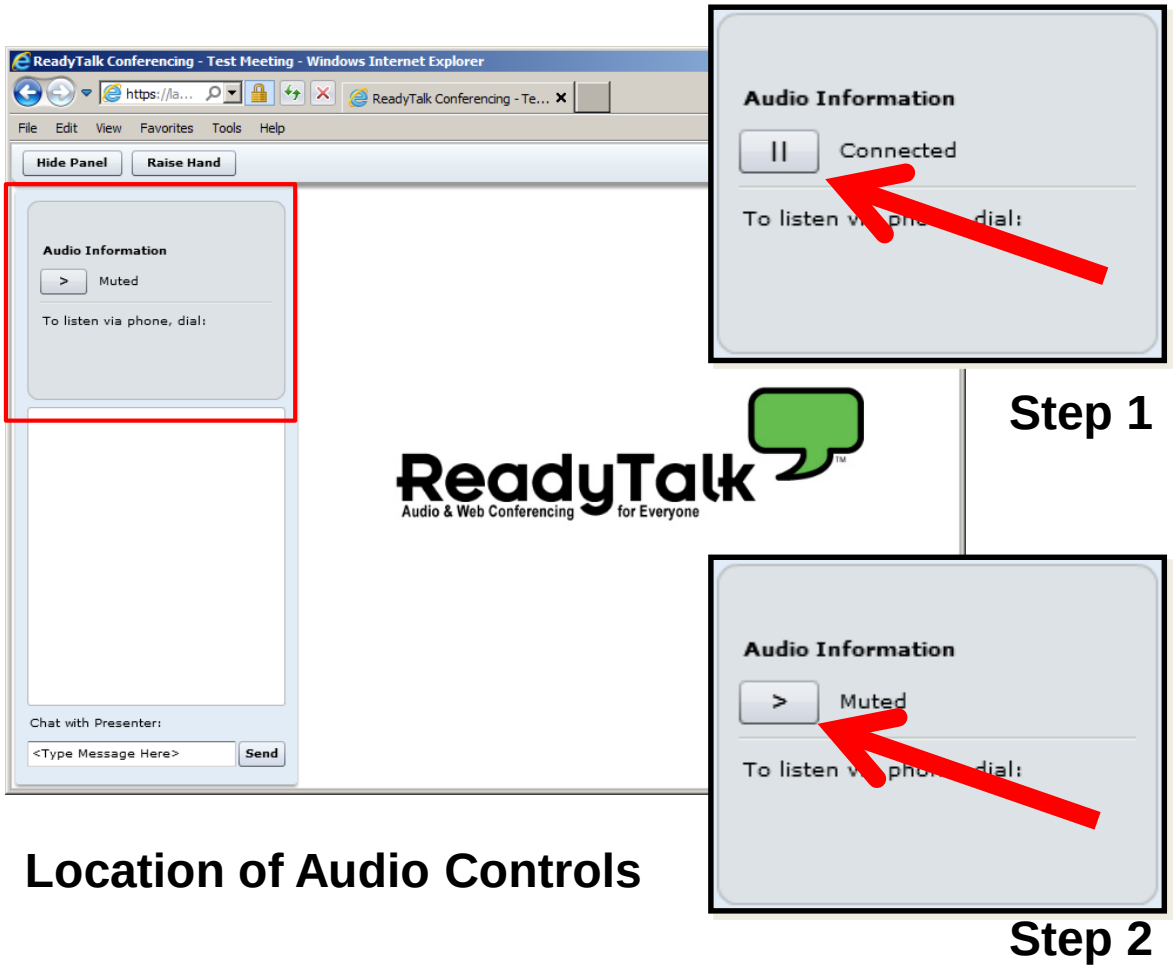
Welcome!

- Audio for this event is available via ReadyTalk® Internet Streaming.
- No telephone line is required.
- Computer speakers or headphones are necessary to listen to streaming audio.
- Limited dial-in lines are available. Please send a chat message if needed.
- This event is being recorded.

Troubleshooting Audio

Audio from computer speakers breaking up?
Audio suddenly stop?

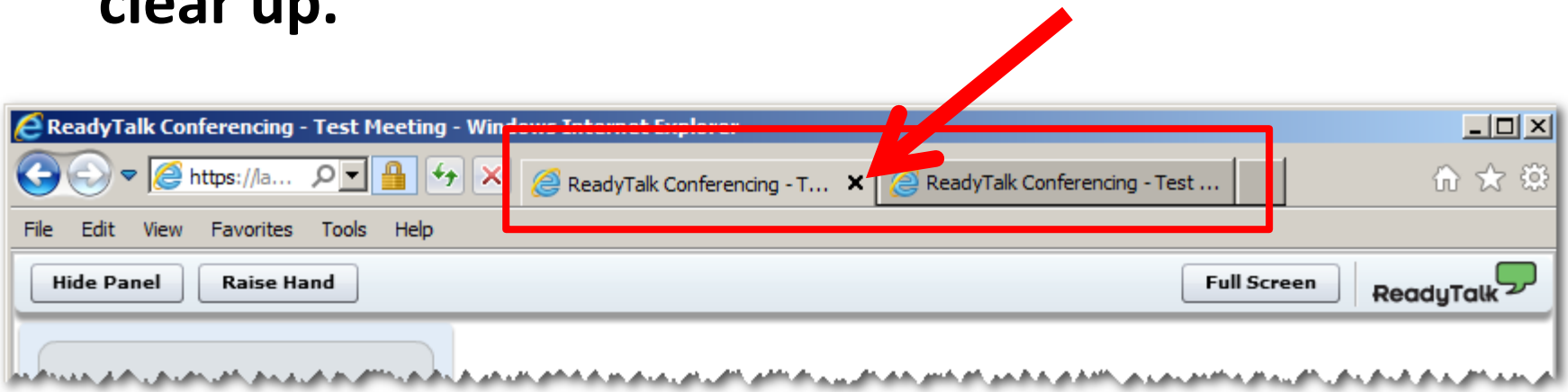
- **Click <u>Pause</u> button**
- **Wait 5 seconds**
- **Click <u>Play</u> button**



Location of Audio Controls

Troubleshooting Echo

- Hear a bad echo on the call?
- Echo is caused by multiple browsers/tabs open to a single event – multiple audio feeds.
- Close all but one browser/tab and the echo will clear up.



Example of Two Browsers Tabs open in Same Event

Submitting Questions

Type questions in the "Chat with Presenter" section, located in the bottom-left corner of your screen.

Using NHSN for MRSA and *C. difficile* LabID Event Reporting

Denise Leaptrot, MSA, SM/MT (ASCP), CIC
Epidemiologist/Infection Prevention Consultant
National Healthcare Safety Network (NHSN)
Centers for Disease Control and Prevention (CDC)

November 18, 2015
2 p.m.

Purpose

Provide guidance that will assist attendees to understand the importance of surveillance for Methicillin-resistant *Staphylococcus aureus* (MRSA) bacteremia and *Clostridium difficile* (*C. difficile*) infections and how to report these LabID Event data correctly.

Our Goals

For participants to be able to:

- Recognize why surveillance for MRSA bacteremia and *C. difficile* infections is important
- Execute requirements for Laboratory-Identified (LabID) Event reporting to the Centers for Medicare & Medicaid Services (CMS) via NHSN
- Demonstrate how to correctly set-up monthly reporting plan for MRSA bacteremia and *C. difficile* LabID Event reporting
- Recall MRSA bacteremia and *C. difficile* LabID Event definitions and protocols
- Describe how to correctly enter MRSA bacteremia and *C. difficile* LabID Event data into NHSN
- Communicate how to correctly enter denominator data for LabID Event reporting into NHSN

Why is MRSA Bacteremia Surveillance Important?

- Serious threat level, requiring prompt and sustained action
- *Staphylococcus* (*Staph*) bacteria, including MRSA, are one of the most common causes of healthcare-associated infections (HAIs)
- CDC estimates >80,000 invasive MRSA infections and >11,000 related deaths occurred in 2011
- Despite a slight decrease in the percentage of *Staphylococcus aureus* (*S. aureus*) resistant to oxacillin (MRSA), MRSA continues to dominate among pathogens

Why is *C. difficile* Surveillance Important?

- *C. difficile* infections contribute to approximately 14,000 deaths/year
  - ≈ 90% elderly
  - 400% increase, 2000–2007
- Hospital stays from *C. difficile* infection (CDI) tripled in the last decade

Centers for Disease Control and Prevention
MMWR
Morbidity and Mortality Weekly Report
Early Release / Vol. 61
March 6, 2012

Vital Signs: Preventing *Clostridium difficile* Infections

Abstract

Background: *Clostridium difficile* infection (CDI) is a common and sometimes fatal health-care–associated infection; the incidence, deaths, and excess health-care costs resulting from CDIs in hospitalized patients are all at historic highs. Meanwhile, the contribution of nonhospital health-care exposures to the overall burden of CDI, and the ability of programs to prevent CDIs by implementing CDC recommendations across a range of hospitals, have not been demonstrated previously.

Methods: Population-based data from the Emerging Infections Program were analyzed by location and antecedent health-care exposures. Present-on-admission and hospital-onset, laboratory-identified CDIs reported to the National Healthcare Safety Network (NHSN) were analyzed. Rates of hospital-onset CDIs were compared between two 8-month periods near the beginning and end of three CDI prevention programs that focused primarily on measures to prevent intrahospital transmission of *C. difficile* in three states (Illinois, Massachusetts, and New York).

Results: Among CDIs identified in Emerging Infections Program data in 2010, 94% were associated with receiving health care; of these, 75% had onset among persons not currently hospitalized, including recently discharged patients, outpatients, and nursing home residents. Among CDIs reported to NHSN in 2010, 52% were already present on hospital admission, although they were largely health-care related. The pooled CDI rate declined 20% among 71 hospitals participating in the CDI prevention programs.

Conclusions: Nearly all CDIs are related to various health-care settings where predisposing antibiotics are prescribed

Making Health Care Safer
Stopping *C. difficile* Infections

CDC Vitalsigns
March 2012

3X
94%
20%

On this Page
- Introduction
- Problem
- Who's at Risk?
- What Can Be Done
- Science Behind this Issue
- Related Links
- Social Media
- Read Associated MMWR

People getting medical care can catch serious infections called health care-associated infections (HAIs). While most types of HAIs are declining, one – caused by the germ *C. difficile** – remains at historically high levels. *C. difficile* causes diarrhea linked to 14,000 American deaths each year. Those most at risk are people, especially older adults, who take antibiotics and also get medical care. When a person takes antibiotics, good germs that protect against infection are destroyed for several months. During this time, patients can get sick from *C. difficile* picked up from contaminated surfaces or spread from a health care provider's hands. About 25% of *C. difficile* infections first show symptoms in hospital patients; 75% first show in nursing home patients or in people recently cared for in doctors' offices and clinics. *C. difficile* infections cost at least $1 billion in extra health care costs annually.

**Clostridium difficile* (klah-STRID-ee-um DIFF-i-seel)

Risk Factors: Key Prevention Targets

- Antimicrobial exposure
- Acquisition of *C. difficile*
- Advanced age
- Underlying illness
- Immunosuppression
- Tube feeds
- Gastric acid suppression?

Main modifiable risk factors

Online Resources

http://www.cdc.gov/nhsn/acute-care-hospital/cdiff-mrsa/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 CAUTI
    - **Surveillance for C. difficile, MRSA, and other Drug-resistant Infections**
    - Surveillance for CLABSI
    - Surveillance for CLIP
    - Surveillance for SSI Events
    - Surveillance for VAE

CDC > NHSN > Materials for Enrolled Facilities > Acute Care Hospitals/Facilities

Surveillance for C. difficile, MRSA, and other Drug-resistant Infections

Resources for NHSN Users Already Enrolled

- **Training**
- **Protocols**
- **Frequently Asked Questions**
- **Data Collection Forms**
- **MDRO & CDI LabID Event Calculator**
- **CMS Supporting Materials**
- **Supporting Material**
- **Analysis Resources**

Resources to Help Prevent Infections

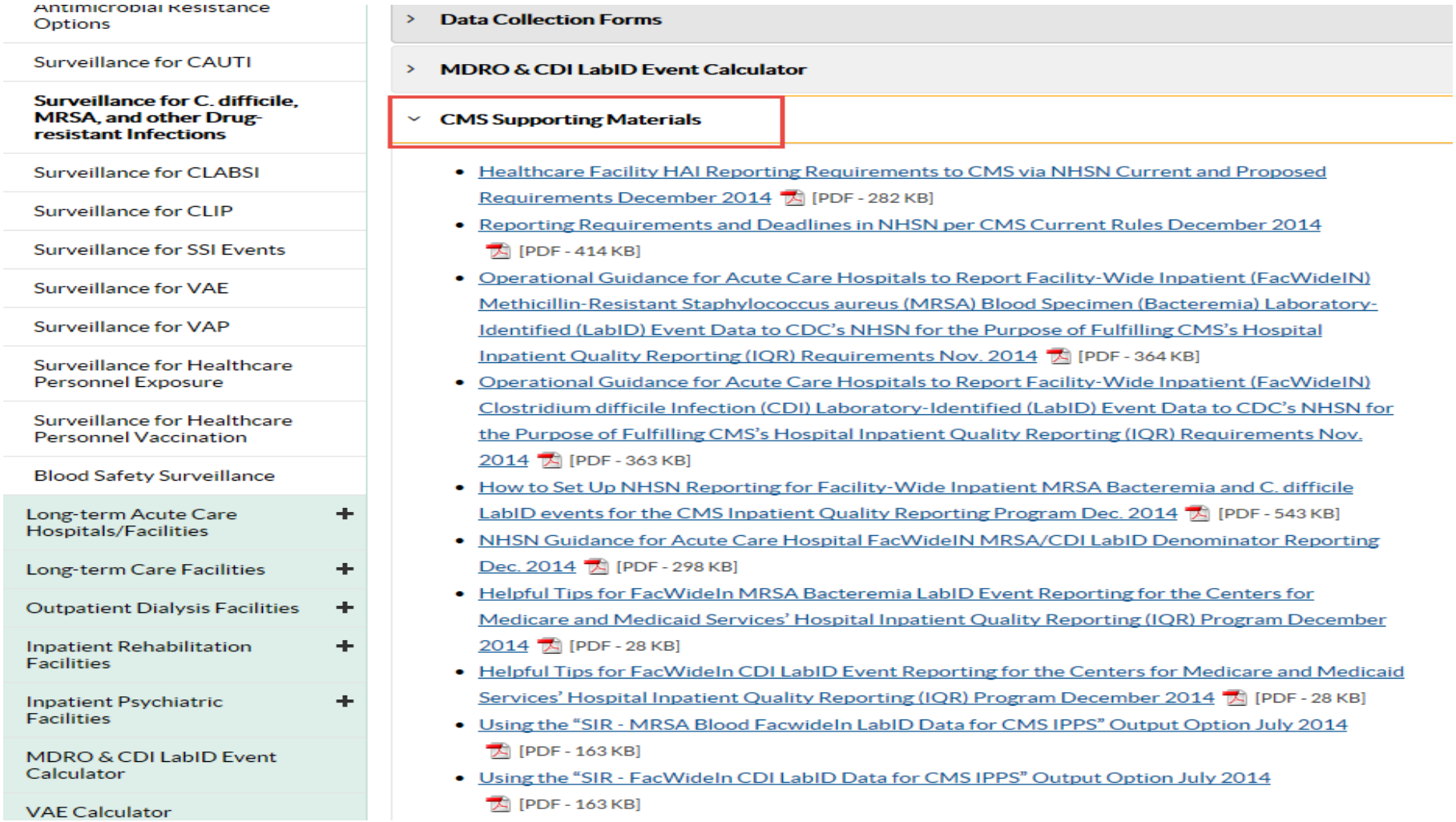
New Users - Start Enrollment Here

- Step 1: Enroll into NHSN
- Step 2: Set up NHSN
- Step 3: Report

Click here to enroll

CMS NHSN Requirements Click here for more

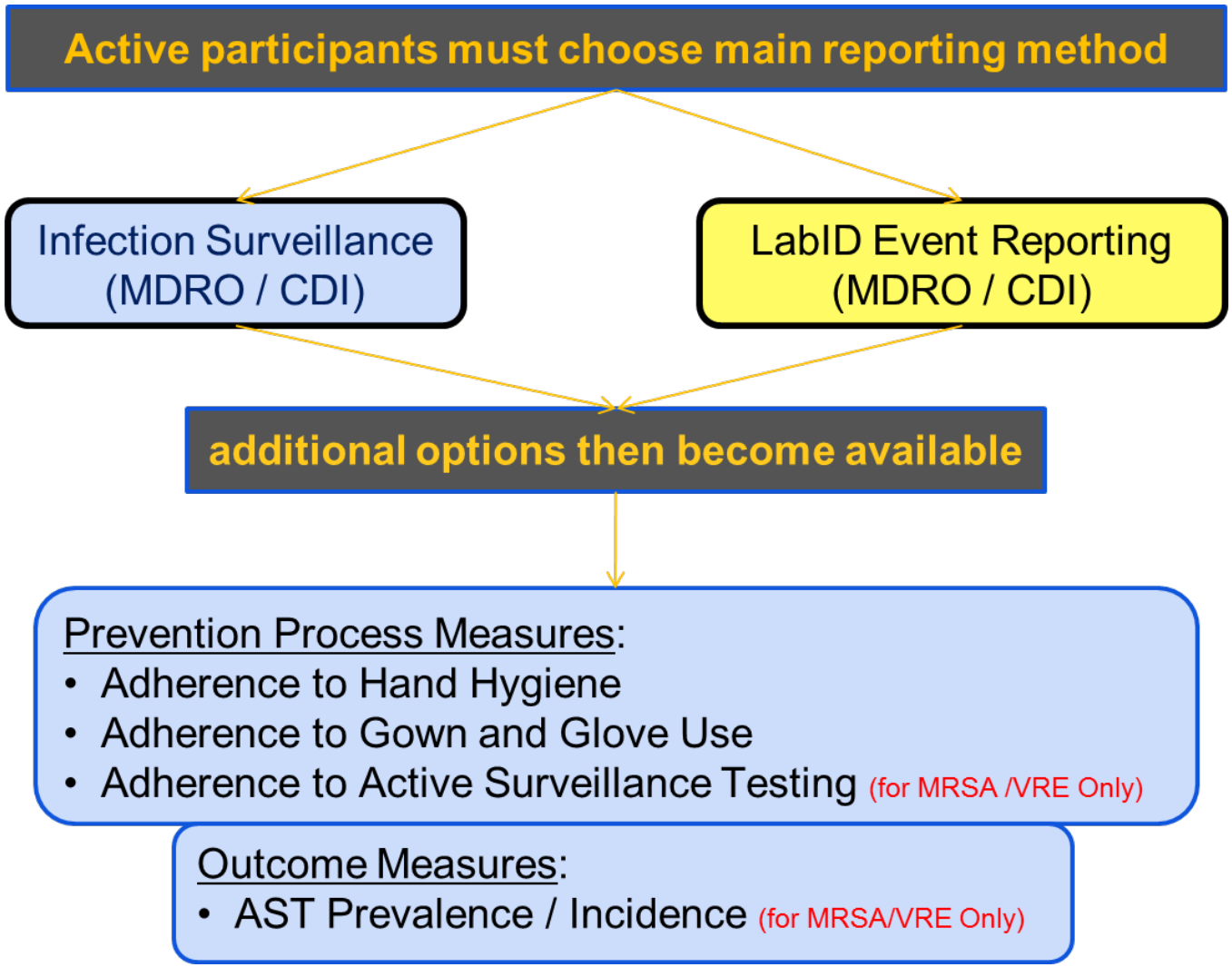
Online Resources: CMS-Related Information



CMS Requirements: LabID Events

	Acute Care Hospital	Long Term Acute Care (LTAC) and IRFs	PPS-Exempt Cancer Hospital Quality Reporting (PCHQR)
Effective	January 1, 2013	January 1, 2015	January 1, 2016
Required Locations	Facility-Wide Inpatient (FacWideIN) as defined in multidrug-resistant organisms (MDRO) and CDI protocol	FacWideIN as defined in MDRO and CDI protocol	FacWideIN as defined in MDRO and CDI protocol
Data Collection	CDC NHSN – MDRO/CDI Module (LabID Event)	CDC NHSN – MDRO/CDI Module (LabID Event)	CDC NHSN – MDRO/CDI Module (LabID Event)
Organisms	Methicillin-Resistant *Staphylococcus aureus* (MRSA) / Clostridium *difficile* (*C. difficile* /CDI)	Methicillin-Resistant *Staphylococcus aureus* (MRSA) / Clostridium *difficile* (*C. difficile*/CDI)	Methicillin-Resistant *Staphylococcus aureus* (MRSA) / *Clostridium difficile* (*C. difficile* / CDI)
Required Data	Non-duplicate MRSA blood / *C. diff* toxin positive results tested on unformed stool	Non-duplicate MRSA blood / *C. diff* toxin positive results tested on unformed stool	Non-duplicate MRSA blood / *C. diff* toxin positive results tested on unformed stool

Reporting Requirements for MDRO Module



Definitions

- ***MRSA*: *S. aureus* testing oxacillin, cefoxitin, or methicillin resistant; or positive from molecular testing for mecA and PBP2a**
- ***C. difficile*: A positive result for a laboratory test for *C. difficile* toxin A and/or B (e.g., enzyme immunoassay, or EIA test), OR a toxin-producing *C. difficile* organism detected in the stool specimen by culture or other laboratory means (e.g., nucleic acid amplification testing by polymerase-chain reaction, or PCR)**
- ***MSSA*: Methicillin sensitive *Staphylococcus aureus* (*S. aureus*) testing oxacillin, cefoxitin, or methicillin intermediate or susceptible; or negative from molecular testing for mecA and PBP2a**
- ***VRE*: *Enterococcus faecalis, Enterococcus faecium*, or *Enterococcus* species unspecified (only those not identified to the species level) testing resistant to vancomycin**

Definitions

- **MDR-*Acinetobacter*:** Any *Acinetobacter* species testing non-susceptible (i.e., resistant or intermediate) to at least one agent in at least three antimicrobial classes of the following six antimicrobial classes:

Antimicrobial Class	Agents
β-lactams and β-lactam/β-lactamase inhibitor combinations	Piperacillin, Piperacillin/tazobactam
Sulbactam	Ampicillin/sulbactam
Cephalosporins	Cefepime, Ceftazidime
Carbapenems	Imipenem, Meropenem, Doripenem, Ertapenem
Aminoglycosides	Amikacin, Gentamicin, Tobramycin
Fluoroquinolones	Ciprofloxacin, Levofloxacin

- **CephR:** *Klebsiella oxytoca* or *Klebsiella pneumoniae* testing intermediate or resistant to ceftazidime, ceftriaxone, cefotaxime, or cefepime
- **CRE:** Any *Escherichia coli*, *Klebsiella oxytoca*, *Klebsiella pneumoniae*, or *Enterobacter* spp. testing resistant to imipenem, meropenem, doripenem, or ertapenem.
  Note: For in-plan CRE surveillance, facilities must conduct surveillance for all three organisms CRE-*E. coli*, CRE-*Enterobacter*, and CRE-*Klebsiella* (*Klebsiella oxytoca* and *Klebsiella pneumoniae*).

OVERVIEW OF LabID EVENT REPORTING

Important Notice

LabID Event reporting allows laboratory testing data to be used without clinical evaluation of the patient, allowing for a much less labor intensive method to track *C. difficile* and MDROs, such as MRSA.

Advantages of LabID Event Reporting

- Objective laboratory-based metrics that allow the following without extensive chart review, including:
  - Identification of vulnerable patient populations
  - Estimation of infection burden
  - Estimation of exposure burden
  - Assessment of need for and effectiveness of interventions
- Standardized case definitions

Why are Standardized Case Definitions and Data Collection Methods Important?

- Increase comparability between clinical settings
- Guide implementation of interventions and monitor impact

AND WE KNOW…

- Documentation of symptoms may differ between healthcare settings
- Resources vary among facilities, which may result in unfair comparison
- Completeness of medical record documentation and variances among facilities may influence how definitions are applied
- Simplicity of auditing data to validate accuracy of submitted data

Facility-Wide Inpatient FacWideIN

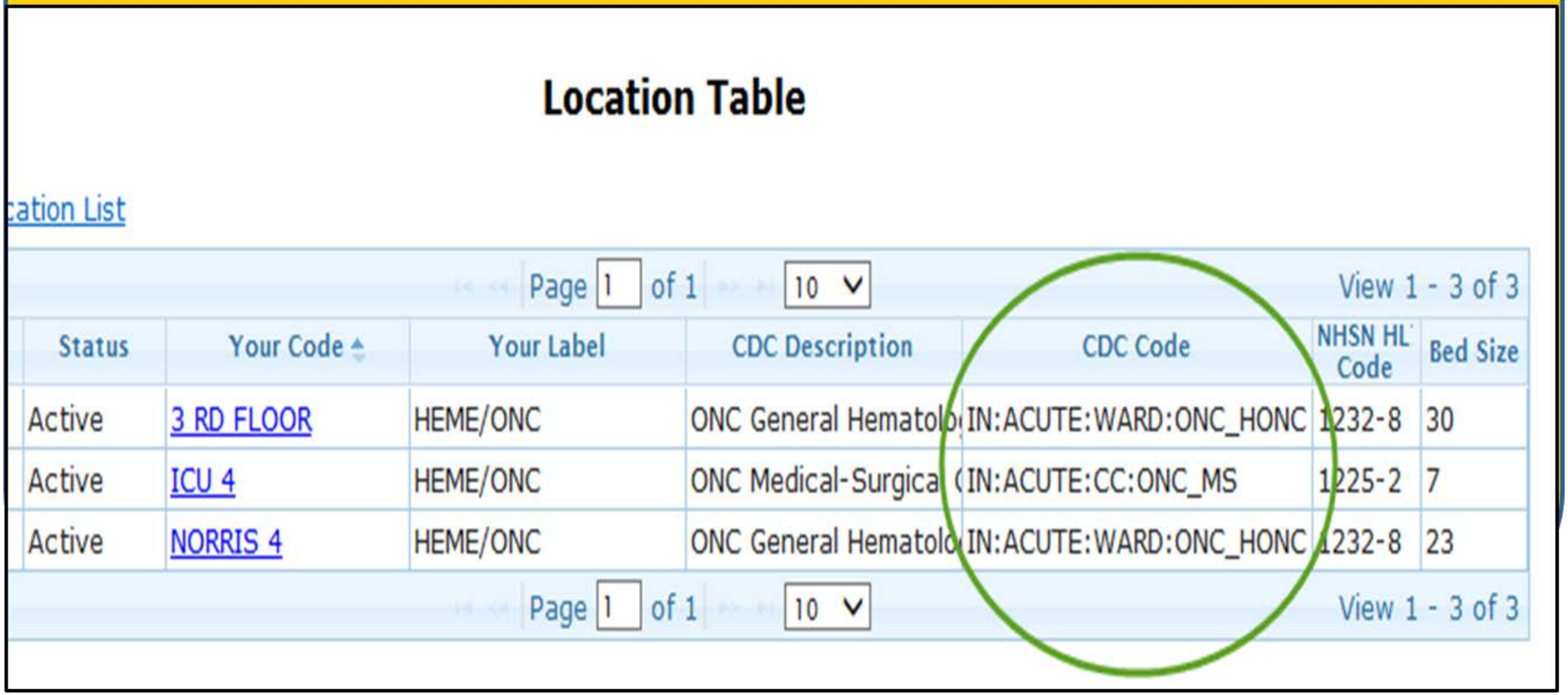
Important:

- Option for LabID Event reporting only!
- Includes all inpatient locations*, including observation patients housed in an **inpatient location**

* See *C. difficile* LabID Event protocol for location exclusions

Facility-Wide Inpatient FacWideIN

Includes all inpatient locations*



Location Table

cation List

Page 1 of 1 10 View 1 - 3 of 3

Status	Your Code	Your Label	CDC Description	CDC Code	NHSN HL7 Code	Bed Size
Active	3 RD FLOOR	HEME/ONC	ONC General Hematolo	IN:ACUTE:WARD:ONC_HONC	1232-8	30
Active	ICU 4	HEME/ONC	ONC Medical-Surgica	IN:ACUTE:CC:ONC_MS	1225-2	7
Active	NORRIS 4	HEME/ONC	ONC General Hematolo	IN:ACUTE:WARD:ONC_HONC	1232-8	23

Page 1 of 1 10 View 1 - 3 of 3

Facility-Wide Inpatient FacWideIN

Important:

- Includes inpatient locations*

PLUS

- Location-specific reporting for the same organism and LabID Event type
  - i.e., All Specimens or Blood Specimens only from each outpatient emergency department (ED) and 24-hour observation location

* See *C. difficile* LabID Event protocol for location exclusions

Facility-Wide Inpatient FacWideIN Locations

LabID specimens collected in EDs and 24-hour observation locations are:

- Reported to NHSN
- Assigned to the ED or 24-hour observation – outpatient location – in which the specimen was collected
  - Regardless of subsequent inpatient admission of patient

Provision to FacWideIN LabID Event Reporting

Specimens collected from affiliated outpatient locations, *excluding ED and 24-hour observation locations,* can be reported for the inpatient **admitting** location if collected on the same calendar day as inpatient admission.

In this circumstance, the admitting inpatient location should be assigned.

Note: Do not report outpatient location events if patient admits on a different calendar day or does not admit to an inpatient location.

Why Are These Additional Data Important?

- To facilitate accurate categorization of LabID Events when specimens are collected in the ED or 24-hour observation units
- To allow each facility to capture community-onset (CO) cases coming into the facility

Knowledge Check: How do I identify LabID events?

6/1: Cindy presents to the outpatient infusion center for scheduled infusion but complains of headache, diarrhea, and lower abdominal pain for the past two days. She states that she attended a family picnic three days ago and wonders if she has food poisoning. Medical history includes breast cancer and patient is currently being treated with undescribed chemotherapy regimen as an outpatient.

Upon exam, patient is slightly hypotensive, but otherwise normal. A loose stool specimen collected is toxin positive for C. *difficile*; negative for *Salmonella* and other enteric pathogens. Cindy is treated with fluids and discharged home with prescription for oral Flagyl.

Knowledge Check: How do I identify LabID events?

For FacWideIN LabID Event reporting, can this result be entered as a LabID Event, and if so, what location would be entered?

✓ **A. No.** This is an outpatient location and I am only monitoring inpatient locations.

B. Yes. Location would be the Infusion Center since specimen was collected there.

C. No. The patient was not admitted.

D. Yes. Location would be FacWideIN.

E. No. Food poisoning can affect CDI toxin testing.

Knowledge Check: How do I identify LabID events?

What if the patient was admitted to an inpatient unit on the same calendar day as specimen collection?

A. Report the positive CDI LabID Event separately, once for Infusion Center and again for admitting inpatient unit
B. Report only as FacWideIN
C. Report only as FacWideOUT
✓ **D. Report for admitting inpatient unit**
E. Toss a coin to make location selection

GETTING READY FOR LabID EVENT REPORTING

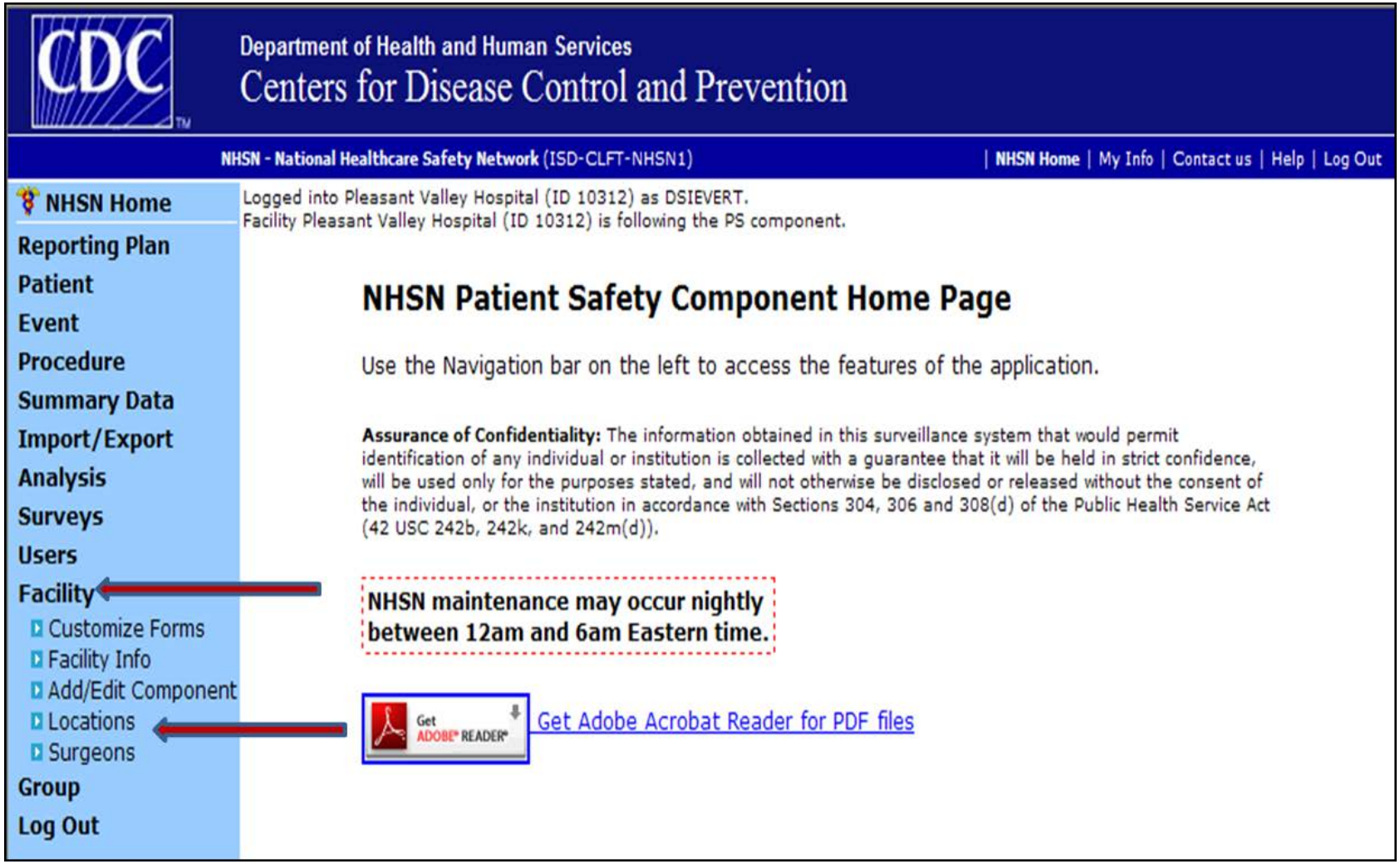
Setting Up and Reporting: LabID Events

	Acute Care Hospital	PPS-Exempt Cancer Hospital
Enrollment		Enroll as separate facility: • HOSP-ONC (Oncology Hospital) • Will have a unique NHSN orgID
Locations	All inpatient locations must be mapped. Additionally, outpatient ED and 24-hour observation locations must be mapped	Map each inpatient location to CDC-defined location type • IN; ACUTE; Ward; ONC_M; etc. • Refer to Patient Safety Manual, Chapter 15 Oncology Facilities, start page 31
Monthly Reporting Plan	FacWideIN and outpatient ED and 24-hour locations for same organism and LabID event	FacWideIN
Numerator Data (LabID events)	Report LabID events separately for each inpatient unit and ED and 24-hour observation	Report LabID Events separately for each location
Denominator Data	FacWideIN and again excluding locations with separate CCNs. Location specific counts for each ED and 24-hour observation	FacWideIN

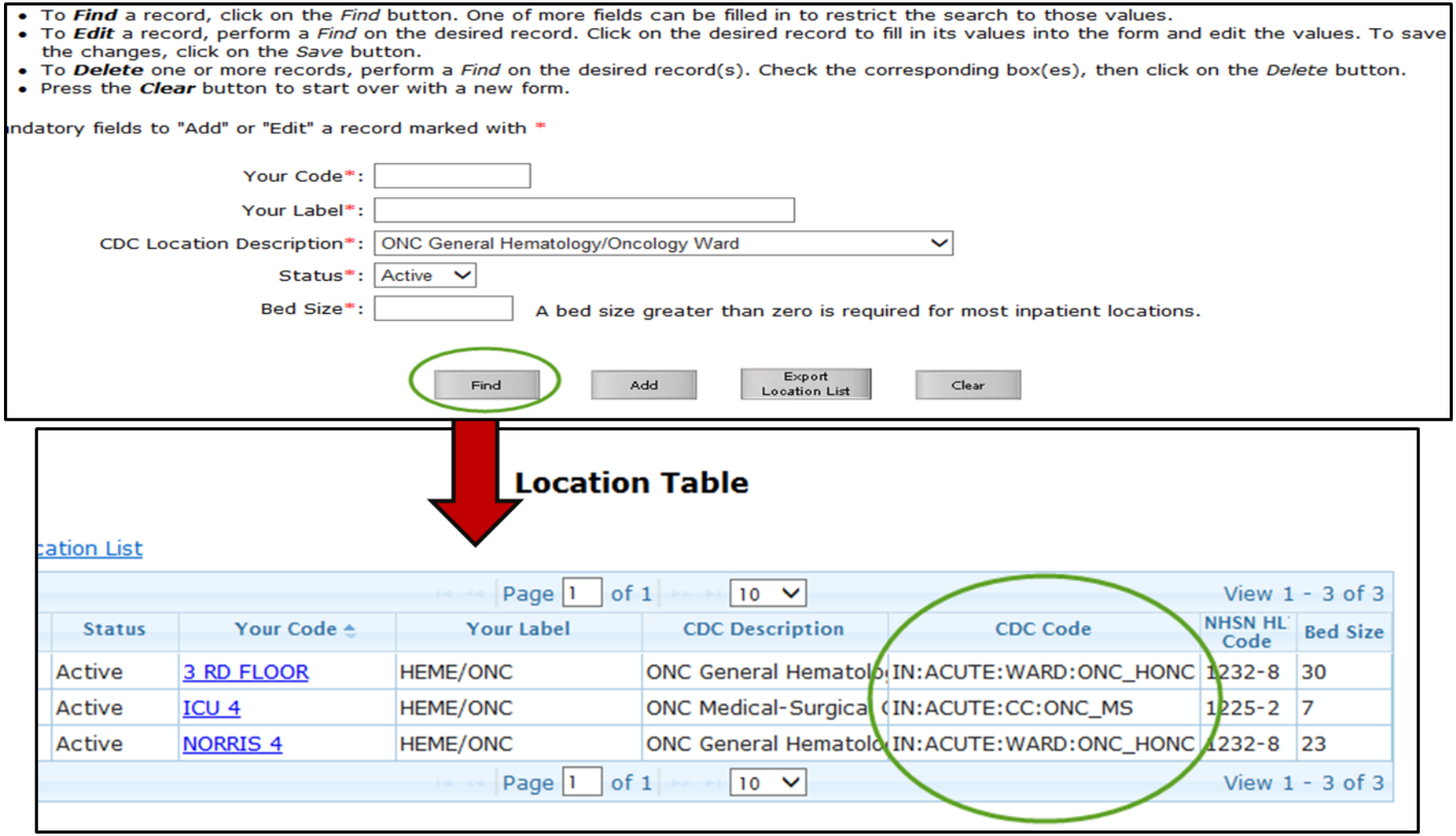
"CHECKLIST" For Facility-wide Inpatient MRSA Bacteremia and *C. difficile* LabID Event Reporting

- **Review location options and map locations in NHSN as necessary.**
- Review Monthly Reporting Plan(s) and update as necessary.
- Identify and enter all MRSA bacteremia and ***C. difficile*** **LabID events into NHSN by location.**
- Enter denominator data for each month under surveillance.
- Resolve "Alerts", if applicable.

Participating In FacWideIN: Map Each Inpatient Location In The Facility

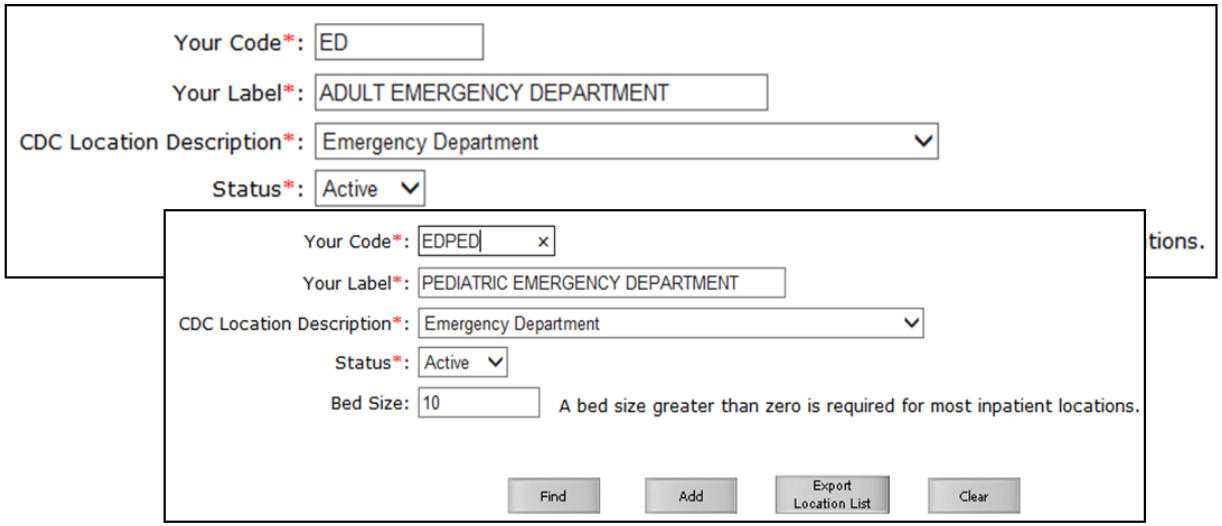


Find Locations:
All or Specific Search



New for 2016!!!

For FacWideIN, map each outpatient ED location, including offsite ED locations.



Location Table

play All Print Location List

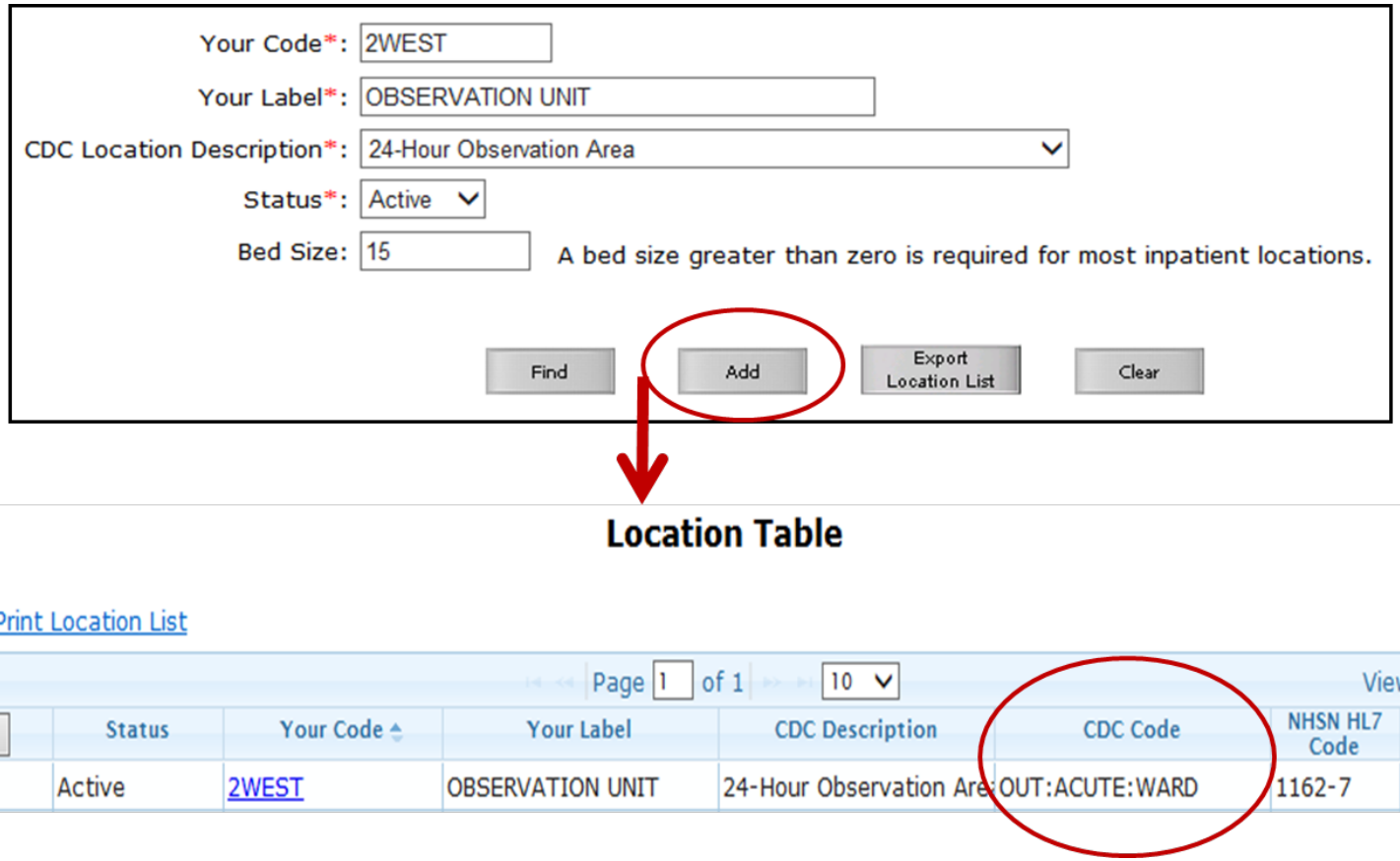
Page 1 of 1 10 View 1 - 2 of 2

Delete	Status	Your Code	Your Label	CDC Description	CDC Code	NHSN HL7 Code	Bed Size
☐	Active	ED	ED	Emergency Department	OUT:ACUTE:ED	1108-0	20
☐	Active	EDPED	PEDIATRIC EMERGENCY D	Emergency Department	OUT:ACUTE:ED	1108-0	10

Page 1 of 1 10 View 1 - 2 of 2

New for 2016!!!

For FacWideIN, map each outpatient 24-hour observation location.



"CHECKLIST"
For Facility-wide Inpatient MRSA Bacteremia and *C. difficile* LabID Event Reporting

- ✓ Review location options and map inpatient locations NHSN as necessary.
- **Review Monthly Reporting Plan(s) (MRPs) and update as necessary.**
- Identify and enter all MRSA bacteremia and *C.difficile* LabID events into NHSN by location.
- Enter denominator data for each month under surveillance
- Resolve "Alerts", if applicable.

Monthly Reporting Plan

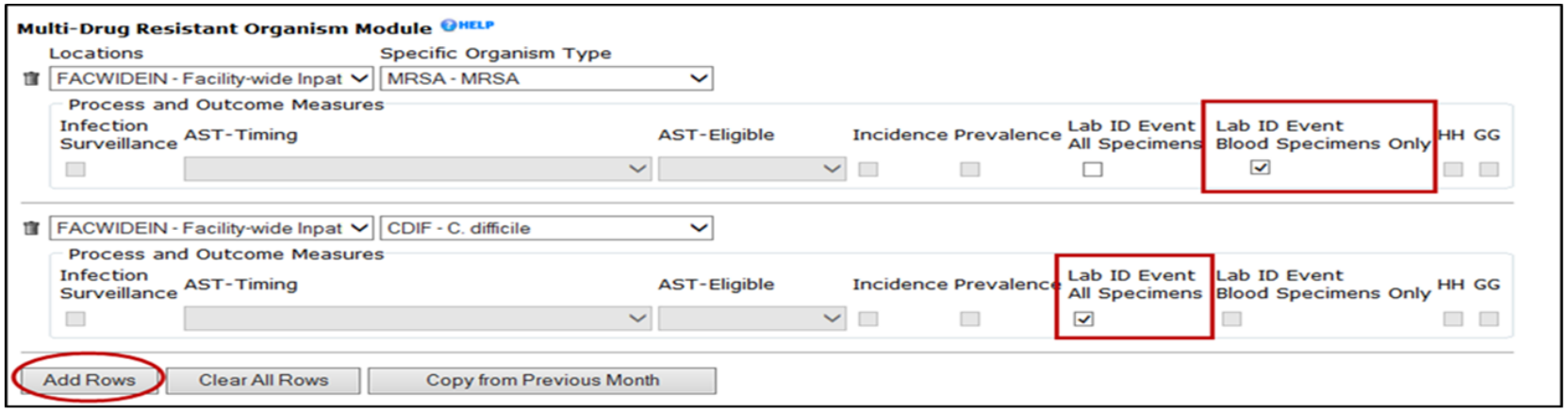
- The MRP informs CDC which modules a facility is participating in during a given month
  - Referred to as “In-Plan” data
- The MRP also informs CDC which data can be used for aggregate analyses
  - INCLUDES sharing applicable data with CMS
- A facility must enter an MRP for every month of the year
- NHSN will only submit data to CMS for those complete months indicated on the MRP

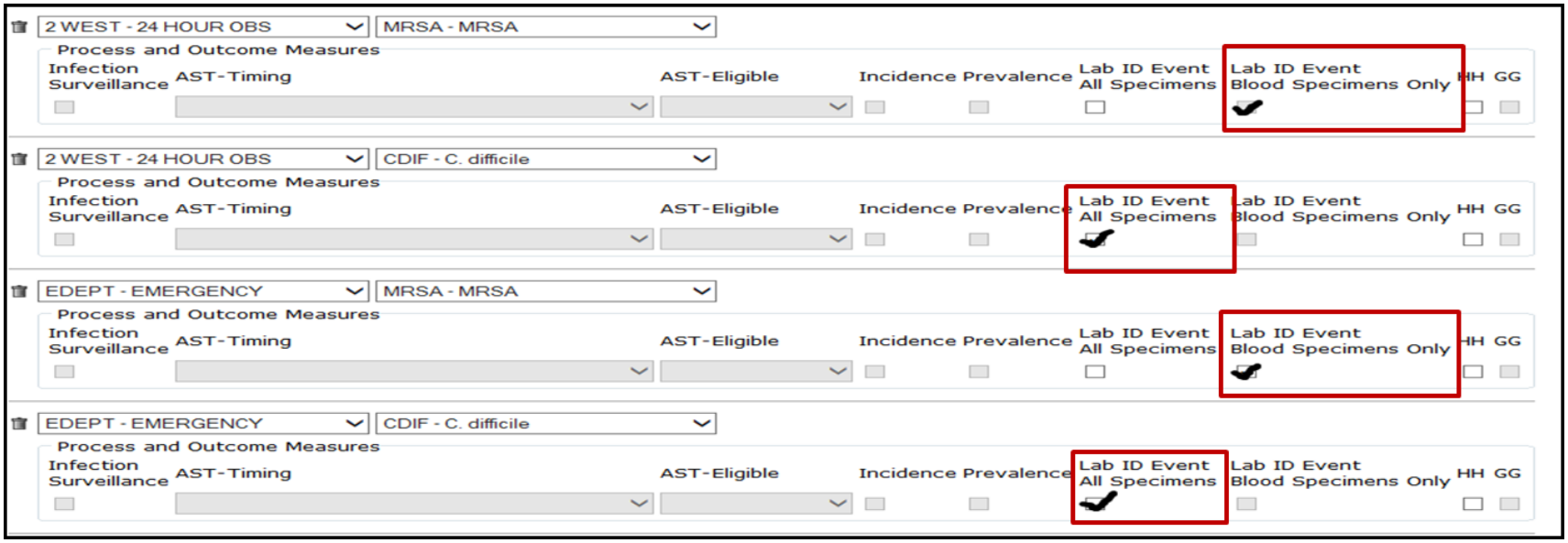
Monthly Reporting Plan FacWideIN

- Add facility-wide inpatient reporting for MRSA bacteremia and *C. difficile* LabID events to your MRP using the “FACWIDEIN” location.
- Add location-specific reporting for the same organism and LabID Event for each outpatient emergency department and 24-hour observation location (must match FacWideIN selections) if reporting FacWideIN.

Creating an MRP

MRP FacWideIN





Knowledge Check

If your hospital is participating in FacWideIN for *C. difficile* and MRSA blood, which locations must you select when setting up your MRP for LabID Event reporting?

A. FacWideIN and each ED and each 24-hour observation location
B. FacWideIN only
C. FacWideIN and FacWideOUT

"CHECKLIST" For Facility-wide Inpatient MRSA Bacteremia and *C. difficile* LabID Event Reporting

- ✓ Review location options and map locations in NHSN as necessary.
- ✓ Review Monthly Reporting Plan(s) and update as necessary.
- **Identify and enter all MRSA bacteremia and *C. difficile* LabID events into NHSN by location using the MDRO/CDI LabID Event protocols.**
- Enter denominator data for each month under surveillance.
- Resolve "Alerts", if applicable.

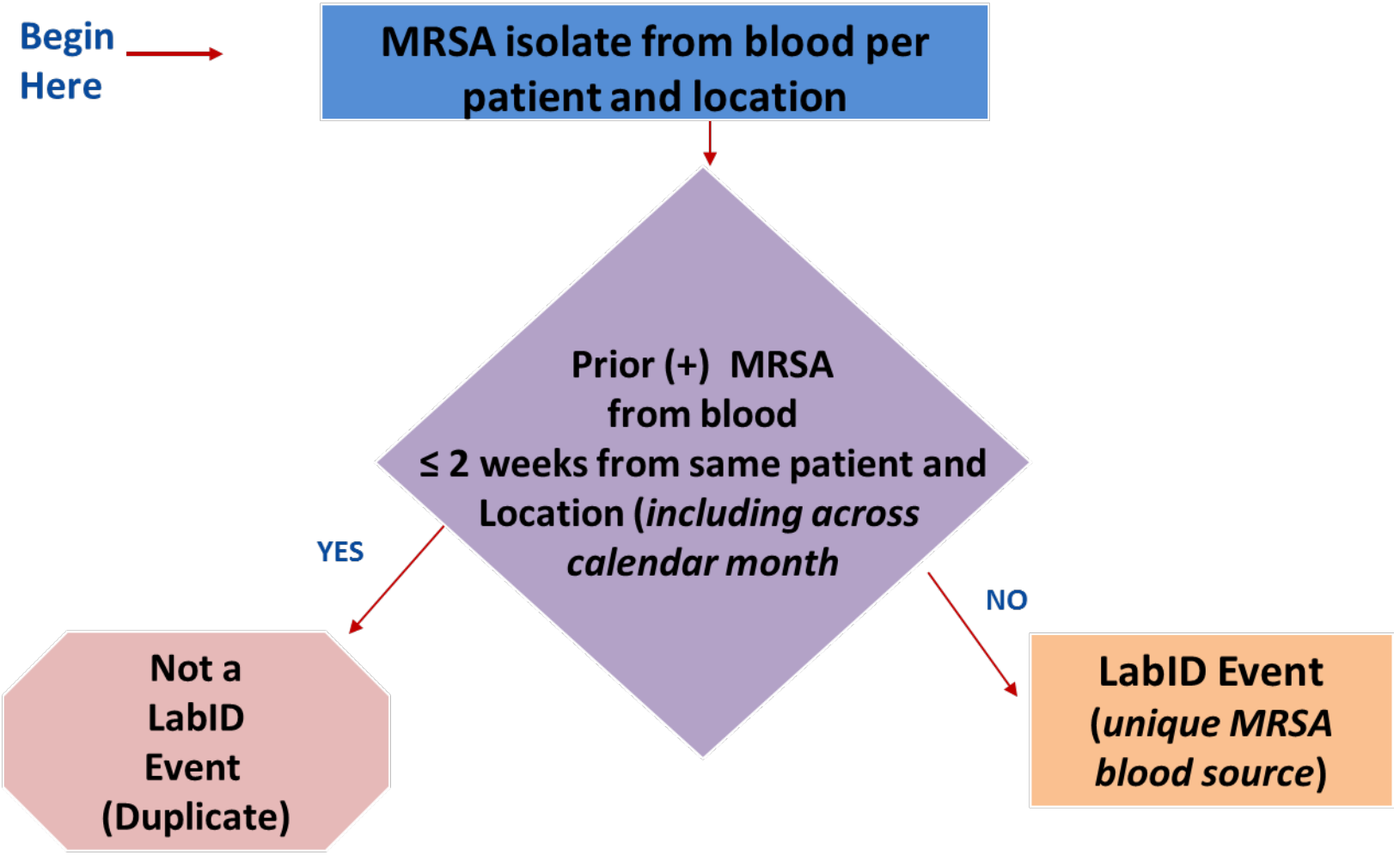
MRSA BACTEREMIA AND *C. DIFFICILE* LabID EVENT REPORTING IN NHSN

Definition
MRSA Bacteremia LabID Event

- Any MRSA blood specimen obtained for clinical decision making purposes
  - Excludes screening cultures, such as those used for active surveillance testing (AST)
- MRSA-positive blood specimen for a patient in a location with no prior MRSA-positive blood specimen result collected within ***14 days*** for the patient and location
  - Includes across calendar months for Blood Specimen Only reporting

Note: Also referred to as non-duplicate LabID Events

MRSA Bacteremia LabID Event Reporting: *Blood Specimen Only*



Adapted from Figure 1 MDRO Test Results Algorithm for Blood Specimens Only LabID Events

Definition
C. difficile LabID Event

- A (+) laboratory test result for C. *difficile* toxin A and/or B
  - Includes molecular assays, Polymerase Chain Reaction (PCR), and/or toxin assays

OR

- A toxin-producing C. *difficile* organism detected by culture or other laboratory means performed on a stool sample

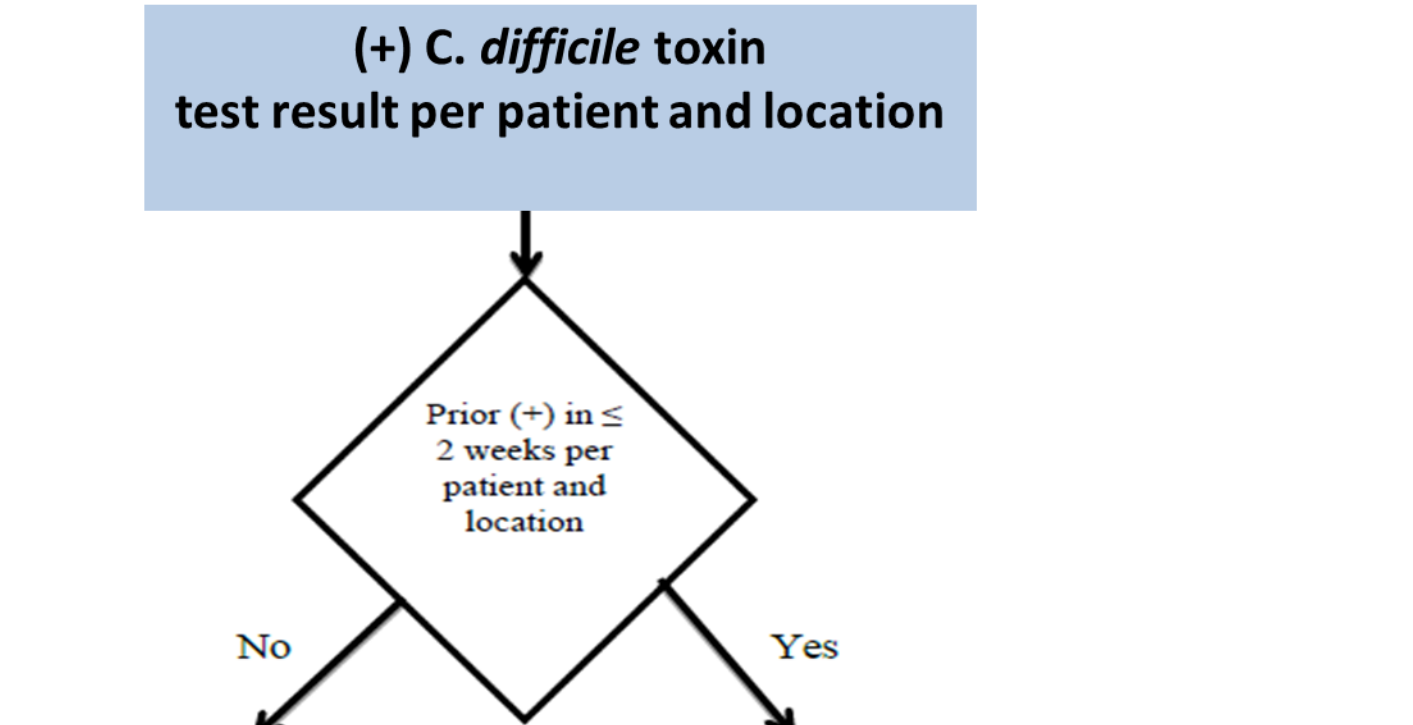
Notes: For a patient in a location with no prior C. *difficile* specimen result reported **within 14 days** for the **patient and location.**

Testing on unformed stool samples only. Stool should conform to shape of container.

Excludes locations known to predominately house babies (neonatal intensive care units [NICUs], nurseries, etc.).

Identifying a *C. difficile* LabID Event

Figure 2. C. difficile test Results Algorithm for Laboratory-Identified (LabID) Events

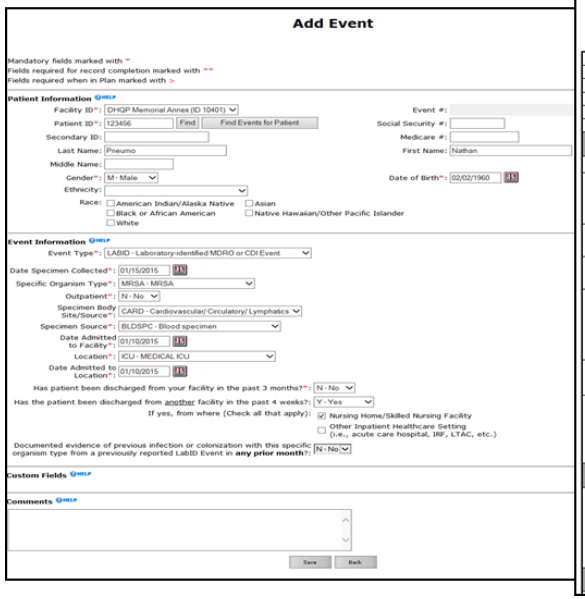


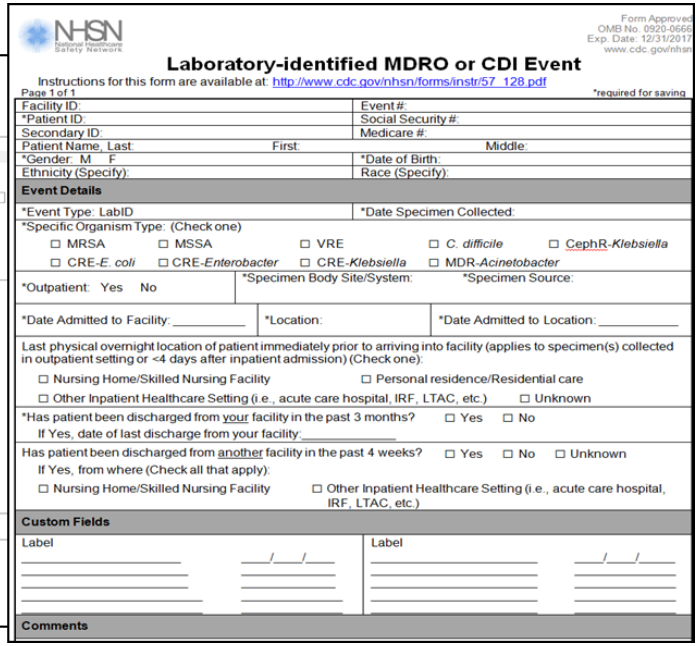
Important

LabID Events are attributable to the location where the positive specimen is collected.

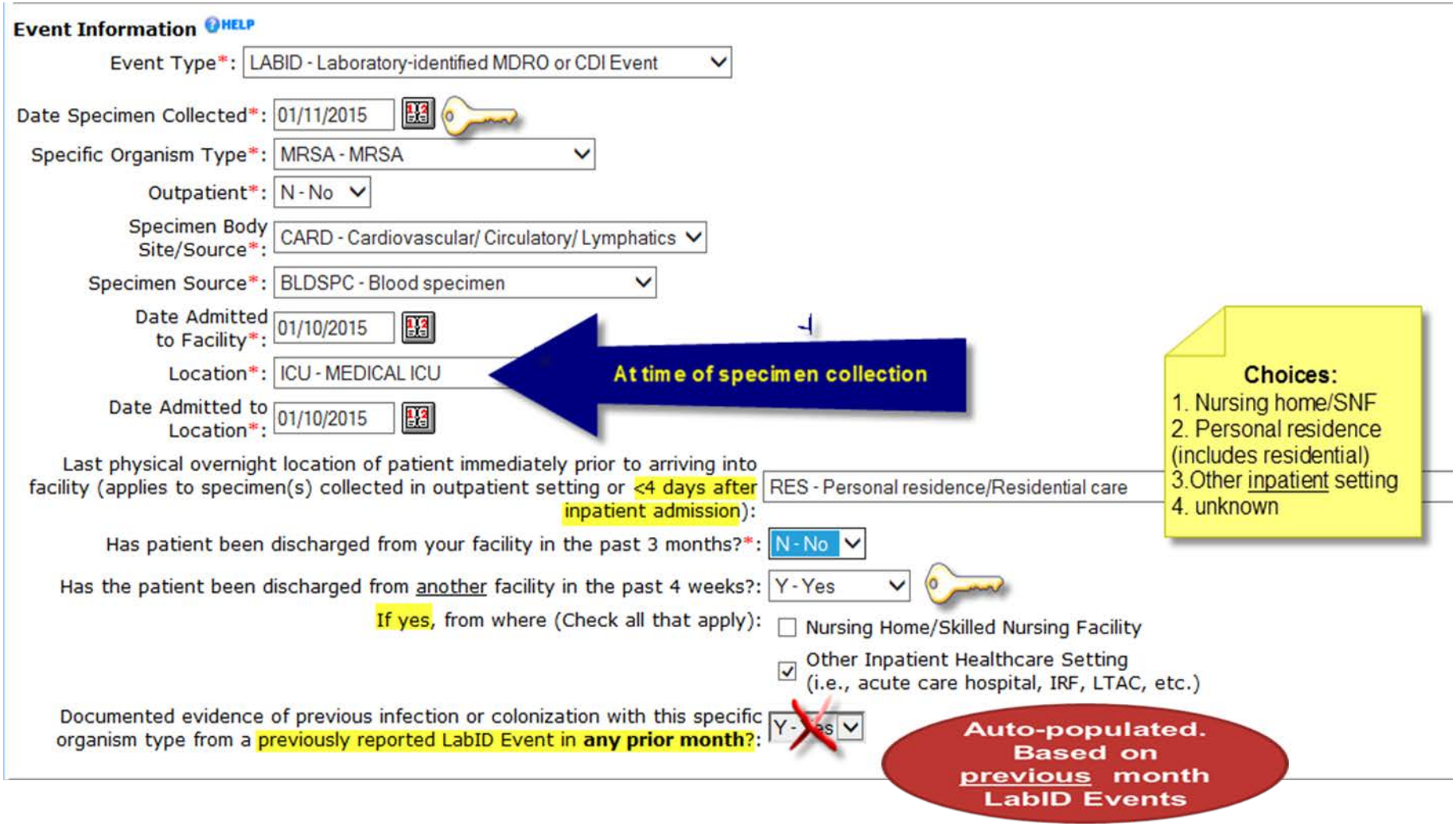
Add Event Information

- Each month all identified LabID events must be entered into NHSN using the specific location where the patient was located at the time of specimen collection.
- Users will not be able to use the FacWideIN location when reporting individual LabID events.

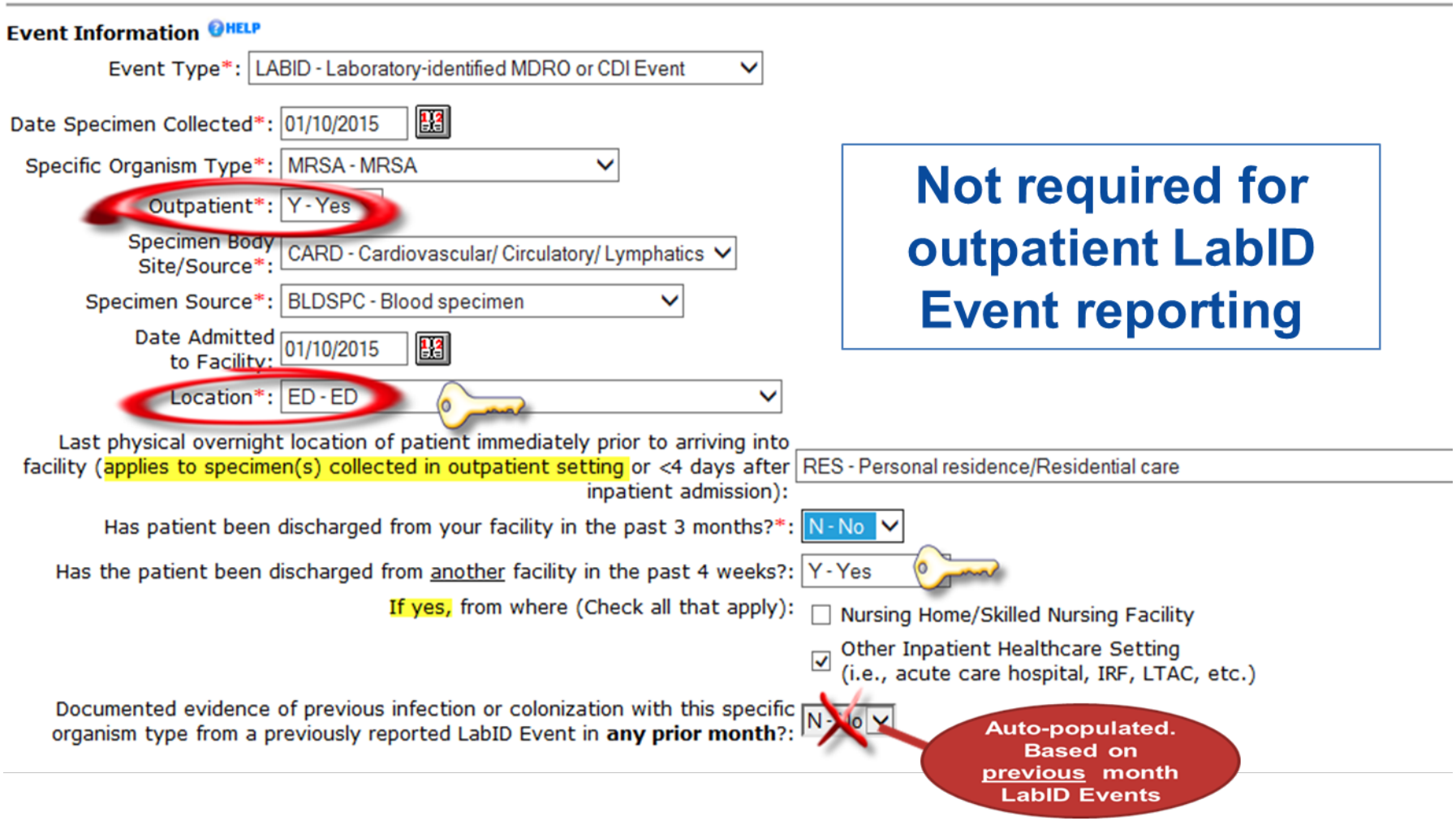




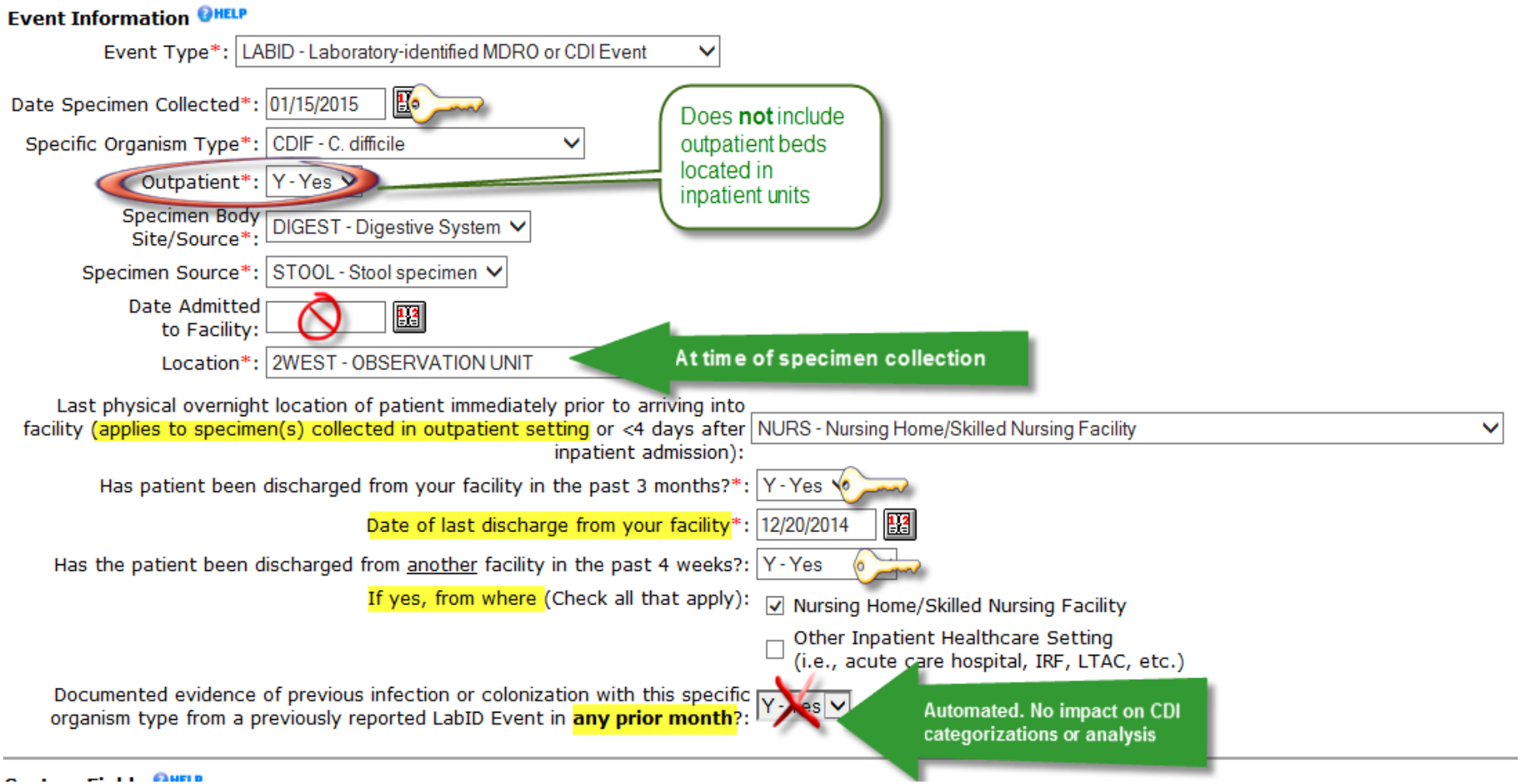
Event Information
Specimens Collected from Inpatients



UPDATE:
Event Information Specimens Collected from Emergency Dept. or 24-Hour Observation



UPDATE:
Event Information Specimens Collected from ED or 24-Hour Observation



Important

All LabID Events, including CO, must be reported into NHSN so that the categorization of incidence and prevalence can be assigned correctly.

NHSN Categorizes MRSA Blood Specimen LabID Events as CO or HO

NHSN Application Categorizes* MRSA LabID Events as:

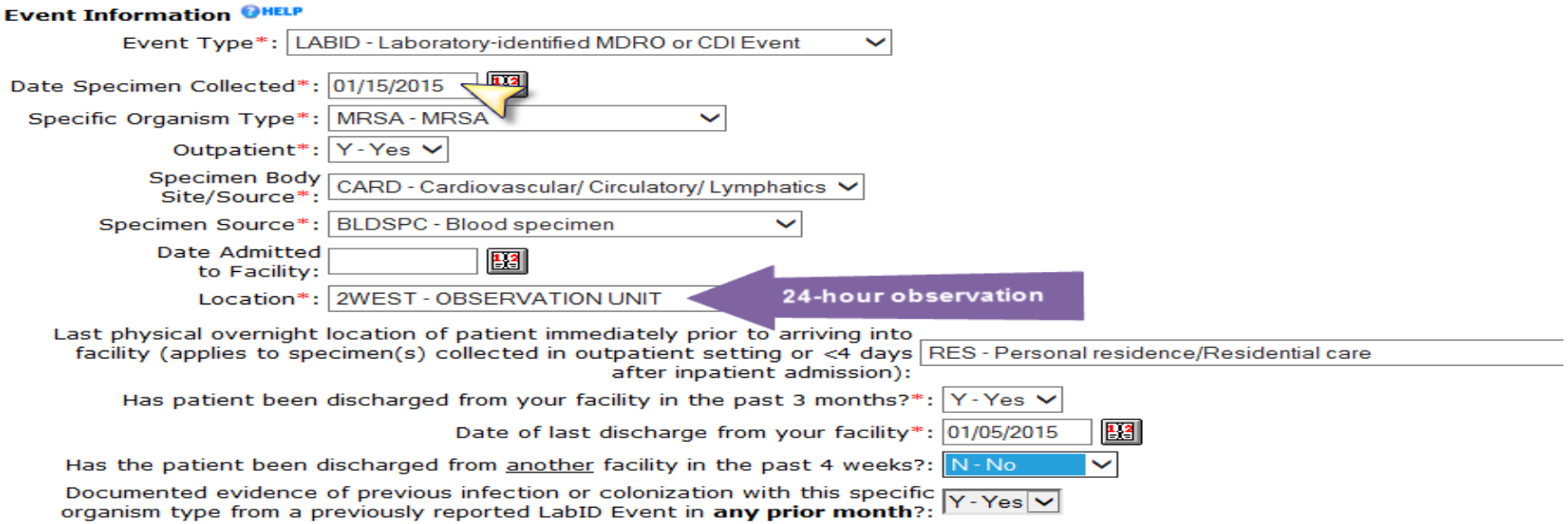
- **Community-Onset (CO)**
  - LabID Event specimen collected in an outpatient location or in an inpatient location **≤ 3 days** after admission to the facility (i.e., days 1 (admission), 2, or 3)
- **Healthcare Facility-Onset (HO)**
  - LabID Event specimen collected **> 3 days** after admission to the facility (i.e., on or after day 4)

*Based on Inpatient Admission and Specimen Collection Dates

LabID Event Categorization

- LabID Events are categorized based on the date of specimen collection and the date of admission.
- Signs and symptoms are NOT applicable to LabID reporting.
- Date of Event will always be the date of specimen collection.

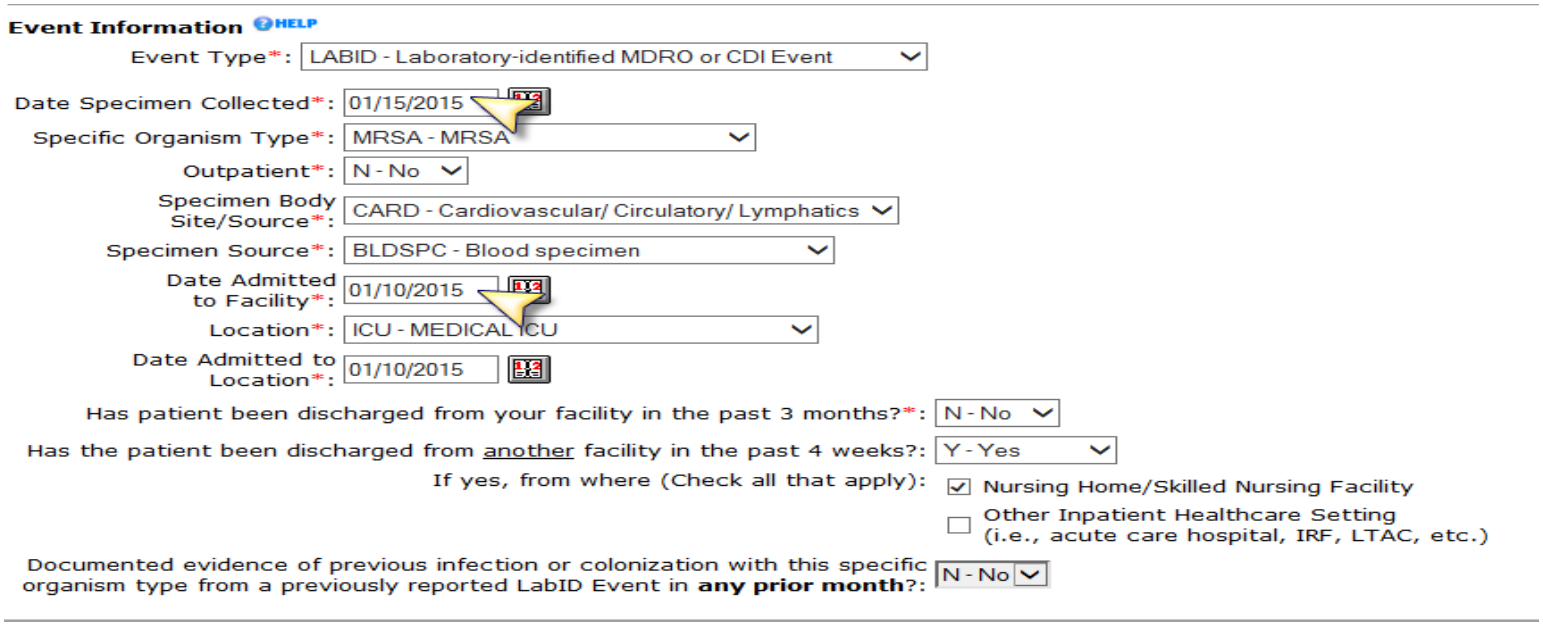
Knowledge Check



How Will NHSN Categorize This MRSA Bacteremia LabID Event?

A. Healthcare Facility-Onset (HO)
B. Community-Onset (CO) ✓
C. Community-Onset Healthcare Facility-Associated (CO-HCFA)
D. NHSN does not categorize

Knowledge Check



How will NHSN categorize this LabID Event?

A. Healthcare Facility-Onset (HO)
B. Community-Onset (CO)
C. Community-Onset Healthcare Facility-Associated (CO-HCFA)

Categorization of *C. difficile* LabID Events

NHSN will Categorize *C. difficile* LabID Events Based on Inpatient Admission and Specimen Collection Dates:

- **Community-Onset (CO)**
  - LabID Event specimen collected in an outpatient location or in an inpatient location **≤ 3 days** after admission to the facility (i.e., days 1 (admission), 2, or 3)
- **Healthcare Facility-Onset (HO)**
  - LabID Event specimen collected **> 3 days** after admission to the facility (i.e., on or after day 4)
- **Community-Onset Healthcare Facility-Associated (CO-HCFA)**
  - CO LabID Event collected from a patient who was discharged from the facility ≤ 4 weeks prior to the date current stool specimen was collected

CO-HCFA LabID Events

- LabID Events categorized as CO-HCFA are simply an additional level and subset of the categorized CO events.
- Healthcare facilities are NOT penalized for CO-HCFA LabID Events.

Knowledge Check

What if a patient with no previous admission to your facility presents with symptoms of diarrhea and fever on admission, but the *C. difficile* toxin was negative on admission and subsequently positive on day 4 of admission?

A. I can over-ride NHSN and categorize the event as CO since patient was symptomatic on admission.

B. NHSN will categorize as CO.

✓ C. NHSN will categorize as HO.

Scenario/Question

Question:
Will a patient in my facility still be categorized as CO-HCFA if he/she spent time in another healthcare facility between admissions to my facility?

Answer:
YES. Although the patient could have spent time at another facility in the period between previous discharge and the new admission, this additional information is not utilized because of burden for searching outside of one's own facility.

The custom fields can be used, if a facility wants to track such information for internal purposes.

More About Categorization

NHSN will Further Categorize *C. difficile* LabID Events based on current Specimen Collection Date and date of previous *C. difficile* LabID events within the **same facility**.

- **Incident CDI Assay:** Any CDI LabID Event from a specimen obtained **> 8 weeks** after the most recent CDI LabID Event (or with no previous CDI LabID Event documented) for that patient
- **Recurrent CDI Assay:** Any CDI LabID Event from a specimen obtained **> 2 weeks** and **≤ 8 weeks** after the most recent CDI LabID Event for that patient

LabID Event Data Reported to CMS

PPS-Exempt Cancer Hospital:

- **MRSA:** MRSA Bloodstream Infection Incidence Density Rate (FacWideIN)
- **CDI:** Facility CDI Healthcare Facility-Onset Incidence Rate (FacWideIN)
  - Facility-onset incident defined as non-duplicate LabID Events identified > 3 days after inpatient admission to the facility

These analyses are compiled each quarter and provided to CMS on behalf of the individual facility.

Review of MRSA Bacteremia LabID Events for FacWideIN

- ✓ MRSA blood specimens MUST be monitored throughout **all inpatient locations** within a facility.
- ✓ All MRSA blood LabID Event(s) MUST be entered whether CO or HO.
- ✓ A blood specimen qualifies as a LabID Event if there has not been a previous positive laboratory result for the **patient and location within the previous 14 days.**
- ✓ Like specimens and LabID Events collected from ED and 24-hour observation must be reported for that outpatient location regardless of subsequent patient admission. Likewise, denominator counts are reported separately for **each** outpatient location.
- ✓ Specimens collected from other **affiliated** outpatient locations (non-ED, non 24 hour observation) may be entered for FacWideIN **ONLY** if specimen collection date = admission date.

Review of *C. difficile* LabID Event Reporting

- ✓ For FacWideIN, *C. diff* toxin-positive specimens **MUST** be monitored throughout all inpatient locations within a facility.
- ✓ For FacWideIN, CDI LabID Events collected from ED and 24-hour observation must be reported for that outpatient location regardless of subsequent patient admission.
- ✓ Specimens collected from other affiliated outpatient locations (non-ED, non-observation) may be entered for admitting inpatient unit, **ONLY** if specimen collection date = admission date.

Review of *C. difficile* LabID Event Reporting

- ✓ All LabID Event(s) **MUST** be entered whether CO) or HO.
- ✓ **Only loose stools** should be tested for *C. difficile*.
- ✓ A toxin-positive loose stool specimen qualifies as a LabID Event if there has not been a previous positive laboratory result for the patient and location within the **previous 14 days for the patient and location**.

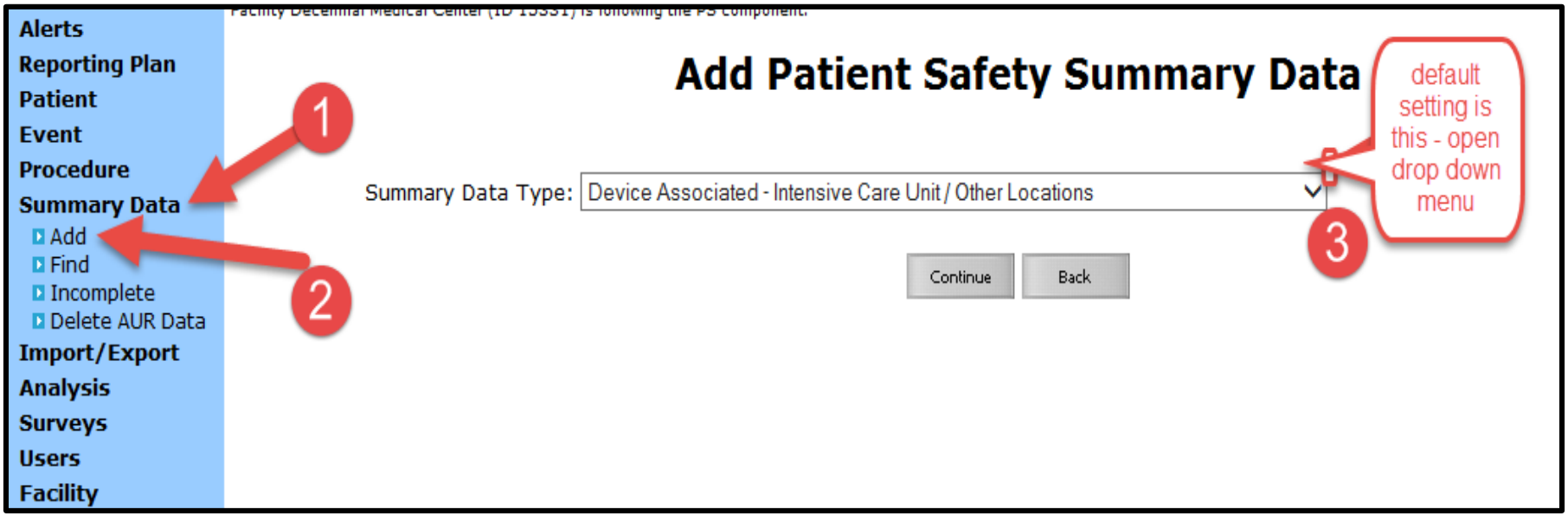
"CHECKLIST"
For Facility-wide Inpatient MRSA Bacteremia and *C. difficile* LabID Event Reporting

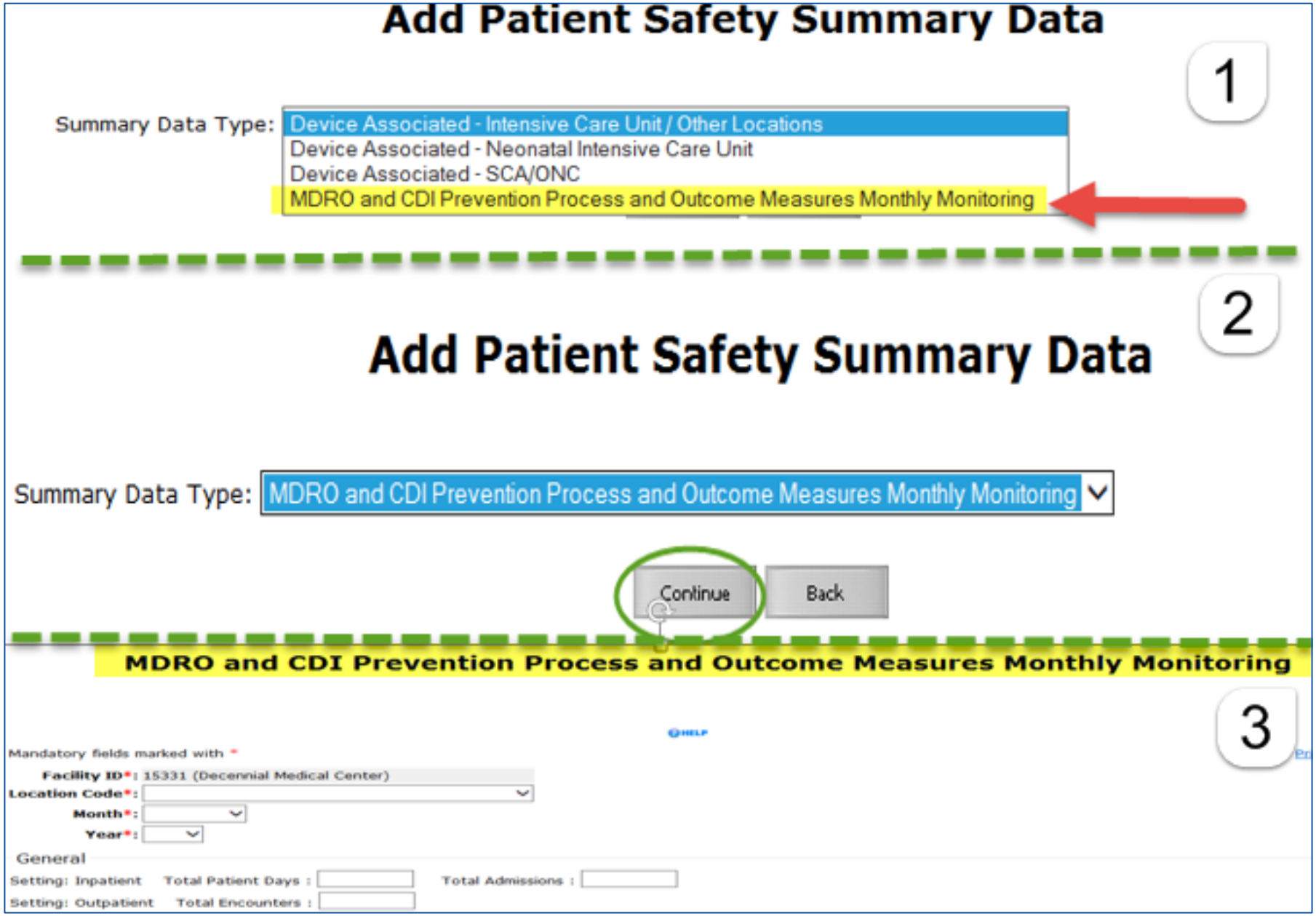
- ✓ Review location options and map inpatient locations in NHSN as necessary.
- ✓ Review Monthly Reporting Plan(s) and update as necessary.
- ✓ Identify and enter all MRSA bacteremia and *C. difficile* LabID events into NHSN by location.
- **Enter denominator data for each month under surveillance.**
- Resolve "Alerts", if applicable.

LabID EVENT REPORTING DENOMINATOR DATA

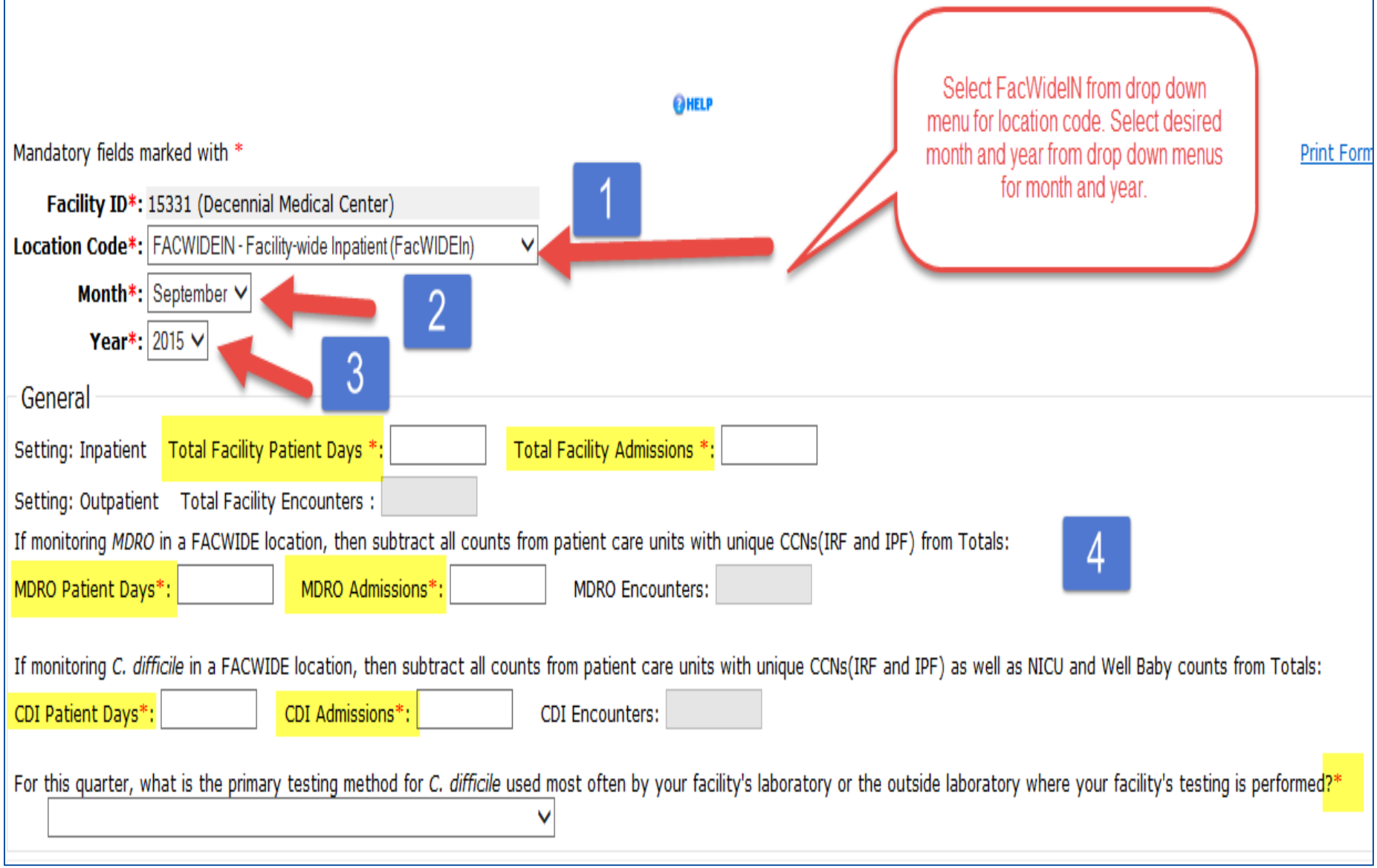
Entering Denominator Data in NHSN Application

- Click on *Summary Data* and then [Add] on the left-hand navigation bar.
- Select *MDRO and CDI Prevention Process and Outcome Measures Monthly Monitoring* from the [Summary Data Type] dropdown menu (see screenshot below).
  - This is a different form than the one you use to report summary data for CLABSI and CAUTI.




Add Patient Safety Summary Data
1
Summary Data Type:
Device Associated - Intensive Care Unit / Other Locations
Device Associated - Neonatal Intensive Care Unit
Device Associated - SCA/ONC
MDRO and CDI Prevention Process and Outcome Measures Monthly Monitoring
2
Add Patient Safety Summary Data
Summary Data Type:
MDRO and CDI Prevention Process and Outcome Measures Monthly Monitoring
Continue
Back
MDRO and CDI Prevention Process and Outcome Measures Monthly Monitoring
3
Mandatory fields marked with *
Facility ID*: 15331 (Decennial Medical Center)
Location Code*:
Month*:
Year*:
General
Setting: Inpatient
Total Patient Days :
Total Admissions :
Setting: Outpatient
Total Encounters :

MDRO and CDI Prevention Process and Outcome Measures Monthly Monitoring



Summary Counts for FacWideIN

Total Count ALL Inpatient Locations

MDRO and CDI patient days and admission should match total facility patient days and admissions

Setting: Inpatient **Total Facility Patient Days: _____ **Total Facility Admissions: _____

Setting: Outpatient (or Emergency Room) Total Facility Encounters: _____

If monitoring MDRO FACWIDE, then subtract all counts from patient care units with separate CCNs (IRF, IPF, etc.) from Totals:

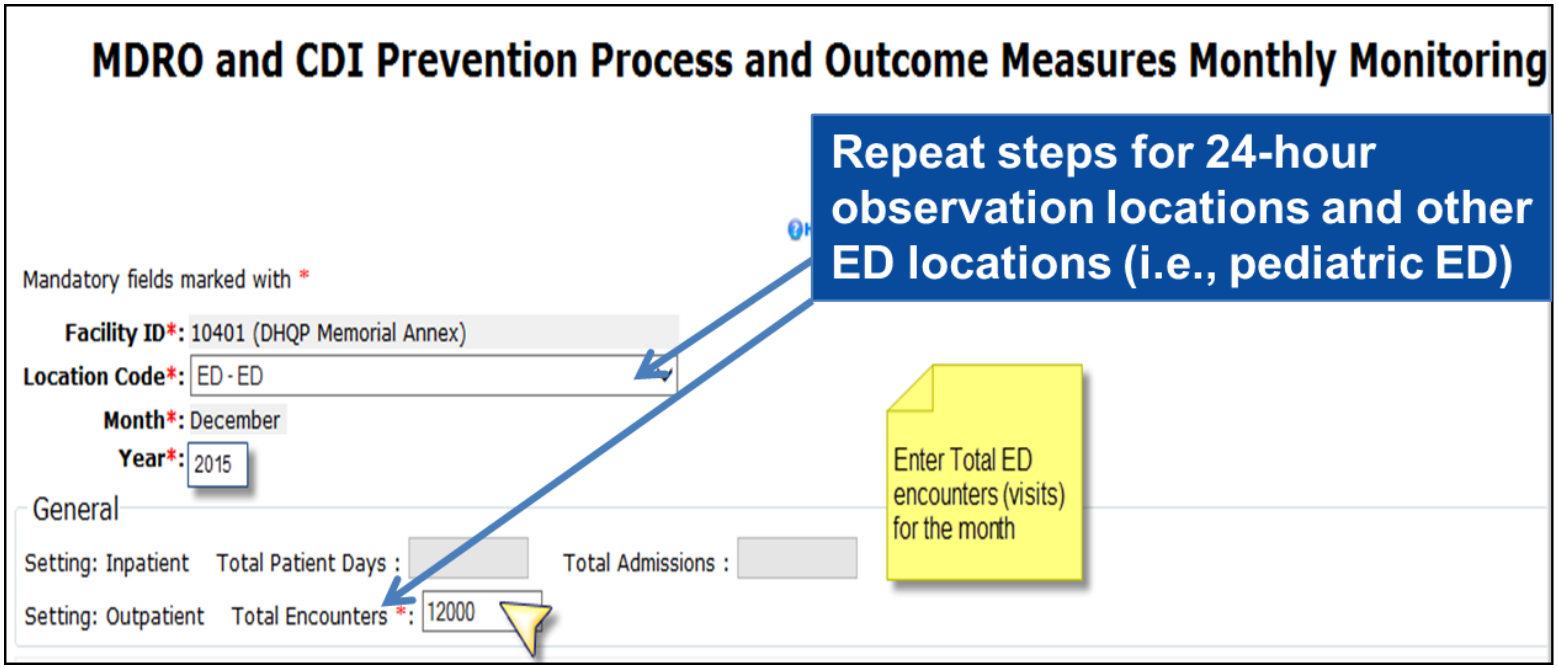
**MDRO Patient Days: _____ **MDRO Admissions: _____ **MDRO Encounters: _____

If monitoring *C. difficile* FACWIDE, then subtract all counts from patient care units with separate CCNs (IRF, IPF, etc.) as well as NICU & Well Baby counts from Totals:

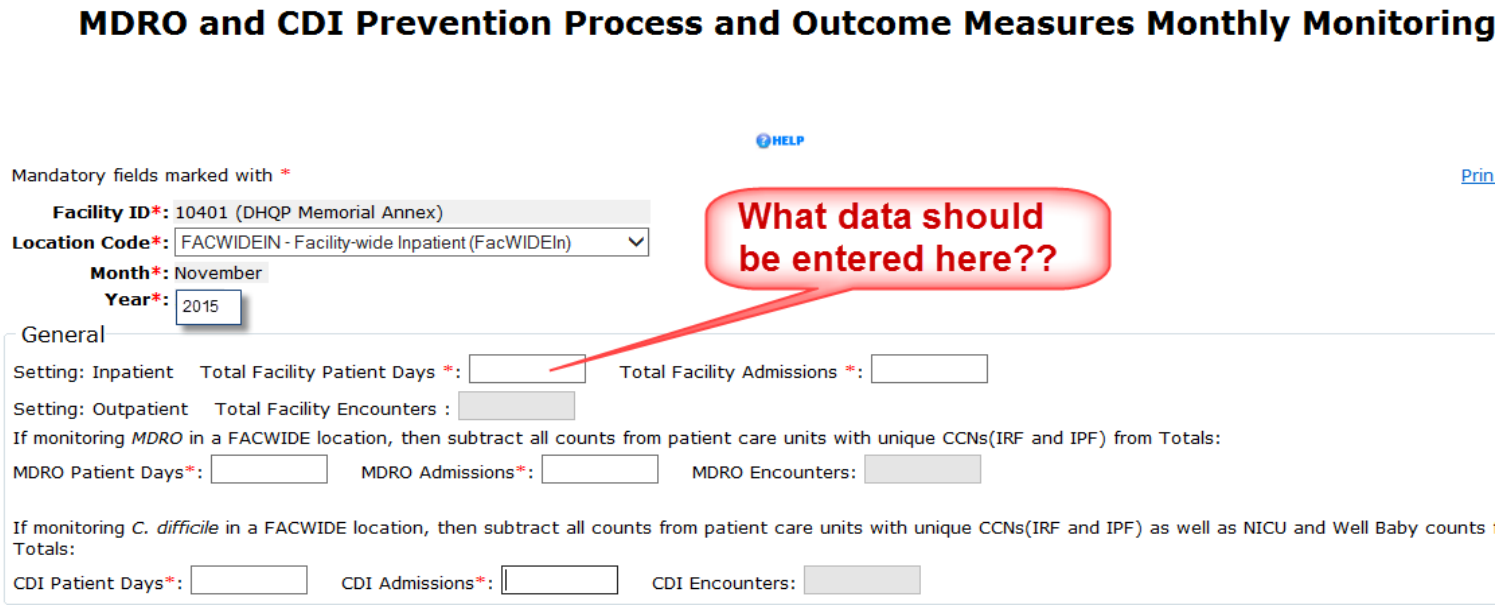
**CDI Patient Days: _____ **CDI Admissions: _____ **CDI Encounters: _____

Denominator Data
Emergency Department

- On the summary data entry screen, you must select the ED as the location for which you are entering the summary data by clicking on the drop down menu next to 'Location Code.'
- After selecting the appropriate unit, month, and year, one summary data field will become required (Total ED Encounters/Visits).
- Repeat steps for 24-hour observation locations.



Knowledge Check: What is entered for summary data?



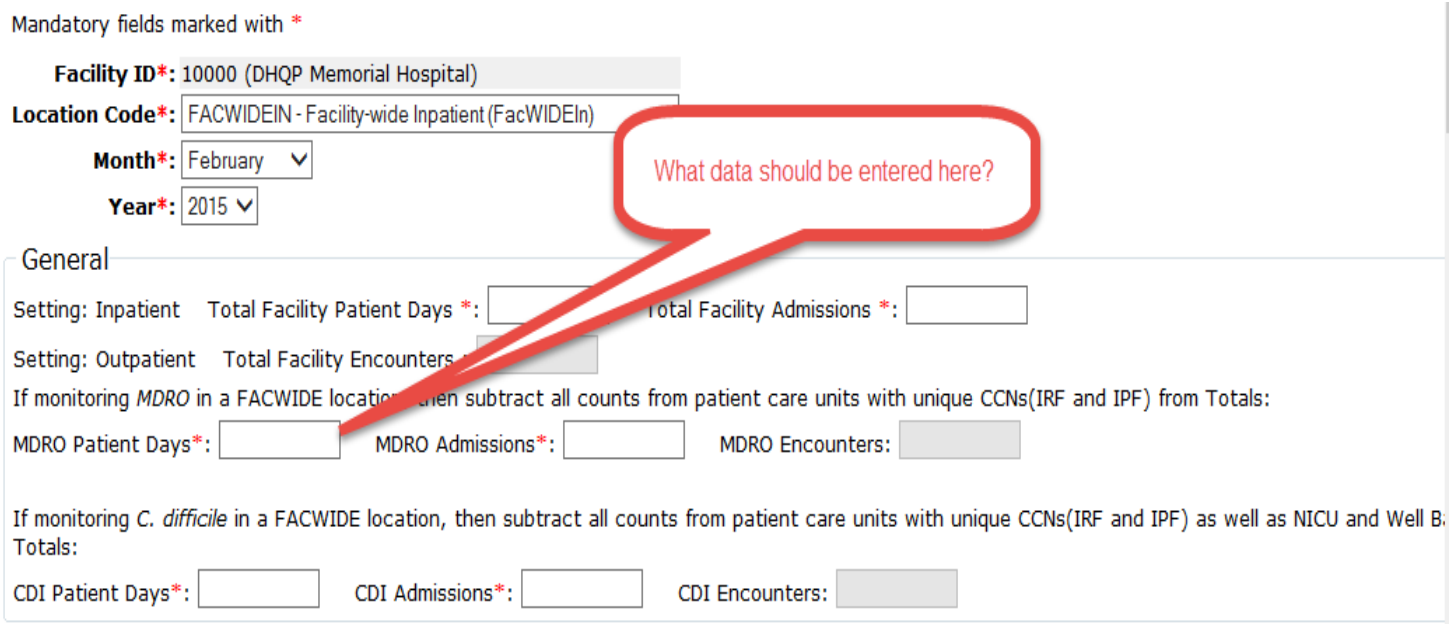
What data should be entered in the box?

✓ A. Total number of patient days for all facility inpatient units combined for November

B. Total patient days for all inpatient and outpatient units in the facility for November

C. Total patient days for all inpatient units in the facility with same CCN

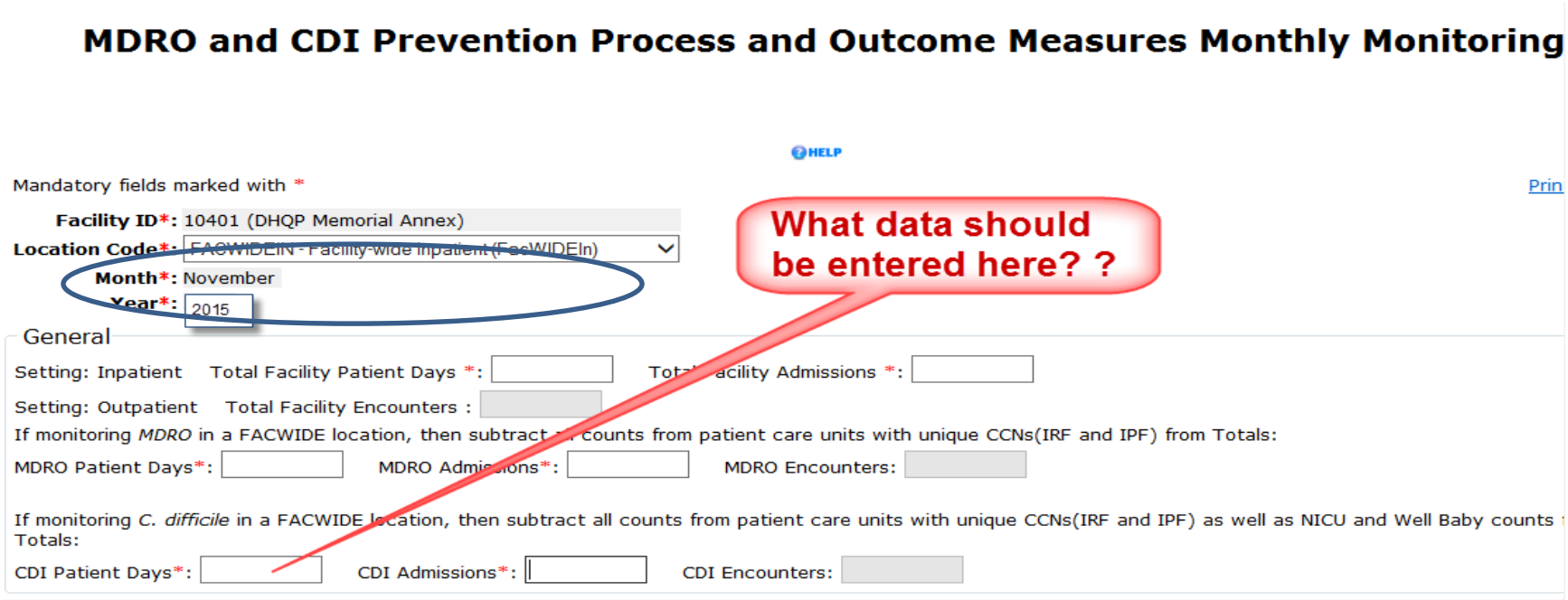
Knowledge Check: What is entered for summary data?



What data should be entered in the box?

A. Total patient days for all inpatient units combined for February
B. Total patient days for all inpatient units
C. Patient days for all inpatient and outpatient units in the facility

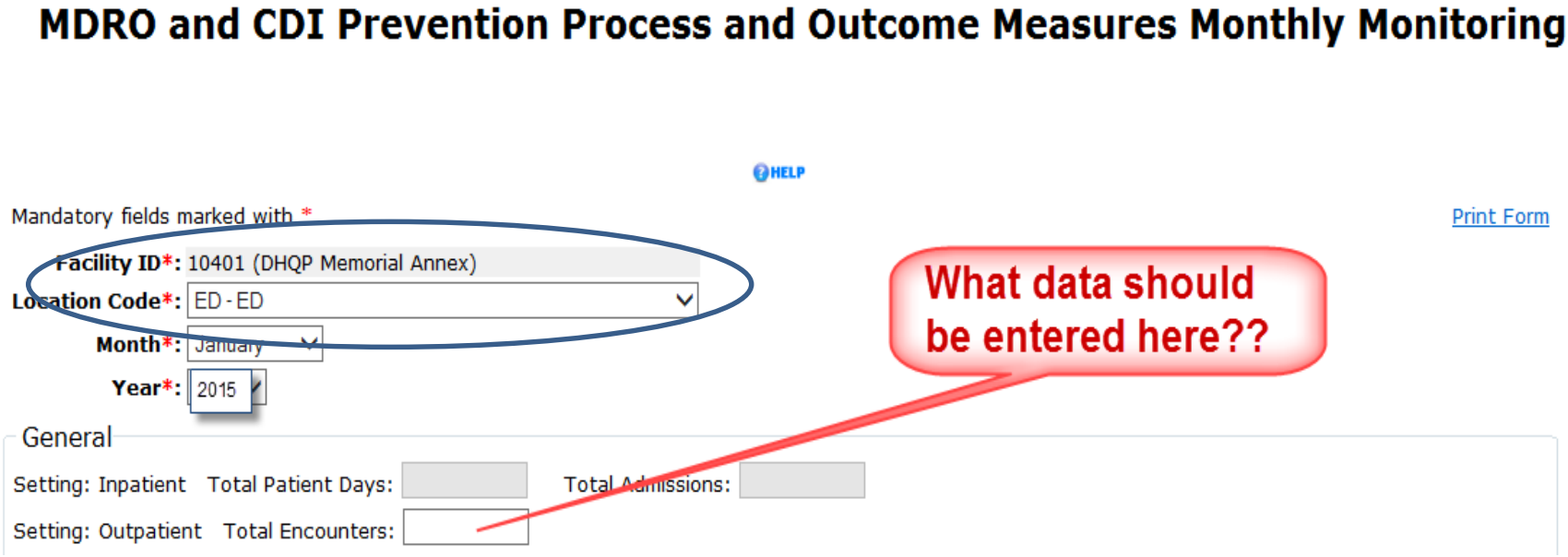
Knowledge Check: What is entered for summary data?



What data should be entered in the box?

A. Total patient days for all inpatient units except baby locations
B. Total patient days for all inpatient and outpatient units except baby locations
✓ C. Total number of patient days for all non-baby facility inpatient locations
D. Total patient days for all inpatient units with same CCN, including baby locations

Knowledge Check: What is entered for summary data?



What data should be entered in the box?

A. Total patient days for all inpatient and outpatient locations in January

✓ B. Total visits to ED in January

C. Total visits to ED and 24-hour observation

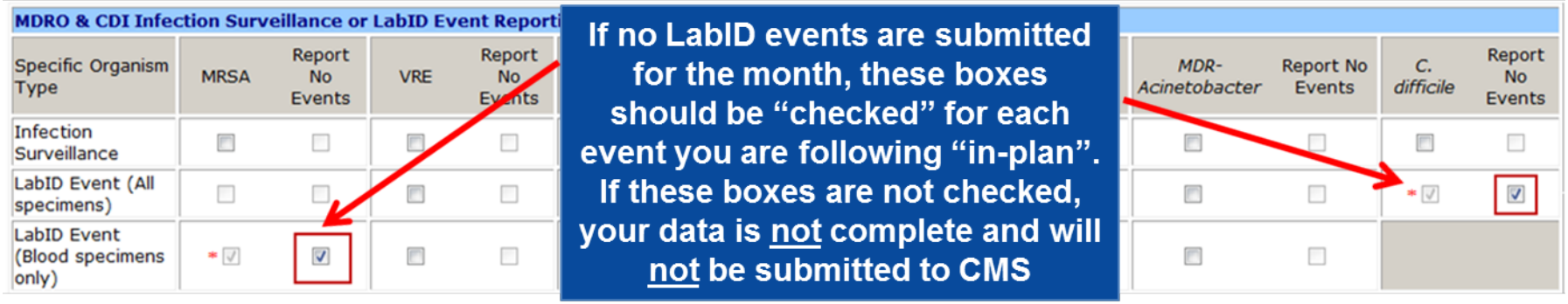
D. Total visits to ED when patient admitted to inpatient unit

"CHECKLIST"
For Facility-wide Inpatient MRSA Bacteremia and *C. difficile* LabID Event Reporting

- ✓ Review location options and map locations in NHSN as necessary.
- ✓ Review Monthly Reporting Plan(s) and update as necessary.
- ✓ Identify and enter all MRSA bacteremia and *C. difficile* LabID events into NHSN by location.
- ✓ Enter denominator data for each month under surveillance.
- ✓ **Resolve "Alerts," if applicable.**

Denominator Data: Report No Events

- If you have identified and reported both MRSA bacteremia and *C. difficile* LabID events during the month, you are finished with your reporting for the month and can skip this step.
- If you have not identified any LabID events for MRSA bacteremia or *C. difficile* at the end of a month, you must indicate this on the summary data record in order for your data to be sent to CMS.
- On the MDRO and CDI Module summary data form, checkboxes for "Report No Events" are found underneath the patient day and admission count fields, as seen in the screenshot below.
- Must repeat steps for each ED, 24-hour observation location, if applicable.



Note: If you identify and enter LabID events for an organism after you've already checked the "Report No Events" box, the "Report No Events" check will automatically be removed in the NHSN database.

CDI Test Choices

For Hospitals: Select CDI Test type quarterly (last month of each calendar year quarter: March, June, September, December).

**For this quarter, what is the primary testing method for *C. difficile* used most often by your facility's laboratory or the outside laboratory where your facility's testing is performed? (check one)

- ☐ Enzyme immunoassay (EIA) for toxin
- ☐ Cell cytotoxicity neutralization assay
- ☐ Nucleic acid amplification test (NAAT) (e.g., PCR, LAMP)
- ☐ Glutamate dehydrogenase (GDH) antigen plus EIA for toxin (2-step algorithm)
- ☐ GDH plus NAAT (2-step algorithm)
- ☐ GDH plus EIA for toxin, followed by NAAT for discrepant results
- ☐ Toxigenic culture (*C. difficile* culture followed by detection of toxins)
- ☐ Other (specify): _____

("Other" should not be used to name specific laboratories, reference laboratories, or the brand names of C. difficile tests; most methods can be categorized accurately by selecting from the options provided. Please ask your laboratory or conduct a search for further guidance on selecting the correct option to report.)

CDI LabID Event: Laboratory Testing

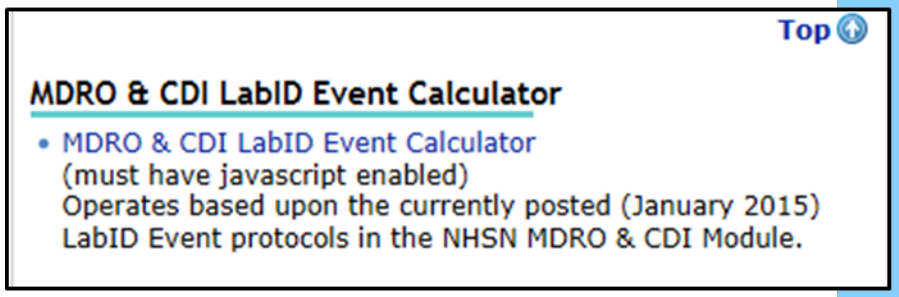
Diagnostic Test	Demonstrates Evidence of Toxigenic Strain		Comments
	YES	NO	
Glutamate dehydrogenase (GDH) antigen		X	Detects antigen in both toxin and non-toxin producing strains
Toxin enzyme immunoassay (EIA)	X		• *C. difficile* toxin A and/or B • GDH plus EIA for toxin (2-step algorithm)
Nucleic acid amplification test [NAAT] (e.g., PCR, loop mediated isothermal amplification [LAMP])	X		• *C. difficile* toxin B gene • GDH plus NAAT (2-step algorithm) • GDH plus EIA for toxin, followed by NAAT for discrepant results
Cell cytotoxicity neutralization assay (CCNA)	X		• Requires tissue culture
Toxigenic (cytotoxic) *C. difficile* culture	X[+]		[+]Requires use of second test for toxin detection

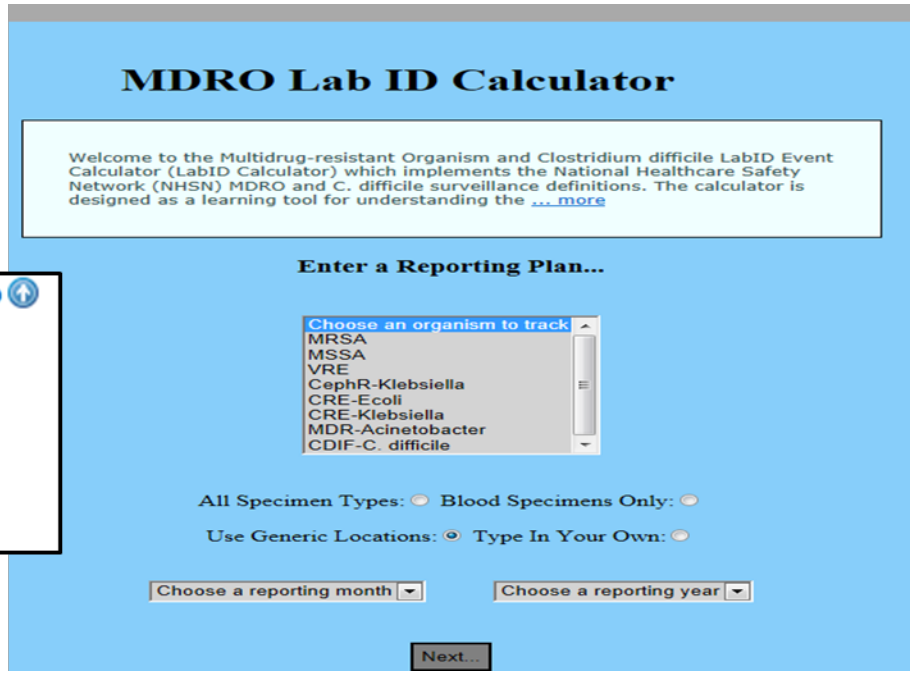
More about CDI Test Type

- It is important to select the correct CDI test type for future risk adjustment.
- If “Other” is selected when a more appropriate response is available on the form, your facility’s data will not be risk-adjusted to the most appropriate level.
- “Other” should not be used to name specific laboratories, reference laboratories, or the brand names of *C. difficile* tests; most test methods can be categorized accurately by selecting from the options provided.

LabID Event Calculator

- Available for use with *C. difficile* and MDRO LabID Event reporting
- Aids in decision making around the 14-day rule
- External calculator





CASE STUDIES/FREQUENTLY ASKED QUESTIONS

FacWideIN MRSA Bacteremia Identify the LabID Events

	Pt.	Hospital Admit Date/ Location	Specimen Collection Date/Loc	Specimen Source	Lab Result	LabID Event? Location?	Explanation
1	BJ	2/15/15 ONC_M	02/15/15 OP Inf Ctr.	Stool	C.diff toxin +	YES ONC_M	1st C. diff in location – ONC_M
2	BJ	02/15/15 ONC_MS	02/15/15 ONC_MS	Stool	C.diff toxin +	YES ONC_M	1st C. diff in location ONC_MS
3	BJ	02/15/15 ONC_MS	02/20/15 ONC_MS	Blood	MRSA	YES ONC_M	First MRSA blood for location
4	BJ	02/15/15 ONC_MS	02/28/15 ONC_MS	Blood	MRSA	NO	≤ 14days prev specimen in ONC_MS
5	BJ	02/15/15 ONC_MS	03/10/15 ONC_MS	Stool	C.diff toxin +	YES ONC_M	≥ 14 days since previous specimen in ONC_MS

Assume all specimens collected are shown

Is this a LabID Event?

- 5/1: Karen, a ? year old female is admitted to ONC_M with history of dehydration, diarrhea and a possible sepsis.
- 5/2: Pt. complains of lower abdominal cramps and two episodes of diarrhea, relieved with medication.
- 5/3: Patient develops fever of 38.2^{0}C with complaints of worsening lower abdominal pain. Bowel movement (BM) with loose unformed stool. Urine and blood cultures collected; *C. diff* toxin ordered, but not collected.
- 5/4: Patient continues to complain of lower abdominal pain and loose stools. Patient transferred to ONC_MS Critical care unit for a private room. After transfer, a loose stool specimen is collected and positive for *C. difficile* toxin. Urine and blood culture results positive for MRSA.

Is this a LabID Event?

For **FacWideIN** LabID reporting, should this be entered as a *C. difficile* LabID Event?

A. No. Her symptoms started on admission to the hospital.

✓ **B. Yes.** This is the first toxin positive *C. difficile* isolate collected for this patient and location (*no previous positive within 14 days for location*).

What location do I use?

To what Location is the LabID Event attributed?

A. ONC_M

✓ **B. ONC_MS**

C. Lab

D. FacWideIN

Notes:

- There is no thought process or subjective decision allowed for location attribution for LabID event reporting. Events are attributed to the location where the specimen is collected.
- NHSN “transfer rule” does **NOT** apply for LabID Events.

How is the event categorized?

How Will this Event be Categorized?

(Hint: admission on 5/1; specimen collection on 5/4)

A. Community-Onset (CO)

✓ **B. Healthcare Facility-Onset (HO)**

C. Community-Onset Healthcare Facility-Associated (CO-HCFA)

D. As a Traumatic Experience

If a patient is admitted with diarrhea, but the stool is not tested for *C. difficile* until hospital day 4, will the Event still be categorized as healthcare facility-onset (HO)?

Note: Symptoms do **NOT** apply to LabID event reporting.

Is this a LabID Event?

What about that MRSA+ Blood Culture?
For **FacWideIN** LabID reporting, should the MRSA blood result be entered as a MRSA bacteremia LabID Event?

A. No. Her symptoms started on admission to the hospital.

✓ **B. Yes.** First MRSA positive blood specimen collected for this patient and location (*no previous positive within 14 days for location*).

C. No. The specimen was collected <4 days after admission

What category?

How Will the MRSA bacteremia LabID Event be Categorized?

✓ **A. Community-Onset (CO)**

B. Healthcare Facility-Onset (HO)

C. Community-Onset Healthcare Facility-Associated (CO-HCFA)

(Hint: admission on 5/1; specimen collection on 5/3)

Does age restrict LabID event reporting?

- 6/15: Leslie, a nine-year-old patient, is admitted to inpatient unit, ONC-Ped, from outside facility. The patient was discharged from your facility two weeks ago after spending one week in the general oncology unit with CDI.
- Upon admission to ONC-Ped, patient is noted to have foul loose stools.
- 6/16: After three episodes of loose stools over the course of 24 hours, an unformed specimen was collected and tested positive for C. *difficile* toxin.

Does age restrict LabID event reporting?

For FacWideIN LabID reporting, should this be entered into NHSN as a LabID Event?

A. **YES.** Specimen was collected from ONC-Ped inpatient location.

B. NO. Pediatrics are excluded from CDI LabID Event reporting.

C. NO. There is no event to report.

Note: LabID event is **location** not age based! Only locations that predominately house babies are excluded.

Does age restrict LabID event reporting?

How will NHSN categorize the CDI event?

A. Community-Onset (CO)
B. Healthcare-Facility onset (HO)
C. **Community-Onset Healthcare Facility-Associated (CO-HCFA)**
D. NHSN will not categorize the event, the user will need to make the decision

Note: Specimen was collected less than four days after admission to the facility **AND t**his patient was previously discharged from your facility ≤ 4 weeks prior to current date of stool specimen collection.

LabID Event or CLABSI?

- 5/15: Tim, a ? year old patient is admitted to Oncology critical care unit. A Foley is inserted and a permanent Port-A-Cath is accessed for blood draw.
- 5/18: Pt. spikes a fever of 101^0F with cloudy urine draining to bedside bag. A urine culture is collected and antibiotic treatment begun.
- 5/19: Urine culture results are positive for *E. coli* and MRSA.
- 5/21: Patient continues to have fever of 101.4^0F – Blood cultures collected from permanent Port-A-Cath.
- 5/22: Two of two blood cultures are positive for MRSA.

LabID Event or CLABSI?

Since your facility participates in MRSA bacteremia LabID Event Reporting for FacWideIN, would you report this positive blood culture as a LabID Event?

A. No. Since the patient already has a (+) urine culture with MRSA for this month and location, the MRSA blood is considered a duplicate.

✓ **B. Yes.** This is considered a unique blood source.

C. No. This is a CLABSI!!

LabID event or CLABSI?

What if the patient had a previous positive MRSA blood culture three days prior to this culture while in the same location?

A. This would be a duplicate MRSA isolate and NOT a MRSA bacteremia LabID Event.

B. I would report as a MRSA bacteremia LabID Event.

C. I would report as an Infection Surveillance Event

Is this a LabID Event?

- On 5/1, Laura presents to the emergency department with diarrhea for five days. She had recently discharged from your facility after an extended hospitalization.
- On 5/2, MD writes orders for the patient to be under 24-hour observation, but all observation beds are full so the patient is transferred to an inpatient unit – ONC_M. Upon admit to the unit, a surveillance nasal screen tested positive for MRSA.
- On 5/4, MD orders *C.diff* testing. A loose stool specimen is collected and tests toxin positive for CDI. After notification of the positive CDI, MD gives verbal order to admit to inpatient status.

Is this a LabID event?

Should this positive MRSA nasal screen be entered into NHSN as a MRSA LabID Event?

✓ **A. NO**

B. YES

Is this a LabID Event?

Should the positive *C. difficile* specimen collected on 5/4 be reported for FacWideIN LabID Event reporting since the patient was on observation status?

✓ **A. YES**

B. NO

C. Undecided

Note: The facility status assignment of the patient as “observation” or “inpatient” has no bearing on LabID event reporting. When a patient is housed in an inpatient location, an event must be reported.

Is this a LabID Event?

How will NHSN categorize this LabID Event?

A. Community-Onset

B. Community-Onset – Healthcare Facility-Associated (CO-HCFA)

✓ **C. Healthcare-Onset**

Note: For NHSN reporting purposes, admit date is the date the patient **physically locates** to a bed on an NHSN mapped inpatient unit. This event occurs on hospital day 4 (5/4).

Is this a LabID Event?

What if blood cultures were also collected and tested positive for MRSA?

A. NO. I would not consider this to be an MDRO LabID Event since the patient had a MRSA positive nasal screen.

✓ **B. YES.** Since the blood culture was obtained for clinical decision making, I would report this as a MRSA bacteremia LabID Event if no MRSA blood was reported for this patient and location in previous 14 days.

Questions?

- Questions: Email user support: nhsn@cdc.gov
- NHSN website: http://www.cdc.gov/nhsn

Continuing Education Approval

- This program has been approved for 1.0 continuing education (CE) unit for the following professional boards:
  - Florida Board of Clinical Social Work, Marriage and Family Therapy and Mental Health Counseling
  - Florida Board of Nursing Home Administrators
  - Florida Council of Dietetics
  - Florida Board of Pharmacy
  - Board of Registered Nursing (Provider #16578)
    - It is your responsibility to submit this form to your accrediting body for credit.

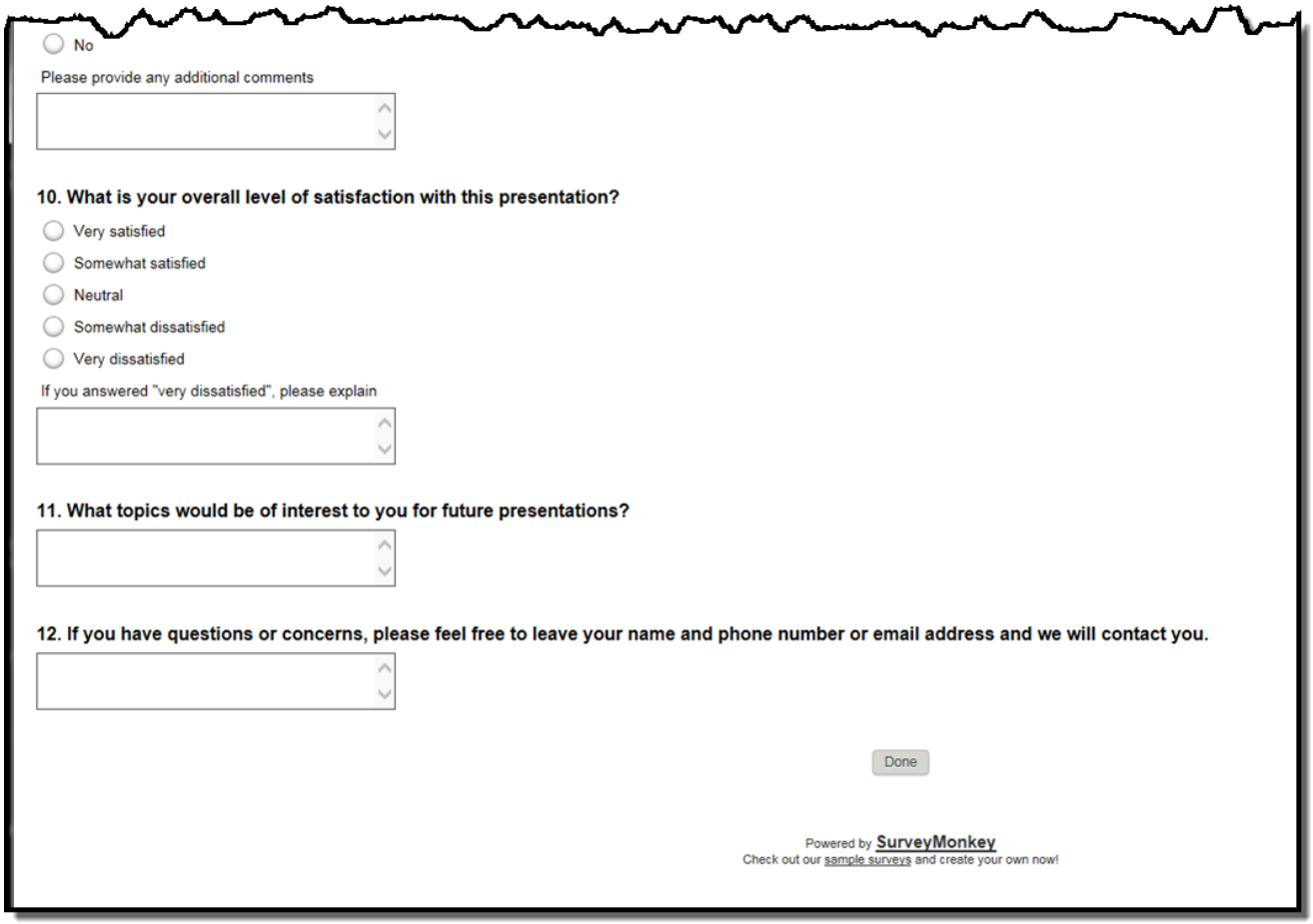
CE Credit Process

- Complete the ReadyTalk® survey that will pop up after the webinar, or wait for the survey that will be sent to all registrants within the next 48 hours.
- After completion of the survey, click “done” at the bottom of the screen.
- Another page will open that asks you to register in HSAG’s Learning Management Center.
  - This is a separate registration from ReadyTalk
  - Please use your PERSONAL email so you can receive your certificate
  - Healthcare facilities have firewalls up that block our certificates

CE Certificate Problems?

- If you do not immediately receive a response to the email that you signed up with in the Learning Management Center, you have a firewall up that is blocking the link that is sent out
- Please go back to the **New User** link and register your personal email account
  - Personal emails do not have firewalls

CE Credit Process: Survey



No

Please provide any additional comments

10. What is your overall level of satisfaction with this presentation?

- Very satisfied
- Somewhat satisfied
- Neutral
- Somewhat dissatisfied
- Very dissatisfied

If you answered "very dissatisfied", please explain

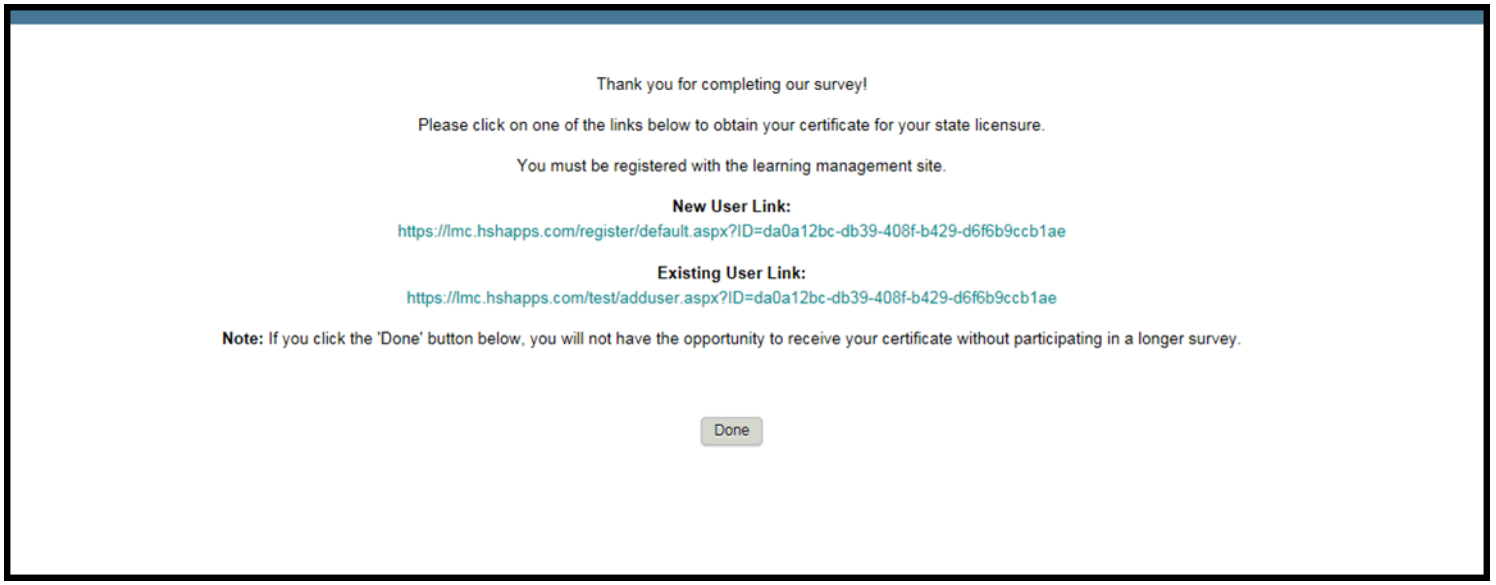
11. What topics would be of interest to you for future presentations?

12. If you have questions or concerns, please feel free to leave your name and phone number or email address and we will contact you.

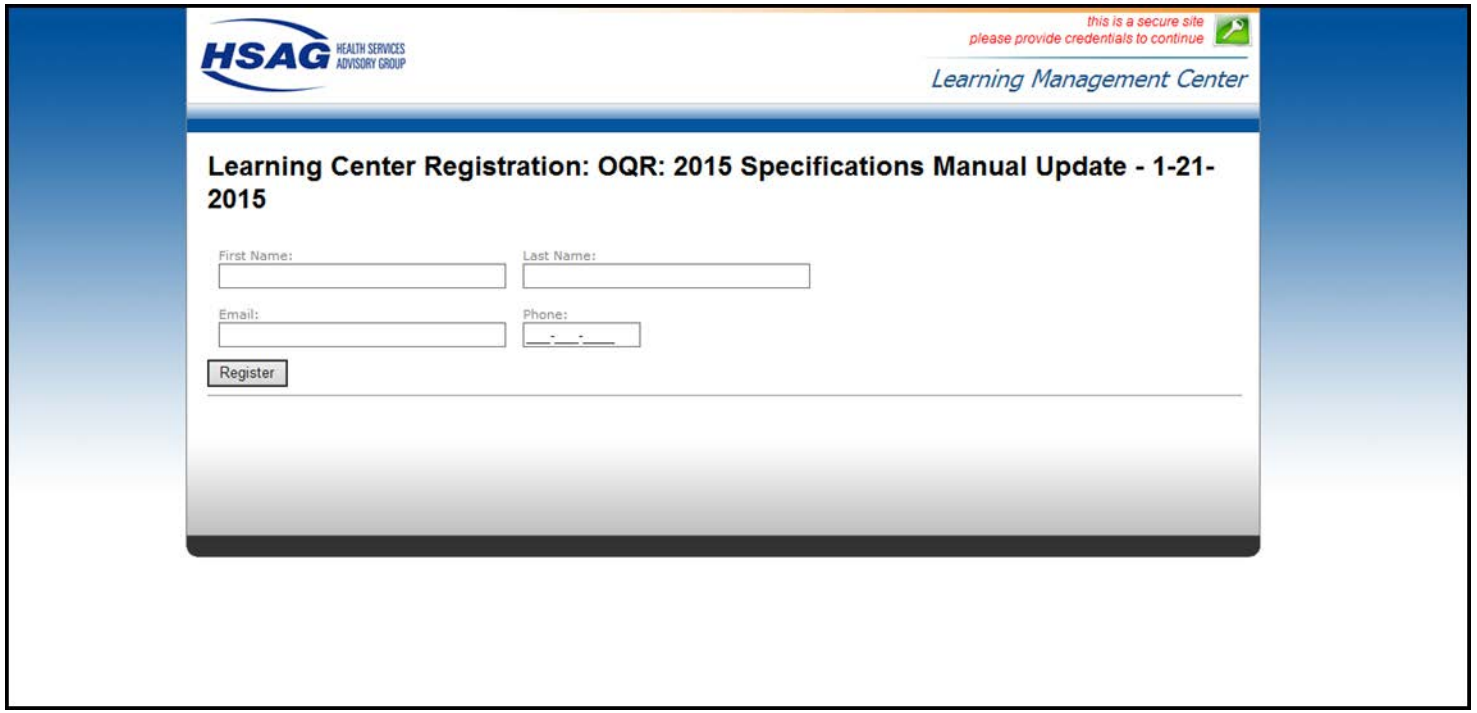
Done

Powered by SurveyMonkey
Check out our sample surveys and create your own now!

CE Credit Process



CE Credit Process: New User



CE Credit Process: Existing User