Overview of Long-term Care Facility (LTCF) Component

National Center for Emerging and Zoonotic Infectious Diseases
Division of Healthcare Quality Promotion

Target Audience

- This training is designed for those who will
  - Enroll a LTCF into NHSN to participate in the LTCF Component
  - Collect or analyze NHSN LTCF Component data
  - Facilities considering joining NHSN for LTCF Component

Objectives

- Describe surveillance
- Describe purposes of NHSN surveillance
  - Define the authority and confidentiality protections for NHSN
- Describe NHSN surveillance methodology
- Overview of NHSN structure
  - Modules of the LTCF Component
- Identify the requirements for participating in the NHSN LTCF Component
- Describe the Annual Facility Survey and Monthly Reporting Plan

Surveillance

- The act of observing or the condition of being observed
- The collection, collation, analysis, and dissemination of data
- A type of observational study that involves continuous monitoring of disease occurrence within a population

The American Heritage® Medical Dictionary Copyright © 2010 by Houghton Mifflin Harcourt Publishing Company. Published by Houghton Mifflin Harcourt Publishing Company. All rights reserved.

Goals of Infection Surveillance

- **Goals of Infection Surveillance**
  - To determine frequency of infections and identify which are most common
  - To help identify new or increasing infections which require further investigation
    - Knowing your baseline helps you identify when changes are happening
  - To use surveillance data to support and evaluate new prevention strategies

National Healthcare Safety Network (NHSN)

- An internet-based surveillance system that monitors patient, resident and healthcare personnel safety
- Maintains data security, integrity, and confidentiality
- Capacity for NHSN users to share data in a timely manner between facilities (e.g., multi-facility or corporate system) or with other entities (e.g., public health agencies or quality improvement organizations)
- No fee for participation in the NHSN

Purposes of NHSN

- Collect data from a sample of U.S. healthcare facilities to permit valid estimation of the magnitude of adverse events
  - Healthcare-associated infections
  - Blood and body fluid exposures for healthcare personnel
- Analyze and report collected data to permit recognition of trends

Purposes of NHSN

- Provide facilities with data that can be used for
  - Local quality improvement activities
  - Inter-facility comparisons
- Assist facilities in developing surveillance and analysis methods that permit
  - Timely recognition of problems
  - Prompt intervention with appropriate measures
- Conduct collaborative research studies with members

Authority and Confidentiality for NHSN

- Public Health Service Act

  (42 USC 242b, 242k, and 242m(d))

- Confidentiality protection
  - Sections 304, 306, 308(d) of the PHS Act

  "The information contained in this surveillance system that would permit identification of any individual or institution is collected with a guarantee that it will be held in strict confidence, will be used only for the purposes stated, and will not be disclosed or released without the consent of the individual, or the institution in accordance with Sections 304, 306, and 308(d) of the Public Health Services Act (42 USC 242b, 242k, and 242m(d))."

NHSN Surveillance Methodology

- Active vs. Passive
- Prospective vs. Retrospective
- Patient-based vs. Laboratory-based
- Priority-directed vs. comprehensive
- Risk-adjusted vs. crude rates
- Incidence rates vs. prevalence rates

NHSN Surveillance Methodology

- **ACTIVE: Trained personnel use standard criteria and a variety of data sources to identify events**
  - Ensures consistent application of criteria even if different individuals are involved in data collection
  - Data becomes more reliable and reproducible

- **PASSIVE: Personnel who are not trained, base events on provider documentation of infections or new antibiotic starts without application of criteria**
  - Difficult to compare and track events since there is no standard definitions being applied

NHSN Surveillance Methodology

- **PROSPECTIVE:** Monitoring patients while still in the institution
  - Provides real-time capture of events
  - Could lead to earlier identification of outbreaks
  - Allows for faster assessments of newly implemented prevention strategies
- **RETROSPECTIVE:** Case-finding based solely on chart review after patient discharged
  - Delays data collection and analysis

NHSN Surveillance Methodology

- **PATIENT-BASED:** Monitoring patients for events, risk factors, and practices related to patient care by visiting patient care areas, reviewing charts, discussing with caregivers
  - Can be more time-intensive
  - Allows for real-time staff education
  - Relies on quality of documentation
  - Example: UTI events
- **LABORATORY-BASED:** Case-finding based solely on positive lab findings
  - Less time consuming
  - Easier to apply
  - May only be a proxy for infection
  - Example: *C. difficile* events

NHSN Surveillance Methodology

- **PRIORITY-DIRECTED:** Objectives for surveillance are defined and focused on specific events, processes, organisms and/or patients/populations

- **COMPREHENSIVE:** Continuous monitoring of all patients for all events and/or processes

NHSN Surveillance Methodology

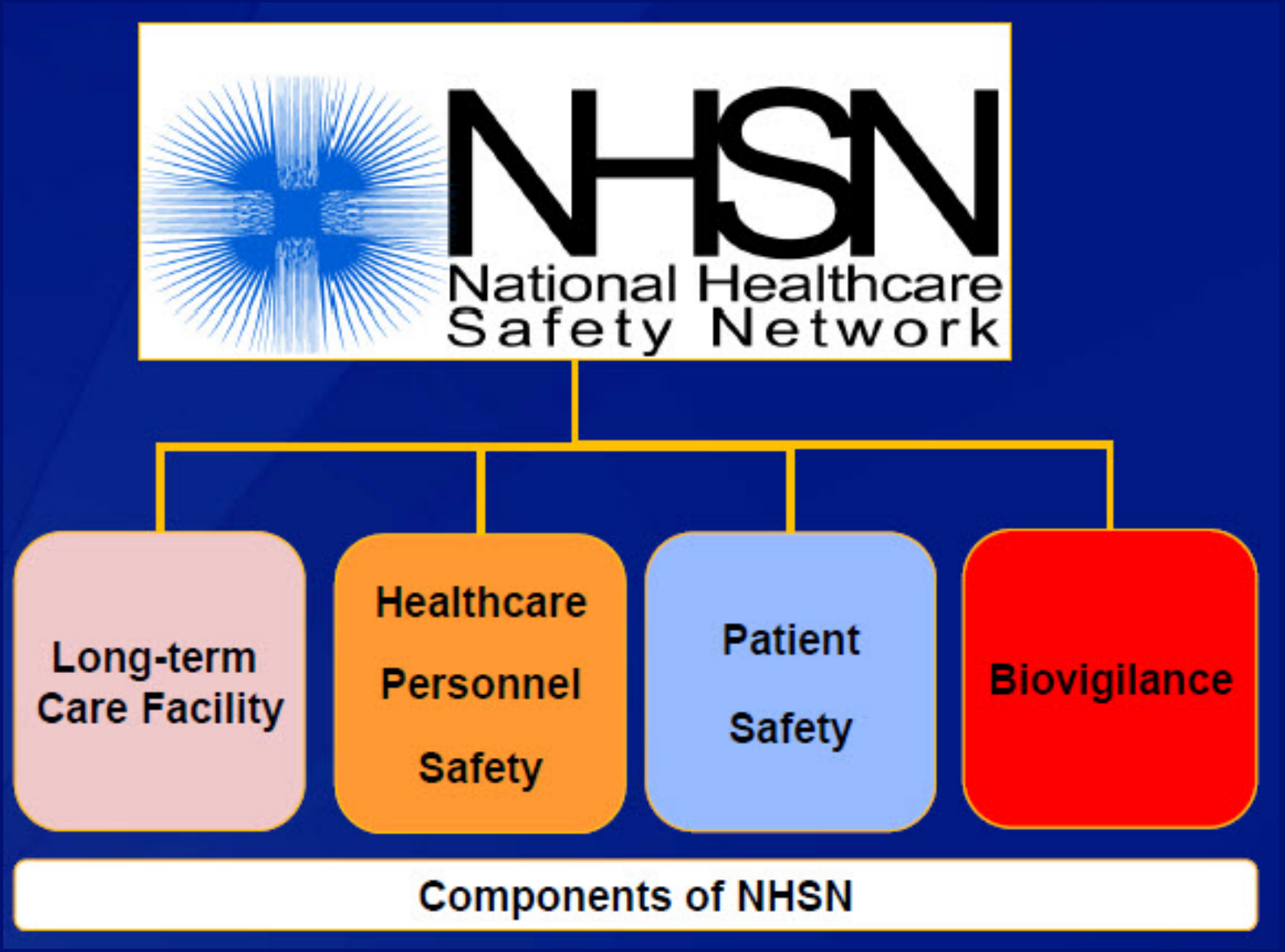
- **RISK-ADJUSTED:** Rates are controlled for variations in the distribution of major risk factor(s) associated with an event's occurrence
  - Comparison of rates or other metrics derived from the rates is useful
- **CRUDE:** Rates assume equal distribution of risk factors for all events
  - Comparison of rates not recommended

NHSN Surveillance Methodology

- **INCIDENCE (I):** New events in a population occurring during some defined time period
  - I = new events / (population during time period)

- **PREVALENCE (P):** All events in a population occurring at either a point in time (P_{point}) or during some defined time period (P_{period})
  - (P_{point}) = new and existing events / (population at point in time)
  - (P_{period}) = new and existing events / (population during time period)

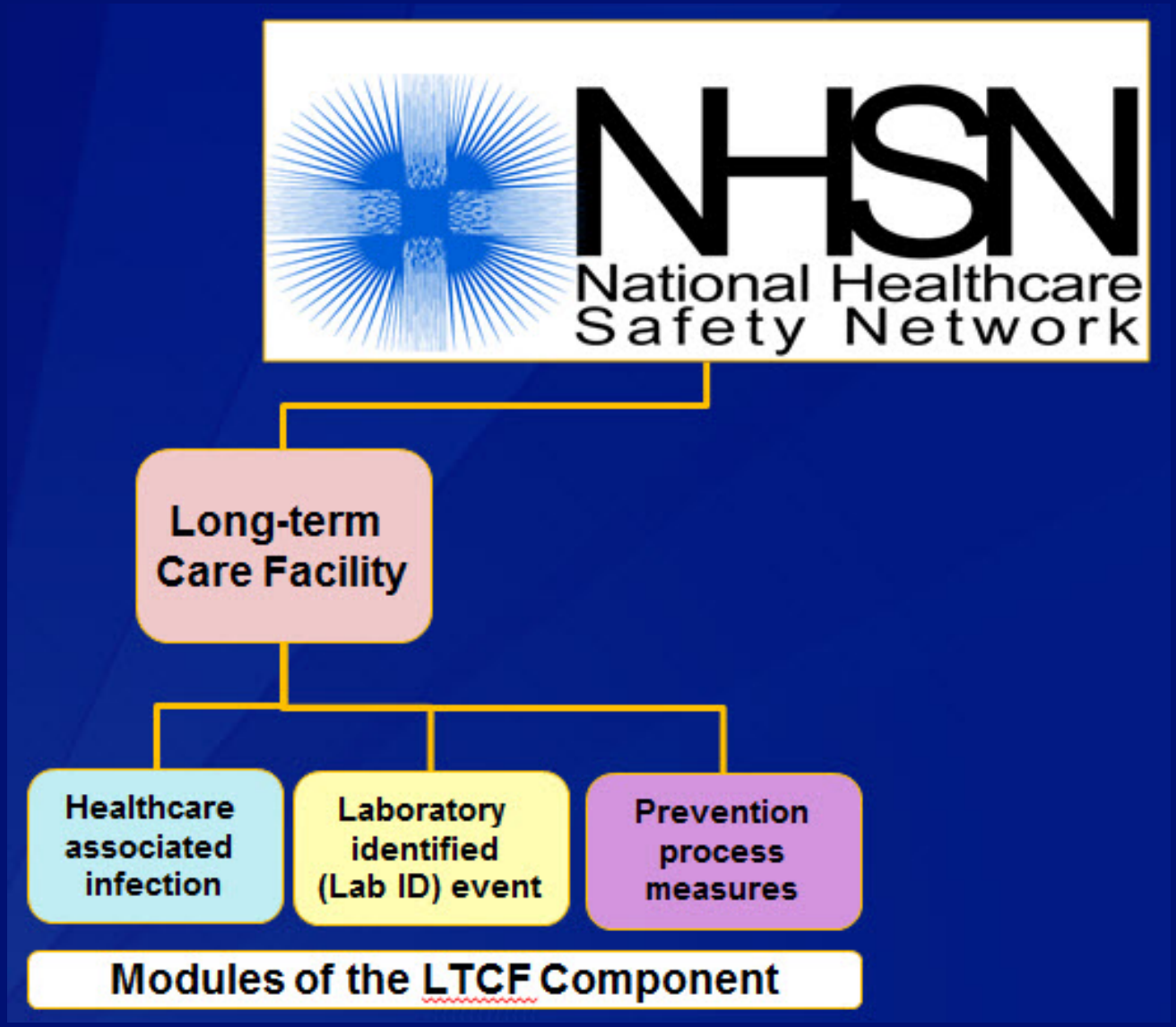
NHSN Structure



NHSN Components for Long-term Care Facilities

- Currently, LTCF can enroll in two NHSN Components
  1. Long-term Care Facility Component
  2. Healthcare Personnel Safety Component
     - For more information see http://www.cdc.gov/nhsn/hps.html

NHSN Structure



Long-term Care Facility Component Modules

1. Healthcare Associated Infection Module
   - Urinary tract infection events
     - Both catheter- and non catheter-associated
2. Laboratory Identified (Lab-ID) Event Module
   - C. difficile infections (CDI)
   - Multidrug-resistance Organisms (MDRO)
3. Preventions Process Measures Module
   - Hand hygiene
   - Gown and glove use

Data Entry in NHSN

- Data entered into NHSN are available to the facility and CDC as soon as they are saved
  - No "transmission" lag
- Data can be edited after they are saved
  - Exceptions: HCW ID and linked data
- Records can be deleted

Data Collection and Reporting Requirements

- Complete the Annual Facility Survey
- Submit a Monthly Reporting Plan to inform CDC which modules will be used for that month
- Use the described surveillance methodology and adhere to the Protocol for the module(s) selected

Data Collection and Reporting Requirements

(continued)

- Follow instructions for data collection as outlined in the "Table of Instructions"
- Report events and appropriate summary or denominator data indicated on the Monthly reporting plan to CDC within 30 days of the end of the previous month

Data Collection and Reporting Requirements

(continued)

- Pass quality control acceptance checks that assess the data for completeness and accuracy
- Agree to report to state health authorities those events identified in the surveillance system for which reporting is required and any for which you are contacted by CDC

Type and Frequency of data collection

1. LTCF Component - Annual Facility Survey
   - Completed upon enrollment and annually thereafter
2. Monthly Reporting Plan for LTCF
   - Completed monthly, indicates which modules will be used
3. Denominators for LTCF*
   - Daily data collection, monthly totals reported each month
4. Prevention Process Measures Monthly Monitoring*
   - At least 30 observations per month, summary reported each month
5. Events (UTI or Lab ID)*
   - Completed when an event occurs

*Depended on which modules your facility is using

Requirements for Completing Forms

On a form each item (or field) can be;

- Required:
  - Must be completed, otherwise data can not be saved
  - A red asterisk (*) appears next to the field label
- Conditionally required:
  - Requirement depends on the response given in another field
- Optional:
  - NHSN does not require the data and the information will not be used in analyses by CDC
- The Table of Instructions for each form will help you find out if a field is Required, Conditionally required or optional

Annual Facility Survey

- Completed on enrollment to NHSN
  - For the first survey – use data for the full calendar year before enrollment
- After enrollment, complete once a year
  - Using data for the previous calendar year
- Collects facility characteristics and information for
  - Risk adjustment
  - Determining rates
  - Aggregate comparisons
- See Table of Instruction for detailed information on how to complete the Annual Facility Survey

Annual Facility Survey

NHSN National Healthcare Safety Network

OMB No. 0920-0666
Exp. Date: 01-31-2015
www.cdc.gov/nhsn

Long Term Care Facility Component—Annual Facility Survey

Page 1 of 2

*required for saving	Tracking #:
Facility ID: *National Provider ID:	*Survey Year: State Provider #:
Facility Characteristics	
*Ownership (check one): ☐ For profit ☐ Not for profit, including church ☐ Government (not VA) ☐ Veteran's Affairs	
*Certification (check one): ☐ Dual Medicare/Medicaid ☐ Medicare only ☐ Medicaid only ☐ State only	
*Affiliation (check one): ☐ Independent, free-standing ☐ Independent, continuing care retirement community ☐ Multi-facility organization (chain) ☐ Hospital system, attached ☐ Hospital system, free-standing	
In the previous calendar year, *Average daily census: _____	

Monthly Reporting Plan

- The Monthly Reporting Plan informs CDC which modules a facility is following during a given month
- A Monthly Reporting Plan must be completed before data are entered into NHSN for that month

Monthly Reporting Plan

NHSN Home
Alerts
Reporting Plan
- Add
- Find

Resident
Event
Summary Data
Surveys
Users
Facility
Group
Log Out

Logged into NT Nursing Home (ID 11133) as NICOLA.
Facility NT Nursing Home (ID 11133) is following the LTCF component.

Add Monthly Reporting Plan

Mandatory fields marked with *

Facility ID*: NT Nursing Home (ID 11133)
Month*: August
Year*: 2012

☐ No Long Term Care Facility Component Modules Followed this Month

HAI Module HELP

	Locations	UTI
🗑	FACWIDEIN - FacWideIN	☑

LabID Event Module HELP

	Locations	Specific Organism Type	Lab ID Event All Specimens
🗑	FACWIDEIN - FacWideIN	CDIF - C. difficile	☑

Add Row | Clear All Rows | Copy from Previous Month

Prevention Process Measure Module HELP

	Locations	Hand Hygiene	Gown and Gloves Use
🗑	FACWIDEIN - FacWideIN	☐	☐

Next Steps

- Get started by designating a NHSN "Facility Administrator"
  - Person in your facility (does not have to be an administrator) who will be primarily responsible for NHSN participation
- Facility Administrator should view:
  - NHSN Enrollment for Long-term Care Facilities
  - LTCF Component Module Trainings

For more information, visit the NHSN website: http://www.cdc.gov/nhsn/hps.html

- Long-term Care Facility Component
  - Training
  - Protocols
  - Data collection forms
  - Tables of instructions for completing all forms
  - Key terms
- Purposes, data collection requirements and assurance of confidentiality

Questions or Need Help?

Contact User Support at nhsn@cdc.gov