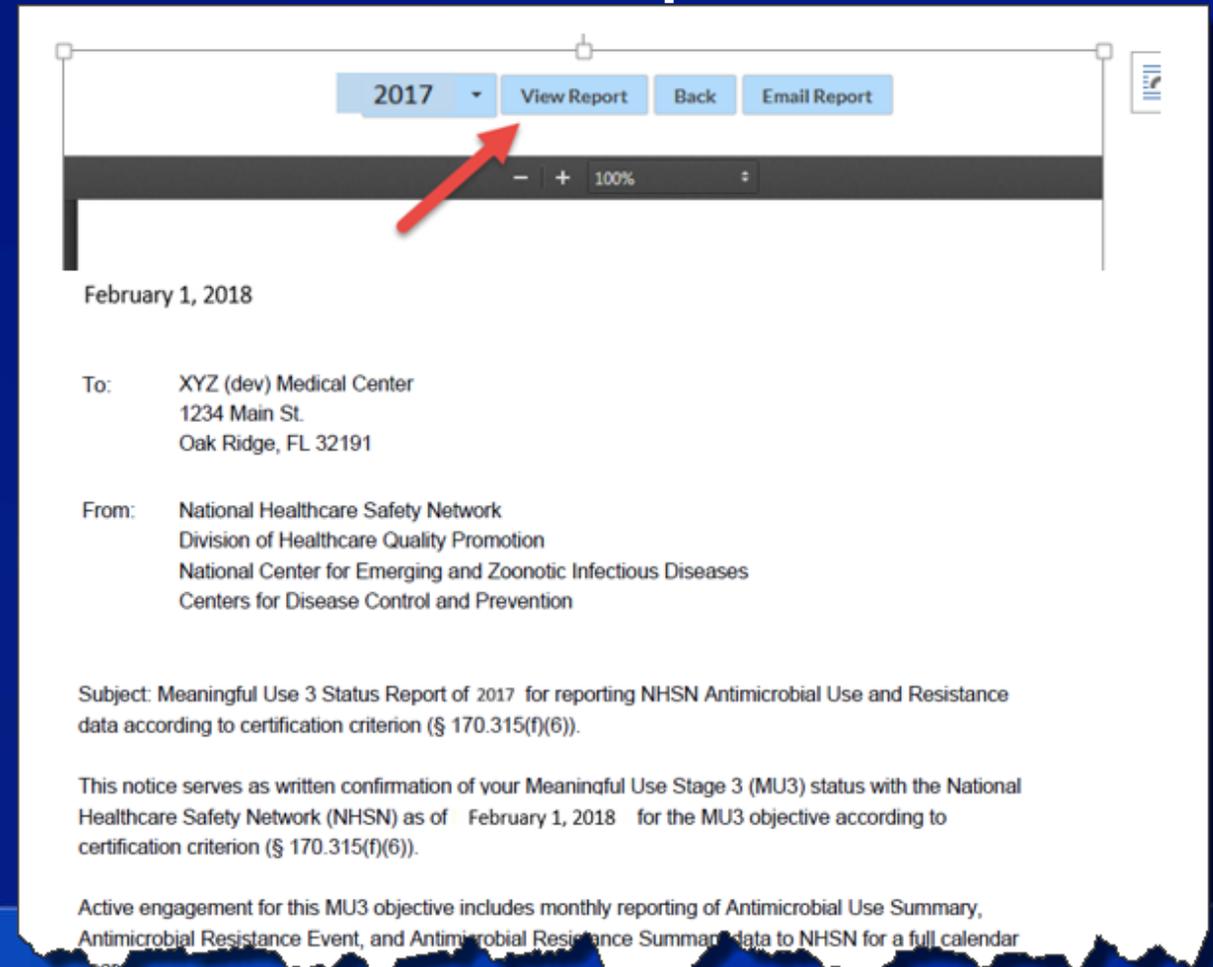
Click for ad-hoc reports

NHSN AUR MU3 Ad Hoc Report

- ❑ Click drop down to select report year



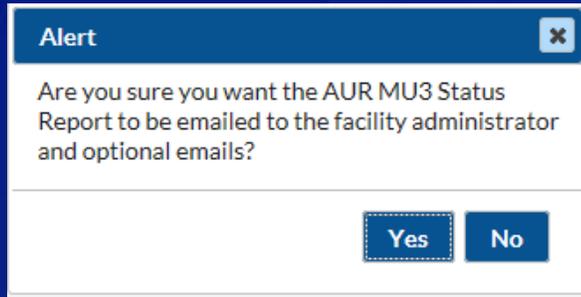
- ❑ Click “View Report”



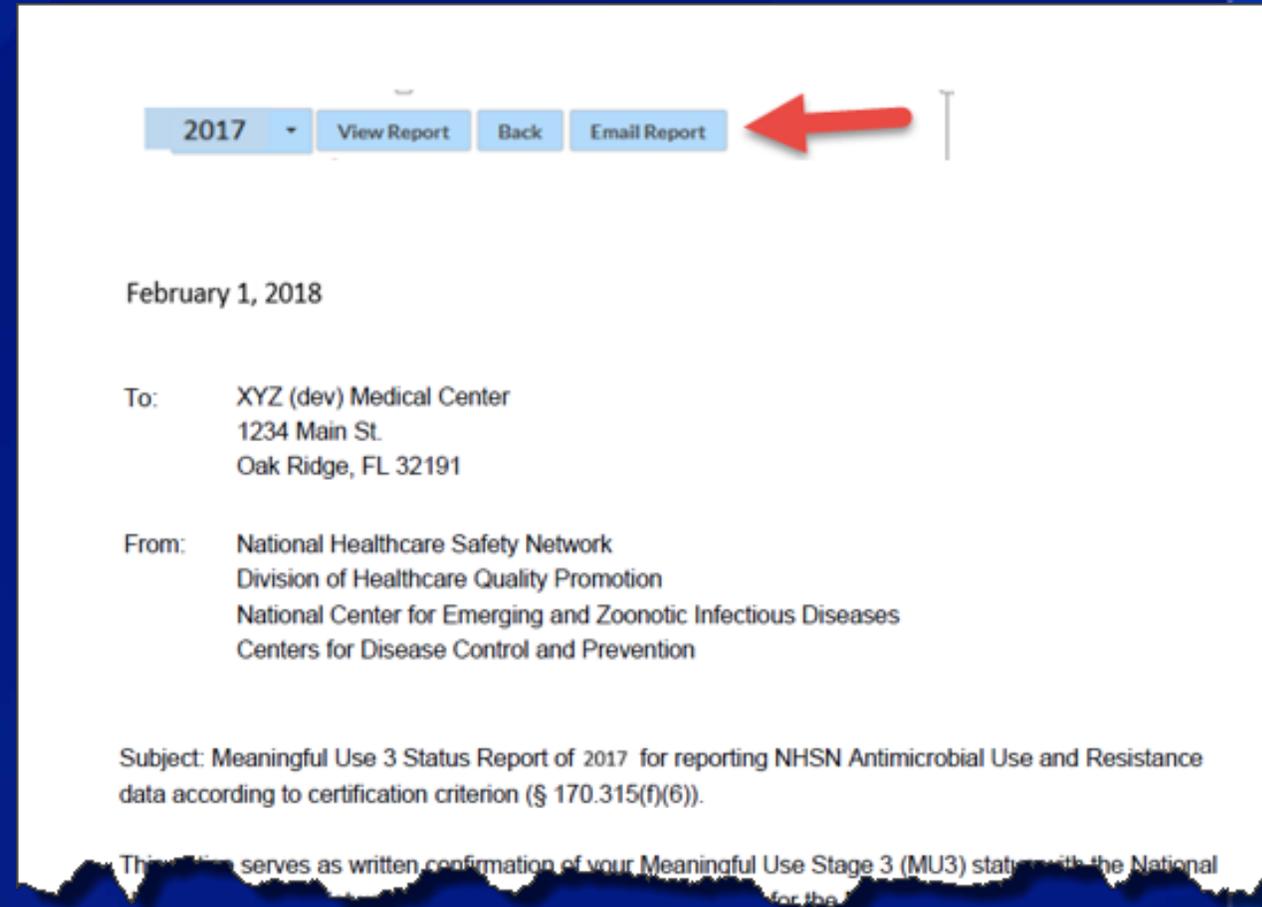
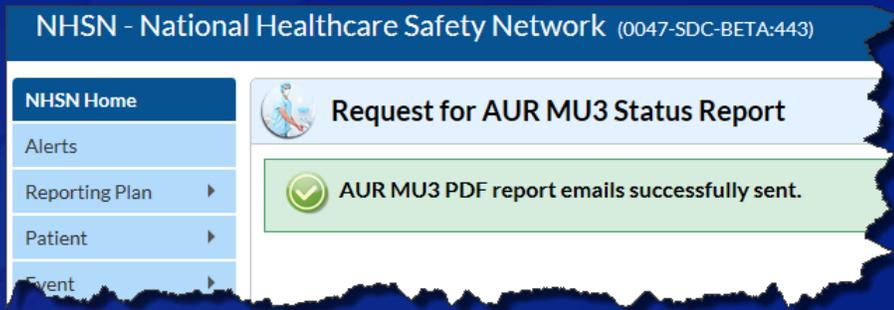
NHSN AUR MU3 Ad Hoc Report

❑ Click “Email Report” to send report via email

❑ Confirm request by clicking “Yes”



❑ Successful email sent



ADDITIONAL RESOURCES

NHSN AUR Module Resources

- NHSN AUR Module webpage: <http://www.cdc.gov/nhsn/acute-care-hospital/aur/index.html>

National Healthcare Safety Network (NHSN)

NHSN	
NHSN Login	
About NHSN	+
Enroll Here	+
Materials for Enrolled Facilities	-
Ambulatory Surgery Centers	+
Acute Care Hospitals/Facilities	-
Surveillance for Antimicrobial Use and Antimicrobial Resistance Options	
Surveillance for UTI (CAUTI)	
Surveillance for C. difficile, MRSA, and other Drug-resistant Infections	
Surveillance for BSI (CLABSI)	
Surveillance for CLIP	
Surveillance for SSI Events	
Surveillance for VAE	
Surveillance for PNEU (pedVAP)	
Surveillance for Healthcare Personnel Exposure	
Surveillance for Healthcare	

[CDC](#) > [NHSN](#) > [Materials for Enrolled Facilities](#) > [Acute Care Hospitals/Facilities](#)

Surveillance for Antimicrobial Use and Antimicrobial Resistance Options



Resources for NHSN Users Already Enrolled

- > **Training** ←
- > **Protocols** ←
- > Frequently Asked Questions
- > Data Collection Forms
- > Supporting Material
- > **Analysis Resources** ←

Resources to Help Prevent Infections

- [HAI Prevention in Long-term Care Settings](#)
- [Resources for Patients and Healthcare Providers](#)
- [HHS Action Plan to Prevent Healthcare-associated Infections](#)
- [Management of Multidrug-Resistant Organisms In Healthcare Settings, 2006](#)
- [Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings, 2007](#)
- [Guideline for Environmental Infection Control in Healthcare Facilities, 2003](#) 
 - See: [C. difficile Excerpt](#)

New Users - Start Enrollment Here



- Step 1: Enroll into NHSN
 - Step 2: Set up NHSN
 - Step 3: Report
- [Click here to enroll!](#)



NHSN AUR Module Resources (continued)

- ❑ **NHSN AUR Protocol:**
 - <http://www.cdc.gov/nhsn/PDFs/pscManual/11pscAURcurrent.pdf>
- ❑ **Intro to NHSN AUR Module Training Slides:**
 - <http://www.cdc.gov/nhsn/PDFs/training/AUR-training.pdf>
- ❑ **NHSN CDA Submission Support Portal:**
 - <http://www.cdc.gov/nhsn/cdaportal/index.html>
- ❑ **NHSN MU3:**
 - <http://www.cdc.gov/nhsn/cdaportal/meaningfuluse.html>
- ❑ **NHSN Helpdesk (protocol questions):**
 - NHSN@cdc.gov
- ❑ **NHSN CDA Helpdesk (technical questions):**
 - NHSNCDA@cdc.gov

Questions

NHSNCDA@cdc.gov

Thank you!

For more information please contact Centers for Disease Control and Prevention

1600 Clifton Road NE, Atlanta, GA 30333
Telephone, 1-800-CDC-INFO (232-4636)/TTY: 1-888-232-6348
E-mail: cdcinfo@cdc.gov Web: www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.