



**HL7 CDA® R2 Implementation Guide:  
National Healthcare Safety Network (NHSN)  
Healthcare Associated Infection (HAI) Reports  
for Long Term Care Facilities (HAI-LTCF-CDA),  
Release 1- US Realm  
November 2020**

**1st HL7 Standard for Trial Use (STU)  
Volume 2—Templates and Supporting Materials**

**Sponsored by:  
Structured Documents (SD) Work Group  
Public Health Work Group  
National Healthcare Safety Network (NHSN)**

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SNOMED CT	SNOMED International <a href="http://www.snomed.org/snomed-ct/get-snomed-ct">http://www.snomed.org/snomed-ct/get-snomed-ct</a> or <a href="mailto:info@ihtsdo.org">info@ihtsdo.org</a>
Logical Observation Identifiers Names & Codes (LOINC)	Regenstrief Institute
International Classification of Diseases (ICD) codes	World Health Organization (WHO)
NUCC Health Care Provider Taxonomy code set	American Medical Association. Please see <a href="http://www.nucc.org">www.nucc.org</a> . AMA licensing contact: 312-464-5022 (AMA IP services)

## Structure of This Guide

Two volumes comprise the complete HL7 CDA® R2 Implementation Guide: NHSN Healthcare Associated Infection (HAI) Reports for Long Term Care Facilities (HAI-LTCF-CDA). Volume 1 provides narrative introductory and background material pertinent to this implementation guide, including information on how to understand and use the templates in Volume 2. Volume 2 contains the normative Clinical Document Architecture (CDA) templates for this guide along with lists of all templates, code systems, value sets, and, when appropriate, changes from the previous version.

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This standard is a set of constraints on existing work, and the extent to which it can accommodate the expressive requirements of HAI reporting over time is a function of the richness of the model on which it is built, the Health Level Seven (HL7) Reference Information Model (RIM) and the RIM document standard, and the Clinical Document Architecture Release 2 (CDA R2). We thank all those who have worked for over a decade to produce these fundamental standards.

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## Revision History

Release	Date	Notes
STU 1	November 2020	First release of the STU

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# 1 DOCUMENT-LEVEL TEMPLATES

**Table 1: Required and Optional Sections for Each Document Type**

Document Type	Required Sections	Optional Sections
<a href="#">HAI Population Summary Report Generic Constraints</a> urn:oid:2.16.840.1.113883.10.20.5.4.28	N/A	N/A
<a href="#">HAI Single-Person Report Generic Constraints LTCF</a> urn:hl7ii:2.16.840.1.113883.10.20.5.1.1.3:2019-08-01	N/A	N/A
<a href="#">Healthcare Associated Infection Report</a> urn:oid:2.16.840.1.113883.10.20.5.4.25	N/A	N/A
<a href="#">Laboratory Identified MDRO or CDI Event Report for LTCF</a> urn:hl7ii:2.16.840.1.113883.10.20.5.1.1.1:2019-08-01	<a href="#">Findings Section in a Laboratory Identified Report LTCF</a> <a href="#">Encounters Section in an LTCF Report</a>	<a href="#">NHSN Comment Section</a>
<a href="#">MDRO and CDI LabID Event Reporting Monthly Summary Data for LTCF</a> urn:hl7ii:2.16.840.1.113883.10.20.5.1.1.2:2019-08-01	<a href="#">Summary Data Section LTCF</a>	<a href="#">Report No Events Section</a>

## 1.1 Healthcare Associated Infection Report

[ClinicalDocument: identifier urn:oid:2.16.840.1.113883.10.20.5.4.25 (open)]

Published as part of NHSN Healthcare Associated Infection (HAI) Reports  
Release 1 - US Realm

This template records constraints on all NHSN Healthcare Associated Infection Reports (generic constraints). Further constraints are found in the specialization templates for single-patient and population summary reports, and in the templates for specific report types.

Annotations before some constraints provide additional information for the implementer.

Elements required by CDA that are not further constrained in this guide are not presented as HAI-specific constraints.

Note: The section on “Template Ids in this Guide” includes a containment table showing all the entries within each report type.

***Table 2: Healthcare Associated Infection Report Constraints Overview***

XPath	Card.	Verb	Data Type	CONF#	Value
ClinicalDocument (identifier: urn:oid:2.16.840.1.113883.10.20.5.4.25)					
realmCode	1..1	SHALL		<a href="#">86-18431</a>	
@code	1..1	SHALL	CD	<a href="#">86-18432</a>	US
typeId	1..1	SHALL		<a href="#">86-18463</a>	
@root	1..1	SHALL		<a href="#">86-18464</a>	2.16.840.1.113883.1.3
@extension	1..1	SHALL		<a href="#">86-18465</a>	POCD_HD000040
templateId	1..1	SHALL		<a href="#">86-18460</a>	
@root	1..1	SHALL		<a href="#">86-18461</a>	2.16.840.1.113883.10.20.5.4.25
@extension	0..0	SHALL NOT		<a href="#">86-18462</a>	
id	1..1	SHALL		<a href="#">86-18466</a>	
@root	0..1	MAY		<a href="#">86-18467</a>	
@extension	0..1	MAY		<a href="#">86-18468</a>	
code	1..1	SHALL		<a href="#">86-18433</a>	
@code	1..1	SHALL		<a href="#">86-18434</a>	51897-7
@codeSystem	1..1	SHALL		<a href="#">86-27413</a>	urn:oid:2.16.840.1.113883.6.1 (LOINC)
title	1..1	SHALL		<a href="#">86-18435</a>	
effectiveTime	1..1	SHALL		<a href="#">86-18436</a>	
confidentialityCode	1..1	SHALL		<a href="#">86-18437</a>	
@code	1..1	SHALL	CD	<a href="#">86-18438</a>	urn:oid:2.16.840.1.113883.5.25 (HL7Confidentiality) = N
languageCode	1..1	SHALL		<a href="#">86-18439</a>	
@code	1..1	SHALL		<a href="#">86-18440</a>	en-US
setId	1..1	SHALL		<a href="#">86-18441</a>	
versionNumber	1..1	SHALL		<a href="#">86-18442</a>	
recordTarget	1..*	SHALL		<a href="#">86-18472</a>	
author	1..*	SHALL		<a href="#">86-18473</a>	
custodian	1..1	SHALL		<a href="#">86-18443</a>	
assignedCustodian	1..1	SHALL		<a href="#">86-18444</a>	
representedCustodianOrganization	1..1	SHALL		<a href="#">86-18445</a>	
id	1..1	SHALL		<a href="#">86-18446</a>	
@root	1..1	SHALL		<a href="#">86-18447</a>	2.16.840.1.114222.4.3.2.11
legalAuthenticator	0..1	SHOULD		<a href="#">86-18474</a>	
relatedDocument	0..*	MAY		<a href="#">86-18469</a>	
@typeCode	1..1	SHALL		<a href="#">86-18470</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RPLC

XPath	Card.	Verb	Data Type	CONF#	Value
parentDocument	1..1	SHALL		<a href="#">86-28401</a>	
id	1..*	SHALL		<a href="#">86-28402</a>	
component	1..1	SHALL		<a href="#">86-18448</a>	
structuredBody	1..1	SHALL		<a href="#">86-18449</a>	
component	1..*	SHALL		<a href="#">86-18475</a>	

1. **SHALL** contain exactly one [1..1] **realmCode** (CONF:86-18431).
  - a. This realmCode **SHALL** contain exactly one [1..1] **@code**="US" (CONF:86-18432).
2. **SHALL** contain exactly one [1..1] **typeId** (CONF:86-18463).
  - a. This typeId **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.1.3" (CONF:86-18464).
  - b. This typeId **SHALL** contain exactly one [1..1] **@extension**="POCD\_HD000040" (CONF:86-18465).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:86-18460) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.5.4.25" (CONF:86-18461).
  - b. **SHALL NOT** contain [0..0] **@extension** (CONF:86-18462).

CDA requires a ClinicalDocument/id element representing a unique identifier for the document. The id may be represented by either @root or @root plus @extension, so long as the resulting id is globally unique.

CDA provides id, setId, versionNumber, and relatedDocument elements to support succession management (document versioning).

The id element identifies the CDA document instance (the electronic file). It is independent of the setId and versionNumber elements.

4. **SHALL** contain exactly one [1..1] **id** (CONF:86-18466).
  - a. This id **MAY** contain zero or one [0..1] **@root** (CONF:86-18467).
  - b. This id **MAY** contain zero or one [0..1] **@extension** (CONF:86-18468).
5. **SHALL** contain exactly one [1..1] **code** (CONF:86-18433).
  - a. This code **SHALL** contain exactly one [1..1] **@code**="51897-7" Healthcare Associated Infection Report (CONF:86-18434).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem** (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:86-27413).

The preferred title content for each report type is given with the constraints for each report type.

6. **SHALL** contain exactly one [1..1] **title** (CONF:86-18435).
7. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:86-18436).

CDA requires a confidentiality code that indicates the sensitivity of the document. All HAI submissions carry the same value of "normal". Note that this designation does not affect local policy on safeguarding confidentiality of patient-identifiable personal health information.

8. **SHALL** contain exactly one [1..1] **confidentialityCode** (CONF:86-18437).
  - a. This confidentialityCode **SHALL** contain exactly one [1..1] **@code="N"** Normal (CodeSystem: HL7Confidentiality urn:oid:2.16.840.1.113883.5.25 **STATIC**) (CONF:86-18438).
9. **SHALL** contain exactly one [1..1] **languageCode** (CONF:86-18439).
  - a. This languageCode **SHALL** contain exactly one [1..1] **@code="en-US"** (CONF:86-18440).
10. **SHALL** contain exactly one [1..1] **setId** (CONF:86-18441).
11. **SHALL** contain exactly one [1..1] **versionNumber** (CONF:86-18442).

CDA requires a recordTarget element that must contain a patientRole element. This is represented differently in single-person and population summary reports. See the templates for generic single-person and population summary reports for details of how to represent the patient or group subject.

12. **SHALL** contain at least one [1..\*] **recordTarget** (CONF:86-18472).

In a single-person report, the author may be software or may be a person in the role of infection control professional (ICP). In a population summary report, the author will be the software forming the message. The effect of the CDA Release 2.0 requirements is:

An author element shall be present. The author element shall contain a time element that represents the time of authoring of the information, and an assignedAuthor element that represents the author of the information. The assignedAuthor element shall contain an id element.

When the report author is vendor software, it can record the Synthetic Data Set (SDS) Validation Id, or, if not participating in SDS, a software installation id. It can also record the vendor software name, the version and release of the software, and the vendor name. For further guidance, see the example at the end of this template.

13. **SHALL** contain at least one [1..\*] **author** (CONF:86-18473).

CDA requires that the document custodian be recorded. The NHSN is the custodian of NHSN HAI Reports.

14. **SHALL** contain exactly one [1..1] **custodian** (CONF:86-18443).
  - a. This custodian **SHALL** contain exactly one [1..1] **assignedCustodian** (CONF:86-18444).
    - i. This assignedCustodian **SHALL** contain exactly one [1..1] **representedCustodianOrganization** (CONF:86-18445).
      1. This representedCustodianOrganization **SHALL** contain exactly one [1..1] **id** (CONF:86-18446).
        - a. This id **SHALL** contain exactly one [1..1] **@root="2.16.840.1.114222.4.3.2.11"** (CONF:86-18447).

CDA requires that a legalAuthenticator element be present if the document has been legally authenticated. Local policy may delegate the function of legal authentication to a device or system that generates the CDA document. In these cases, the legal authenticator must still be a person accepting responsibility for the document content, not the device or system. The effect of the CDA Release 2.0 requirements is:

The legalAuthenticator element shall contain a time element that represents the time of

authentication of the document, a signatureCode element where the value of @code is S, and an assignedEntity element that represents the authenticator of the document. The assignedEntity element shall contain an id element.

HAI Reports are not signed reports and do not require a legalAuthenticator.

15. **SHOULD** contain zero or one [0..1] **legalAuthenticator** (CONF:86-18474).

16. **MAY** contain zero or more [0..\*] **relatedDocument** (CONF:86-18469).

- a. The relatedDocument, if present, **SHALL** contain exactly one [1..1] **@typeCode**="RPLC" replace (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 **STATIC**) (CONF:86-18470).
- b. The relatedDocument, if present, **SHALL** contain exactly one [1..1] **parentDocument** (CONF:86-28401).
  - i. This parentDocument **SHALL** contain at least one [1..\*] **id** (CONF:86-28402).
    1. The value of id **SHALL** be populated with the ClinicalDocument/id of the document being replaced (CONF:86-28403).
- c. If versionNumber/@value is greater than 1, a relatedDocument element **SHALL** be present (CONF:86-18471).

17. **SHALL** contain exactly one [1..1] **component** (CONF:86-18448).

- a. This component **SHALL** contain exactly one [1..1] **structuredBody** (CONF:86-18449).
  - i. This structuredBody **SHALL** contain at least one [1..\*] **component** (CONF:86-18475).
  - ii. The structuredBody element **SHALL** contain a component element for each section required by the particular report type. Additional sections may be present, but their content will not be processed by NHSN (CONF:86-18450).

**Figure 1: Software Author Example**

```
<author>
  <!-- The time the document was authored -->
  <time value="20080701" />
  <assignedAuthor>
    <!-- root=vendor OID; extension may be the Synthetic Data Set (SDS)
    Validation ID assigned by NHSN AUR subject matter expert (SME);
    if not participating in SDS, vendor may use a software ID -->
    <id root="2.111.111.111.10008" extension="SDS validation ID" />
    <assignedAuthoringDevice>
      <!-- Optional-Vendor software name -->
      <manufacturerModelName>vendor software name</manufacturerModelName>
      <!-- Optional-version and release of the software-->
      <softwareName>vendor software version</softwareName>
    </assignedAuthoringDevice>
    <!-- Optional-Vendor Name -->
    <representedOrganization>
      <name>vendor name</name>
    </representedOrganization>
  </assignedAuthor>
</author>
```

### 1.1.1 HAI Population Summary Report Generic Constraints

[ClinicalDocument: identifier urn:oid:2.16.840.1.113883.10.20.5.4.28 (open)]

Published as part of NHSN Healthcare Associated Infection (HAI) Reports  
Release 1 - US Realm

A Population Summary Report records summary data for a group, such as the patients in a particular ward, during a specified period. This report type differs in several ways from the HAI single-person reports.

These report types are used to record many different data sets. The basic structure of the body templates for this report type are:

- A Summary Data Section:

- o A Summary Encounter records the location to which the data pertain.
- o Various Summary Data Observations record data as code-value pairs.

A population-summary report must conform to the Healthcare Associated Infection Report above. In addition:

- The patient identifier (required by CDA) is recorded with a nullFlavor.
- A participant element records that the subject of the report is a group.
- A second participant element records the reporting facility. (The in-facility unit identifier and type to which the data pertain are recorded in the Summary Encounter Section of the document body.)
- In the documentationOf/serviceEvent element,
  - o The effectiveTime element records the first and last days of the period reported.
  - o The code element records the type of summary data reported. This corresponds to the NHSN form type.

The data set being reported is identified by a code in the CDA header; for example, the cdcNHSN concept “1887-9” identifies the data set “Summary data reporting Antimicrobial Usage”. The codes for these data sets are listed in value set NHSNPopulationSummaryReportTypeCode (2.16.840.1.114222.4.11.3595).

Note that a few data sets are stratified. For example, the NICU (Neonatal Intensive Care Unit) data set is stratified by birthweight; the Antimicrobial Usage data set is stratified by antimicrobial and by route of administration. The stratifying factor is recorded as a CDA element in the Summary Encounter or Summary Data Observation. For example, in an Antimicrobial Use report, the antimicrobial information is represented as a participant. The requirements for each data set are provided in the relevant Summary Data Observation.

Most of the concepts reported are defined for the NHSN protocol and are not expected to see widespread external use: the codes for these concepts come from the NHSN code system.

Key encounter data:

- Facility identifier is required. This represents the reporting facility; the location to which the data pertain, such as a unit, is recorded with the data in the Summary Encounter.
- A code identifying the data set is required.
- The period reported is required.

Note: The section on “Template Ids in this Guide” includes a containment table showing all the entries within each report type.

**Table 3: HAI Population Summary Report Generic Constraints Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
ClinicalDocument (identifier: urn:oid:2.16.840.1.113883.10.20.5.4.28)					
templateId	1..1	SHALL		<a href="#">86-22431</a>	
@root	1..1	SHALL		<a href="#">86-22432</a>	2.16.840.1.113883.10.20.5.4.28
recordTarget	1..1	SHALL		<a href="#">86-22433</a>	
patientRole	1..1	SHALL		<a href="#">86-22434</a>	
id	1..1	SHALL		<a href="#">86-22435</a>	
@nullFlavor	1..1	SHALL		<a href="#">86-22436</a>	NA
participant	1..1	SHALL		<a href="#">86-22437</a>	
@typeCode	1..1	SHALL		<a href="#">86-22438</a>	urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = SBJ
@contextControlCode	1..1	SHALL	CS	<a href="#">86-22439</a>	urn:oid:2.16.840.1.113883.5.1057 (HL7ContextControl) = OP
associatedEntity	1..1	SHALL		<a href="#">86-22440</a>	
@classCode	1..1	SHALL		<a href="#">86-22441</a>	urn:oid:2.16.840.1.113883.5.41 (HL7EntityClass) = PRS
code	1..1	SHALL		<a href="#">86-22442</a>	
@code	1..1	SHALL		<a href="#">86-22443</a>	urn:oid:2.16.840.1.113883.6.96 (SNOMED CT) = 389109008
participant	1..1	SHALL		<a href="#">86-22444</a>	
@typeCode	1..1	SHALL		<a href="#">86-22445</a>	urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = LOC
associatedEntity	1..1	SHALL		<a href="#">86-22447</a>	
@classCode	1..1	SHALL		<a href="#">86-22448</a>	urn:oid:2.16.840.1.113883.5.110 (HL7RoleClass) = SDLOC
id	1..1	SHALL		<a href="#">86-22449</a>	
@root	1..1	SHALL		<a href="#">86-22450</a>	
documentationOf	1..1	SHALL		<a href="#">86-22451</a>	
serviceEvent	1..1	SHALL		<a href="#">86-22452</a>	
@classCode	1..1	SHALL		<a href="#">86-22453</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = CASE
code	1..1	SHALL		<a href="#">86-22454</a>	urn:oid:2.16.840.1.114222.4.11.3595 (NHSNPopulationSummaryReportTypeCode)
effectiveTime	1..1	SHALL		<a href="#">86-22456</a>	
low	1..1	SHALL		<a href="#">86-22457</a>	
high	1..1	SHALL		<a href="#">86-22458</a>	

1. Conforms to [Healthcare Associated Infection Report](#) template (identifier: urn:oid:2.16.840.1.113883.10.20.5.4.25).
2. **SHALL** contain exactly one [1..1] **templateId** (CONF:86-22431) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.5.4.28" (CONF:86-22432).
3. **SHALL** contain exactly one [1..1] **recordTarget** (CONF:86-22433).
  - a. This recordTarget **SHALL** contain exactly one [1..1] **patientRole** (CONF:86-22434).
    - i. This patientRole **SHALL** contain exactly one [1..1] **id** (CONF:86-22435).
      1. This id **SHALL** contain exactly one [1..1] **@nullFlavor**="NA" not applicable (CONF:86-22436).
4. **SHALL** contain exactly one [1..1] **participant** (CONF:86-22437) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode**="SBJ" Subject (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90 **STATIC**) (CONF:86-22438).
  - b. **SHALL** contain exactly one [1..1] **@contextControlCode**="OP" (CodeSystem: HL7ContextControl urn:oid:2.16.840.1.113883.5.1057 **STATIC**) (CONF:86-22439).
  - c. **SHALL** contain exactly one [1..1] **associatedEntity** (CONF:86-22440).
    - i. This associatedEntity **SHALL** contain exactly one [1..1] **@classCode**="PRS" Person (CodeSystem: HL7EntityClass urn:oid:2.16.840.1.113883.5.41 **STATIC**) (CONF:86-22441).
    - ii. This associatedEntity **SHALL** contain exactly one [1..1] **code** (CONF:86-22442).
      1. This code **SHALL** contain exactly one [1..1] **@code**="389109008" Group (CodeSystem: SNOMED CT urn:oid:2.16.840.1.113883.6.96 **STATIC**) (CONF:86-22443).
5. **SHALL** contain exactly one [1..1] **participant** (CONF:86-22444) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode**="LOC" Location (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90 **STATIC**) (CONF:86-22445).
  - b. **SHALL** contain exactly one [1..1] **associatedEntity** (CONF:86-22447).
    - i. This associatedEntity **SHALL** contain exactly one [1..1] **@classCode**="SDLOC" Service delivery location (CodeSystem: HL7RoleClass urn:oid:2.16.840.1.113883.5.110 **STATIC**) (CONF:86-22448).
    - ii. This associatedEntity **SHALL** contain exactly one [1..1] **id** (CONF:86-22449).

The value of **@root** must be the NHSN assigned Facility OID.

1. This id **SHALL** contain exactly one [1..1] **@root** (CONF:86-22450).
6. **SHALL** contain exactly one [1..1] **documentationOf** (CONF:86-22451).
  - a. This documentationOf **SHALL** contain exactly one [1..1] **serviceEvent** (CONF:86-22452).
    - i. This serviceEvent **SHALL** contain exactly one [1..1] **@classCode**="CASE" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:86-22453).

- ii. This serviceEvent **SHALL** contain exactly one [1..1] **code**, which **SHALL** be selected from ValueSet [NHSNPopulationSummaryReportTypeCode](#) urn:oid:2.16.840.1.114222.4.11.3595 **DYNAMIC** (CONF:86-22454).
  - iii. This serviceEvent **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:86-22456).
    - 1. This effectiveTime **SHALL** contain exactly one [1..1] **low** (CONF:86-22457).
    - 2. This effectiveTime **SHALL** contain exactly one [1..1] **high** (CONF:86-22458).
7. The author **SHALL** represent the software forming the message (CONF:86-22459).

**Table 4: NHSNPopulationSummaryReportTypeCode**

Value Set: NHSNPopulationSummaryReportTypeCode urn:oid:2.16.840.1.114222.4.11.3595 (Clinical Focus: NHSN surveillance reporting: This value set contains codes describing the type of population summary report.), (Data Element Scope: A code describing the population category associated with the data being reported.), (Inclusion Criteria: ), (Exclusion Criteria: )  This value set was imported on 9/16/2020 with a version of Latest. Value Set Source: <a href="https://vsac.nlm.nih.gov/valueset/2.16.840.1.114222.4.11.3595/expansion">https://vsac.nlm.nih.gov/valueset/2.16.840.1.114222.4.11.3595/expansion</a>			
Code	Code System	Code System OID	Print Name
1657-6	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Summary data reporting outpatient procedure component events at a facility
1879-6	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Summary data reporting catheter and ventilator use in a ICU/other
1880-4	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Summary data reporting catheter and ventilator use in a SCA
1881-2	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Summary data reporting catheter and ventilator use in a NICU
1884-6	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Summary data reporting active surveillance testing (AST)
1887-9	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Summary data reporting antimicrobial usage
1891-1	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Summary data reporting MDRO and CDI LabID Event for LTCF
2316-8	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Summary data reporting vascular access types for chronic hemodialysis patients
2410-9	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Summary data reporting antimicrobial resistance patterns at a facility
2543-7	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Hemovigilance module - monthly reporting denominator
...			

### 1.1.2 MDRO and CDI LabID Event Reporting Monthly Summary Data for LTCF

[ClinicalDocument: identifier urn:hl7ii:2.16.840.1.113883.10.20.5.1.1.2:2019-08-01 (closed)]

Published as part of NHSN Healthcare Associated Infection (HAI) Report for Long Term Care Facilities (LTCF), Release 1 - US Realm

**Table 5: MDRO and CDI LabID Event Reporting Monthly Summary Data for LTCF Contexts**

Contained By:	Contains:
	<a href="#">Report No Events Section</a> (optional) <a href="#">Summary Data Section LTCF</a> (required)

This report records the monthly aggregate data for Multidrug-Resistant Organisms (MDRO) and *Clostridioides difficile* infection (CDI). It includes summary data observations and should be completed even if 'no events' were reported for the month. The summary data are not required if there is no monthly reporting plan for a given month.

Facility id is required and represents the reporting facility, the location to which the data pertain and its associated Monthly Summary Report information. The first and last day of the period (month) being reported are required.

This template represents the MDRO and CDI LabID Event Reporting Monthly Summary Data for LTCF form (CDC 57.139). It records the monthly aggregate for the data sets listed in Value set NHSNPopulationSummaryReportTypeCode (2.16.840.1.114222.4.11.3595).

For further details on reporting healthcare-associated infections in long-term care facilities see the NHSN website (<https://www.cdc.gov/nhsn/>). The concepts reported in this document-type are defined for the NHSN "LabID Event Protocol for LTCF" and the corresponding data collection form.

***Table 6: MDRO and CDI LabID Event Reporting Monthly Summary Data for LTCF Constraints Overview***

XPath	Card.	Verb	Data Type	CONF#	Value
ClinicalDocument (identifier: urn:hl7ii:2.16.840.1.113883.10.20.5.1.1.2:2019-08-01)					
templateId	1..1	SHALL		<a href="#">4417-31201</a>	
@root	1..1	SHALL		<a href="#">4417-31202</a>	2.16.840.1.113883.10.20.5.1.1.2
@extension	1..1	SHALL		<a href="#">4417-31203</a>	2019-08-01
title	1..1	SHALL		<a href="#">4417-31248</a>	
participant	1..1	SHALL		<a href="#">4417-31268</a>	
associatedEntity	1..1	SHALL		<a href="#">4417-31269</a>	
id	1..1	SHALL		<a href="#">4417-31273</a>	
@root	1..1	SHALL		<a href="#">4417-31419</a>	
@extension	1..1	SHALL		<a href="#">4417-31420</a>	FACWIDEIN
participant	1..1	SHALL		<a href="#">4417-31270</a>	
associatedEntity	1..1	SHALL		<a href="#">4417-31271</a>	
code	1..1	SHALL		<a href="#">4417-31272</a>	
@code	1..1	SHALL		<a href="#">4417-31274</a>	urn:oid:2.16.840.1.113883.6.96 (SNOMED CT) = 389109008
documentationOf	1..1	SHALL		<a href="#">4417-31262</a>	
serviceEvent	1..1	SHALL		<a href="#">4417-31263</a>	
code	1..1	SHALL		<a href="#">4417-31391</a>	
@code	1..1	SHALL		<a href="#">4417-31392</a>	1891-1
@codeSystem	1..1	SHALL		<a href="#">4417-31393</a>	urn:oid:2.16.840.1.113883.6.277 (cdcNHSN)
effectiveTime	1..1	SHALL		<a href="#">4417-31264</a>	
low	1..1	SHALL		<a href="#">4417-31266</a>	
high	1..1	SHALL		<a href="#">4417-31267</a>	
component	1..1	SHALL		<a href="#">4417-31197</a>	

XPath	Card.	Verb	Data Type	CONF#	Value
structuredBody	1..1	SHALL		<a href="#">4417-31198</a>	
component	1..1	SHALL		<a href="#">4417-31199</a>	
section	1..1	SHALL		<a href="#">4417-31200</a>	<a href="#">Summary Data Section LTCF (identifier: urn:hl7ii:2.16.840.1.113883.10.20.5.1.2.3:2019-08-01)</a>
component	0..1	MAY		<a href="#">4417-31245</a>	
section	1..1	SHALL		<a href="#">4417-31246</a>	<a href="#">Report No Events Section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.5.5.62:2018-04-01)</a>

1. Conforms to [HAI Population Summary Report Generic Constraints](#) template (identifier: urn:oid:2.16.840.1.113883.10.20.5.4.28).
2. **SHALL** contain exactly one [1..1] **templateId** (CONF:4417-31201) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.5.1.1.2" (CONF:4417-31202).
  - b. **SHALL** contain exactly one [1..1] **@extension**="2019-08-01" (CONF:4417-31203).

Preferred document title: "MDRO and CDI LabID Event Reporting Monthly Summary Data for LTCF"

3. **SHALL** contain exactly one [1..1] **title** (CONF:4417-31248).
4. **SHALL** contain exactly one [1..1] **participant** (CONF:4417-31268) such that it
  - a. **SHALL** contain exactly one [1..1] **associatedEntity** (CONF:4417-31269).
    - i. This associatedEntity **SHALL** contain exactly one [1..1] **id** (CONF:4417-31273).

The value of **@root** must be the NHSN assigned facility OID.

1. This id **SHALL** contain exactly one [1..1] **@root** (CONF:4417-31419).  
Note: Facility ID
2. This id **SHALL** contain exactly one [1..1] **@extension**="FACWIDEIN" (CONF:4417-31420).  
Note: Location code
5. **SHALL** contain exactly one [1..1] **participant** (CONF:4417-31270) such that it
  - a. **SHALL** contain exactly one [1..1] **associatedEntity** (CONF:4417-31271).
    - i. This associatedEntity **SHALL** contain exactly one [1..1] **code** (CONF:4417-31272).
      1. This code **SHALL** contain exactly one [1..1] **@code**="389109008" Group (social concept) (CodeSystem: SNOMED CT urn:oid:2.16.840.1.113883.6.96) (CONF:4417-31274).
6. **SHALL** contain exactly one [1..1] **documentationOf** (CONF:4417-31262).

- a. This documentationOf **SHALL** contain exactly one [1..1] **serviceEvent** (CONF:4417-31263).
  - i. This serviceEvent **SHALL** contain exactly one [1..1] **code** (CONF:4417-31391).
    - 1. This code **SHALL** contain exactly one [1..1] **@code**="1891-1" MDRO and CDI LabID Event Reporting Monthly Summary Data for LTCF (CONF:4417-31392).
    - 2. This code **SHALL** contain exactly one [1..1] **@codeSystem**, which **SHALL** be selected from CodeSystem cdcNHSN (urn:oid:2.16.840.1.113883.6.277) **STATIC** (CONF:4417-31393).
  - ii. This serviceEvent **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:4417-31264).
    - 1. This effectiveTime **SHALL** contain exactly one [1..1] **low** (CONF:4417-31266).  
Note: First day of the reporting month
    - 2. This effectiveTime **SHALL** contain exactly one [1..1] **high** (CONF:4417-31267).  
Note: Last day in the reporting month
- 7. **SHALL** contain exactly one [1..1] **component** (CONF:4417-31197).
  - a. This component **SHALL** contain exactly one [1..1] **structuredBody** (CONF:4417-31198).
    - i. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:4417-31199) such that it
      - 1. **SHALL** contain exactly one [1..1] Summary Data Section LTCF (identifier:  
urn:hl7ii:2.16.840.1.113883.10.20.5.1.2.3:2019-08-01) (CONF:4417-31200).
    - ii. This structuredBody **MAY** contain zero or one [0..1] **component** (CONF:4417-31245) such that it
      - 1. **SHALL** contain exactly one [1..1] Report No Events Section (identifier:  
urn:hl7ii:2.16.840.1.113883.10.20.5.5.62:2018-04-01) (CONF:4417-31246).

**Figure 2: MDRO and CDI LabID Reporting Monthly Summary Data for LTCF Example**

```

<ClinicalDocument>
  <!-- This is a population-summary report. -->
  <realmCode code="US" />
  <typeId root="2.16.840.1.113883.1.3" extension="POCD_HD000040" />

  <!-- [HAI Normative R1]Conformant to Healthcare Associated Infection Report -->
  <templateId root="2.16.840.1.113883.10.20.5.4.25" />

  <!-- [HAI R2D1] Conformant to Healthcare Associated Infection Report -->
  <templateId root="2.16.840.1.113883.10.20.5.4.24" />

  <!-- [HAI Normative R1] Conformant to the HAI Population Summary Report Generic
Constraints -->
  <templateId root="2.16.840.1.113883.10.20.5.4.28" />

  <!-- [HAI LTCF R1D1] Conformant to MDRO and CDI LabID Event Reporting Monthly Summary
Data for LTCF -->
  <templateId root="2.16.840.1.113883.10.20.5.1.1.2" extension="2019-08-01" />
  <!-- Document ID (extension) is scoped by vendor/software -->
  <id root="2.16.840.1.113883.3.117.1.1.5.2.1.1.2" extension="20202201" />
  <code codeSystem="2.16.840.1.113883.6.1"
    codeSystemName="LOINC" code="51897-7"
    displayName="Healthcare Associated Infection Report" />
  <title>MDRO and CDI LabID Event Reporting Monthly Summary Data for LTCF</title>
  <!-- Document-creation date -->
  <effectiveTime value="20190201" />
  <confidentialityCode codeSystem="2.16.840.1.113883.5.25" code="N" />
  <languageCode code="en-US" />
  <setId root="2.16.840.1.113883.3.117.1.1.5.2.1.1.1" extension="33" />
  <!-- the original -->
  <versionNumber value="1" />
  <recordTarget>
    <patientRole>
      <!-- This is a population summary report -->
      <id nullFlavor="NA" />
    </patientRole>
  </recordTarget>
  <!-- The author of a population summary report is the software forming the message. -->
  <author>
    ...
  </author>
  <!-- The custodian of the CDA document is NHSN -->
  <custodian>
    ...
  </custodian>
  <!-- Legal authenticator is scoped by facility -->
  <legalAuthenticator>
    ...
  </legalAuthenticator>
  <!-- The location participant (facility) -->
  <participant typeCode="LOC" contextControlCode="OP">
    <associatedEntity classCode="SDLOC">
      <!--root is ID of facility -->
      <!-- extension is the location code 'FACWIDEIN' -->
      <id root="2.16.840.1.113883.3.117.1.1.5.1.1" extension="FACWIDEIN"/>
    </associatedEntity>
  </participant>

```

```

        </associatedEntity>
    </participant>
    <!-- The group participant in a population-summary report-->
    <participant typeCode="SBJ" contextControlCode="OP">
        <associatedEntity classCode="PRS">
            <code codeSystem="2.16.840.1.113883.6.96"
                code="389109008" displayName="group" />
        </associatedEntity>
    </participant>
    <!-- The period reported -->
    <documentationOf>
        <serviceEvent classCode="CASE">
            <code codeSystem="2.16.840.1.113883.6.277" codeSystemName="cdcNHSN"
                code="1891-1"
                displayName="Summary data reporting MDRO and CDI LabID Event Monthly
Summary Data for LTCF" />
            <effectiveTime>
                <!-- the first day of the period reported -->
                <low value="20190101" />
                <!-- the last day of the period reported -->
                <high value="20190131" />
            </effectiveTime>
        </serviceEvent>
    </documentationOf>

    <!-- *****
    Structured Body
    ***** -->
    <component>
        <structuredBody>

            <!-- *****
            Summary Data Section LTCF
            ***** -->
            <component>
                <section>
                    <!-- HAI Section Generic Constraints -->
                    <templateId root="2.16.840.1.113883.10.20.5.4.26" />
                    <!-- Summary Data Section LTCF -->
                    <templateId root="2.16.840.1.113883.10.20.5.1.2.3"
                        extension="2019-08-01" />
                    ...
                </section>
            </component>
            <!--
            *****
            Report No Events Section
            *****
            -->
            <component>
                <section>
                    <!-- [HAI Normative R1] HAI Section Generic Constraints -->
                    <templateId root="2.16.840.1.113883.10.20.5.4.26" />
                    <!-- [HAI R2D1] Report No Events Section -->
                    <templateId root="2.16.840.1.113883.10.20.5.5.62"
                        extension="2018-04-01" />
                    ...
                </section>
            </component>
        </structuredBody>
    </component>

```

```
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

### 1.1.3 HAI Single-Person Report Generic Constraints LTCF

[ClinicalDocument: identifier urn:hl7ii:2.16.840.1.113883.10.20.5.1.1.3:2019-08-01 (open)]

Published as part of NHSN Healthcare Associated Infection (HAI) Report for Long Term Care Facilities (LTCF), Release 1 - US Realm

This template records the constraints for HAI LTCF single-person reports. It is used by all numerator reports covered by this guide.

A single-person report must conform to the Healthcare Associated Infection Report template. In addition, key data about the resident are recorded in the recordTarget element.

- A resident identifier representing the facility-assigned resident ID is required. Other identifiers for the person can also be present, such as a Medicare beneficiary identifier (id/@root = 2.16.840.1.113883.4.338), and resident ID (id/@root = the appropriate facility OID for resident ID).
- The resident name is optional; consult the NHSN reporting protocol and requirements.
- Resident gender and birthdate are required.

The report-specific requirements specify the encounter data to record for each single-person report type. These data always include an identifier for the reporting facility, and usually include the encounter type, the admission date or encounter date, and the facility unit identifier and type.

Note: The section on “Template Ids in this Guide” includes a containment table showing all the entries within each report type.

**Table 7: HAI Single-Person Report Generic Constraints LTCF Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
ClinicalDocument (identifier: urn:hl7ii:2.16.840.1.113883.10.20.5.1.1.3:2019-08-01)					
templateId	1..1	SHALL		<a href="#">4417-31399</a>	
@root	1..1	SHALL		<a href="#">4417-31406</a>	2.16.840.1.113883.10.20.5.1.1.3
@extension	1..1	SHALL		<a href="#">4417-31415</a>	2019-08-01
recordTarget	1..1	SHALL		<a href="#">4417-31400</a>	
patientRole	1..1	SHALL		<a href="#">4417-31401</a>	
id	1..*	SHALL		<a href="#">4417-31402</a>	
@root	1..1	SHALL		<a href="#">4417-31407</a>	
@extension	1..1	SHALL		<a href="#">4417-31408</a>	
patient	1..1	SHALL		<a href="#">4417-31403</a>	
name	0..1	MAY		<a href="#">4417-31409</a>	US Realm Patient Name (PTN.US.FIELDDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1)
administrativeGenderCode	1..1	SHALL		<a href="#">4417-31404</a>	
@code	1..1	SHALL		<a href="#">4417-31410</a>	urn:oid:2.16.840.1.113883.1.1.1.1 (Administrative Gender (HL7 V3))
birthTime	1..1	SHALL		<a href="#">4417-31405</a>	
@value	1..1	SHALL		<a href="#">4417-31411</a>	
raceCode	0..1	MAY		<a href="#">4417-31412</a>	urn:oid:2.16.840.1.114222.4.1.1.7232 (NHSNRaceCategory)
ethnicGroupCode	0..1	MAY		<a href="#">4417-31413</a>	urn:oid:2.16.840.1.114222.4.1.1.837 (Ethnicity)

1. Conforms to [Healthcare Associated Infection Report](#) template (identifier: urn:oid:2.16.840.1.113883.10.20.5.4.25).
2. **SHALL** contain exactly one [1..1] **templateId** (CONF:4417-31399) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.5.1.1.3" (CONF:4417-31406).
  - b. **SHALL** contain exactly one [1..1] **@extension**="2019-08-01" (CONF:4417-31415).

3. **SHALL** contain exactly one [1..1] **recordTarget** (CONF:4417-31400).
  - a. This recordTarget **SHALL** contain exactly one [1..1] **patientRole** (CONF:4417-31401).
    - i. This patientRole **SHALL** contain at least one [1..\*] **id** (CONF:4417-31402).  
Note: Resident ID, SSN, Medicare beneficiary ID, alternate IDs
      1. Such ids **SHALL** contain exactly one [1..1] **@root** (CONF:4417-31407).
      2. Such ids **SHALL** contain exactly one [1..1] **@extension** (CONF:4417-31408).
    - ii. This patientRole **SHALL** contain exactly one [1..1] **patient** (CONF:4417-31403) such that it
      1. **MAY** contain zero or one [0..1] US Realm Patient Name (PTN.US.FIELDDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1) (CONF:4417-31409).
      2. **SHALL** contain exactly one [1..1] **administrativeGenderCode** (CONF:4417-31404).
        - a. This administrativeGenderCode **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet [Administrative Gender \(HL7 V3\)](#) urn:oid:2.16.840.1.113883.1.11.1 **STATIC** (CONF:4417-31410).
    3. **SHALL** contain exactly one [1..1] **birthTime** (CONF:4417-31405).
      - a. This birthTime **SHALL** contain exactly one [1..1] **@value** (CONF:4417-31411).
    4. **MAY** contain zero or one [0..1] **raceCode**, which **SHALL** be selected from ValueSet [NHSNRaceCategory](#) urn:oid:2.16.840.1.114222.4.11.7232 **DYNAMIC** (CONF:4417-31412).
    5. **MAY** contain zero or one [0..1] **ethnicGroupCode** (ValueSet: [Ethnicity](#) urn:oid:2.16.840.1.114222.4.11.837 **STATIC**) (CONF:4417-31413).
4. The author **MAY** be software or **MAY** be a person in the role of infection control professional (ICP) (CONF:4417-31414).

**Table 8: Administrative Gender (HL7 V3)**

Value Set: Administrative Gender (HL7 V3) urn:oid:2.16.840.1.113883.1.11.1 (Clinical Focus: The gender of a person used for administrative purposes (as opposed to clinical gender)),(Data Element Scope: ),(Inclusion Criteria: All codes in the HL7 V3 AdministrativeGender code system),(Exclusion Criteria: )  This value set was imported on 9/29/2020 with a version of Latest. Value Set Source: <a href="https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.1/expansion">https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.1/expansion</a>			
Code	Code System	Code System OID	Print Name
F	Administrative Gender	urn:oid:2.16.840.1.113883.5.1	Female
M	Administrative Gender	urn:oid:2.16.840.1.113883.5.1	Male
UN	Administrative Gender	urn:oid:2.16.840.1.113883.5.1	Undifferentiated

**Table 9: NHSNRaceCategory**

Value Set: NHSNRaceCategory urn:oid:2.16.840.1.114222.4.11.7232 (Clinical Focus: This value set contains codes describing race.),(Data Element Scope: A code classifying the person into a named category of humans sharing common history, traits, geographical origin or nationality. (source: HL7 V3 RIM).),(Inclusion Criteria: ),(Exclusion Criteria: )  This value set was imported on 9/16/2020 with a version of Latest. Value Set Source: <a href="https://vsac.nlm.nih.gov/valueset/2.16.840.1.114222.4.11.7232/expansion">https://vsac.nlm.nih.gov/valueset/2.16.840.1.114222.4.11.7232/expansion</a>			
Code	Code System	Code System OID	Print Name
1002-5	Race & Ethnicity - CDC	urn:oid:2.16.840.1.113883.6.238	American Indian or Alaska Native
2028-9	Race & Ethnicity - CDC	urn:oid:2.16.840.1.113883.6.238	Asian
2054-5	Race & Ethnicity - CDC	urn:oid:2.16.840.1.113883.6.238	Black or African American
2076-8	Race & Ethnicity - CDC	urn:oid:2.16.840.1.113883.6.238	Native Hawaiian or Other Pacific Islander
2106-3	Race & Ethnicity - CDC	urn:oid:2.16.840.1.113883.6.238	White

**Table 10: Ethnicity**

Value Set: Ethnicity urn:oid:2.16.840.1.114222.4.11.837 (Clinical Focus: ),(Data Element Scope: ),(Inclusion Criteria: ),(Exclusion Criteria: )  This value set was imported on 9/29/2020 with a version of Latest. Value Set Source: <a href="https://vsac.nlm.nih.gov/valueset/2.16.840.1.114222.4.11.837/expansion">https://vsac.nlm.nih.gov/valueset/2.16.840.1.114222.4.11.837/expansion</a>			
Code	Code System	Code System OID	Print Name
2135-2	Race & Ethnicity - CDC	urn:oid:2.16.840.1.113883.6.238	Hispanic or Latino
2186-5	Race & Ethnicity - CDC	urn:oid:2.16.840.1.113883.6.238	Not Hispanic or Latino

#### 1.1.4 Laboratory Identified MDRO or CDI Event Report for LTCF

[ClinicalDocument: identifier urn:hl7ii:2.16.840.1.113883.10.20.5.1.1.1:2019-08-01 (closed)]

Published as part of NHSN Healthcare Associated Infection (HAI) Report for Long Term Care Facilities (LTCF), Release 1 - US Realm

**Table 11: Laboratory Identified MDRO or CDI Event Report for LTCF Contexts**

Contained By:	Contains:
	<a href="#">NHSN Comment Section</a> (optional) <a href="#">Findings Section in a Laboratory Identified Report LTCF</a> (required) <a href="#">Encounters Section in an LTCF Report</a> (required)

This report records the laboratory identification of an MDRO or CDI. These reports are submitted if the LTCF is monitoring the organism specified. Each report records a single event as indicated by the NHSN protocol.

Information regarding the resident's care location, type of primary service, and date of current admission are found in the header of this document.

This template represents the Laboratory-identified MDRO or CDI Event for LTCF form (CDC 57.138). It records the laboratory identification of key encounter data in the report such as:

- The date of the current admission to the facility location where the specimen was collected is required and is recorded in encompassingEncounter/effectiveTime.
- The date of specimen collection is recorded in effectiveTime in the Specimen Collection Procedure LTCF template.

Key Finding data in this report includes:

- Information on the type of organism, the body site from which it was collected, and the date in which it was collected.

For further details on reporting C. difficile Infection (CDI) and Multidrug Resistant Organism (MDRO) LabID events in long-term care facilities see the NHSN website (<https://www.cdc.gov/nhsn/>).

**Table 12: Laboratory Identified MDRO or CDI Event Report for LTCF Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
ClinicalDocument (identifier: urn:hl7ii:2.16.840.1.113883.10.20.5.1.1.1:2019-08-01)					
templateId	1..1	SHALL		<a href="#">4417-30990</a>	
@root	1..1	SHALL		<a href="#">4417-30998</a>	2.16.840.1.113883.10.20.5.1.1.1
@extension	1..1	SHALL		<a href="#">4417-30999</a>	2019-08-01
title	1..1	SHALL		<a href="#">4417-31247</a>	
componentOf	1..1	SHALL		<a href="#">4417-30977</a>	
encompassingEncounter	1..1	SHALL		<a href="#">4417-30978</a>	
effectiveTime	1..1	SHALL		<a href="#">4417-30979</a>	
low	1..1	SHALL		<a href="#">4417-31427</a>	
location	1..1	SHALL		<a href="#">4417-30981</a>	
healthCareFacility	1..1	SHALL		<a href="#">4417-30982</a>	
id	1..1	SHALL		<a href="#">4417-30983</a>	
@root	1..1	SHALL		<a href="#">4417-30996</a>	
@extension	1..1	SHALL		<a href="#">4417-31360</a>	
code	1..1	SHALL		<a href="#">4417-31361</a>	urn:oid:2.16.840.1.113883.10.20.5.1.5.9.3 (NHSNPrimaryResidentService Type)
component	1..1	SHALL		<a href="#">4417-30984</a>	
structuredBody	1..1	SHALL		<a href="#">4417-30985</a>	
component	1..1	SHALL		<a href="#">4417-30986</a>	
section	1..1	SHALL		<a href="#">4417-30987</a>	<a href="#">Findings Section in a Laboratory Identified Report LTCF (identifier: urn:hl7ii:2.16.840.1.113883.10.20.5.1.2.1:2019-08-01)</a>
component	1..1	SHALL		<a href="#">4417-30988</a>	
section	1..1	SHALL		<a href="#">4417-30989</a>	<a href="#">Encounters Section in an LTCF Report (identifier: urn:hl7ii:2.16.840.1.113883.10.20.5.1.2.2:2019-08-01)</a>
component	0..1	MAY		<a href="#">4417-31417</a>	
section	1..1	SHALL		<a href="#">4417-31418</a>	<a href="#">NHSN Comment Section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.5.5.61:2017-04-01)</a>

1. Conforms to [HAI Single-Person Report Generic Constraints LTCF](#) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.5.1.1.3:2019-08-01).
2. **SHALL** contain exactly one [1..1] **templateId** (CONF:4417-30990) such that it

- a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.5.1.1.1" (CONF:4417-30998).
- b. **SHALL** contain exactly one [1..1] **@extension**="2019-08-01" (CONF:4417-30999).

Laboratory-identified MDRO or CDI Event for LTCF

- 3. **SHALL** contain exactly one [1..1] **title** (CONF:4417-31247).
- 4. **SHALL** contain exactly one [1..1] **componentOf** (CONF:4417-30977).
  - a. This **componentOf** **SHALL** contain exactly one [1..1] **encompassingEncounter** (CONF:4417-30978).
    - i. This **encompassingEncounter** **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:4417-30979).
      - 1. This **effectiveTime** **SHALL** contain exactly one [1..1] **low** (CONF:4417-31427).  
Note: Date of Current Admission
    - ii. This **encompassingEncounter** **SHALL** contain exactly one [1..1] **location** (CONF:4417-30981).
      - 1. This **location** **SHALL** contain exactly one [1..1] **healthCareFacility** (CONF:4417-30982).
        - a. This **healthCareFacility** **SHALL** contain exactly one [1..1] **id** (CONF:4417-30983).

The value of **@root** must be the NHSN assigned facility OID.

- i. This **id** **SHALL** contain exactly one [1..1] **@root** (CONF:4417-30996).  
Note: Facility ID

The value of **@extension** must be a value registered with NHSN.

- ii. This **id** **SHALL** contain exactly one [1..1] **@extension** (CONF:4417-31360).  
Note: Resident Care Location
- b. This **healthCareFacility** **SHALL** contain exactly one [1..1] **code**, which **SHALL** be selected from ValueSet [NHSNPrimaryResidentServiceType](#)  
**urn:oid:2.16.840.1.113883.10.20.5.1.5.9.3 DYNAMIC** (CONF:4417-31361).  
Note: Primary Resident Service Type
- 5. **SHALL** contain exactly one [1..1] **component** (CONF:4417-30984).
  - a. This **component** **SHALL** contain exactly one [1..1] **structuredBody** (CONF:4417-30985).
    - i. This **structuredBody** **SHALL** contain exactly one [1..1] **component** (CONF:4417-30986) such that it
      - 1. **SHALL** contain exactly one [1..1] [Findings Section in a Laboratory Identified Report LTCF](#) (**identifier**:  
**urn:hl7ii:2.16.840.1.113883.10.20.5.1.2.1:2019-08-01**) (CONF:4417-30987).

- ii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:4417-30988) such that it
  1. **SHALL** contain exactly one [1..1] [Encounters Section in an LTCF Report](#) (identifier:  
urn:hl7ii:2.16.840.1.113883.10.20.5.1.2.2:2019-08-01)  
(CONF:4417-30989).
- iii. This structuredBody **MAY** contain zero or one [0..1] **component** (CONF:4417-31417) such that it
  1. **SHALL** contain exactly one [1..1] [NHSN Comment Section](#) (identifier:  
urn:hl7ii:2.16.840.1.113883.10.20.5.5.61:2017-04-01)  
(CONF:4417-31418).

**Table 13: NHSNPrimaryResidentServiceType**

Value Set: NHSNPrimaryResidentServiceType urn:oid:2.16.840.1.113883.10.20.5.1.5.9.3 (Clinical Focus: Location where service was provided for reporting laboratory identification of MDRO or CDI in LTCF to NHSN),(Data Element Scope: Code identifying the type of service location in a health care facility.),(Inclusion Criteria: ),(Exclusion Criteria: )  This value set was imported on 9/16/2020 with a version of Latest. Value Set Source: <a href="https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.10.20.5.1.5.9.3/expansion">https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.10.20.5.1.5.9.3/expansion</a>			
Code	Code System	Code System OID	Print Name
1254-2	HSLOC	urn:oid:2.16.840.1.113883.6.259	Long Term Care Facility Inpatient Hospice Unit
1255-9	HSLOC	urn:oid:2.16.840.1.113883.6.259	Long Term Care Facility Dementia Unit
1256-7	HSLOC	urn:oid:2.16.840.1.113883.6.259	Long Term Care Facility Psychiatric Unit
1257-5	HSLOC	urn:oid:2.16.840.1.113883.6.259	Long Term Care Facility Skilled Nursing-Short Term Rehabilitation Unit
1258-3	HSLOC	urn:oid:2.16.840.1.113883.6.259	Long Term Care Facility General Nursing Unit
1259-1	HSLOC	urn:oid:2.16.840.1.113883.6.259	Long Term Care Facility Ventilator Dependent Unit
1260-9	HSLOC	urn:oid:2.16.840.1.113883.6.259	Long Term Care Facility Bariatric Unit

**Figure 3: Laboratory Identified MDRO or CDI Event Report LTCF Example**

```

<ClinicalDocument>
  <!-- This is a single-person report. -->
  <realmCode code="US" />
  <typeId root="2.16.840.1.113883.1.3" extension="POCD_HD000040" />
  <!-- [HAI Normative R1] Conformant to Healthcare Associated Infection Report -->
  <templateId root="2.16.840.1.113883.10.20.5.4.25" />
  <!-- [HAI LTCF R1D1] Conformant to Laboratory Identified MDRO or CDI
    Event Report for LTCF -->
  <templateId root="2.16.840.1.113883.10.20.5.1.1.1" extension="2019-08-01" />
  <!-- [HAI LTCF R1D1] Conformant to HAI Single-Person Report
    Generic Constraints LTCF -->
  <templateId root="2.16.840.1.113883.10.20.5.1.1.3" extension="2019-08-01" />
  <!-- Document ID (extension) is scoped by vendor/software -->
  <id root="2.16.840.1.113883.3.117.1.1.5.2.1.1.2" extension="20202201" />
  <code codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" code="51897-7"
    displayName="Healthcare Associated Infection Report" />
  <title>Laboratory-identified MDRO or CDI Event for LTCF</title>
  <effectiveTime value="20190129" />
  <confidentialityCode codeSystem="2.16.840.1.113883.5.25" code="N" />
  <languageCode code="en-US" />
  <setId root="2.16.840.1.113883.3.117.1.1.5.2.1.1.1" extension="31" />
  <!-- the original -->
  <versionNumber value="1" />
  <recordTarget>
    <patientRole>
      <!-- Resident Facility ID - scoped by facility -->
      <id root="2.16.840.1.113883.3.117.1.1.5.1.1.1" extension="123456" />
      <!-- Resident Medicare number -->
      <id root="2.16.840.1.113883.4.338" extension="111111111Z" />
      <patient>
        <name>
          <family>Nuclear</family>
          <given>Ned</given>
          <given>Middle</given>
        </name>
        <administrativeGenderCode codeSystem="2.16.840.1.113883.5.1" code="M" />
        <birthTime value="19541125" />
        <raceCode code="2106-3" displayName="White"
          codeSystem="2.16.840.1.113883.6.238"
          codeSystemName="Race & Ethnicity - CDC" />
        <ethnicGroupCode code="2186-5" displayName="Not Hispanic or Latino"
          codeSystem="2.16.840.1.113883.6.238"
          codeSystemName="Race & Ethnicity - CDC" />
      </patient>
    </patientRole>
  </recordTarget>
  <!-- Author/authenticator may be software or may be
    someone in the role of "infection control professional".
    This author is scoped by facility. -->
  <author>
    <time value="20080807" />
    ...
  </author>
  <!-- The custodian of the CDA document is NHSN -->
  <custodian>

```

```

    <assignedCustodian>
      ...
    </assignedCustodian>
  </custodian>
  <!-- legal authenticator is scoped by facility -->
  <legalAuthenticator>
    ...
  </legalAuthenticator>
  <componentOf>
    <encompassingEncounter>
      <effectiveTime>
        <!-- Date of Current Admission to Facility -->
        <low value="20190115" />
      </effectiveTime>
      <location>
        <healthCareFacility>
          <!-- root is the NHSN assigned facility OID/'Facility ID' -->
          <!-- extension must be a value registered with
              NHSN/'Resident Care Location' -->
          <id root="2.16.840.1.113883.3.117.1.1.5.1.1" extension="1A" />
          <!-- Primary Resident Service Type -->
          <code codeSystem="2.16.840.1.113883.6.277" codeSystemName="cdcNHSN"
              code="1255-9"
              displayName="Long Term Care Facility Dementia Unit" />
        </healthCareFacility>
      </location>
    </encompassingEncounter>
  </componentOf>
</ClinicalDocument>

```

## 2 SECTION-LEVEL TEMPLATES

### 2.1 HAI Section Generic Constraints

[section: identifier urn:oid:2.16.840.1.113883.10.20.5.4.26 (closed)]

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Release 1 - US Realm

This template records the constraints that apply to all sections specified in the NHSN HAI Implementation Guide.

**Table 14: HAI Section Generic Constraints Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
section (identifier: urn:oid:2.16.840.1.113883.10.20.5.4.26)					
templateId	1..1	SHALL		<a href="#">86-21958</a>	
@root	1..1	SHALL		<a href="#">86-21959</a>	2.16.840.1.113883.10.20.5.4.26
code	1..1	SHALL		<a href="#">86-21953</a>	
@code	1..1	SHALL		<a href="#">86-21954</a>	urn:oid:2.16.840.1.113883.6.1 (LOINC)
title	1..1	SHALL		<a href="#">86-21955</a>	
text	1..1	SHALL		<a href="#">86-21956</a>	
entry	1..*	SHALL		<a href="#">86-21957</a>	

1. **SHALL** contain exactly one [1..1] **templateId** (CONF:86-21958) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.5.4.26" (CONF:86-21959).
2. **SHALL** contain exactly one [1..1] **code** (CONF:86-21953).
  - a. This code **SHALL** contain exactly one [1..1] **@code** (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1 **STATIC**) (CONF:86-21954).
3. **SHALL** contain exactly one [1..1] **title** (CONF:86-21955).
4. **SHALL** contain exactly one [1..1] **text** (CONF:86-21956).
5. **SHALL** contain at least one [1..\*] **entry** (CONF:86-21957).

### 2.1.1 Encounters Section in an LTCF Report

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.5.1.2.2:2019-08-01  
(closed)]

Published as part of NHSN Healthcare Associated Infection (HAI) Report for  
Long Term Care Facilities (LTCF), Release 1 - US Realm

**Table 15: Encounters Section in an LTCF Report Contexts**

Contained By:	Contains:
<a href="#">Laboratory Identified MDRO or CDI Event Report for LTCF</a> (required)	<a href="#">First Admission Encounter in a Lab Identified Report LTCF</a> (required) <a href="#">Transfer From Acute Care Facility to LTCF in Past Four Weeks</a> (required)

This template contains entries representing the first admission date to the facility along with whether or not the resident was transferred from an acute care facility in the past four weeks.

**Table 16: Encounters Section in an LTCF Report Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.5.1.2.2:2019-08-01)					
templateId	1..1	SHALL		<a href="#">4417-31091</a>	
@root	1..1	SHALL		<a href="#">4417-31097</a>	2.16.840.1.113883.10.20.5.1.2.2
@extension	1..1	SHALL		<a href="#">4417-31098</a>	2019-08-01
code	1..1	SHALL		<a href="#">4417-31092</a>	
@code	1..1	SHALL		<a href="#">4417-31099</a>	46240-8
@codeSystem	1..1	SHALL		<a href="#">4417-31100</a>	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
entry	1..1	SHALL		<a href="#">4417-31089</a>	
encounter	1..1	SHALL		<a href="#">4417-31090</a>	<a href="#">First Admission Encounter in a Lab Identified Report LTCF (identifier: urn:hl7ii:2.16.840.1.113883.10.20.5.1.3.4:2019-08-01)</a>
entry	1..1	SHALL		<a href="#">4417-31093</a>	
observation	1..1	SHALL		<a href="#">4417-31394</a>	<a href="#">Transfer From Acute Care Facility to LTCF in Past Four Weeks (identifier: urn:hl7ii:2.16.840.1.113883.10.20.5.1.3.5:2019-08-01)</a>

1. Conforms to [HAI Section Generic Constraints](#) template (identifier: urn:oid:2.16.840.1.113883.10.20.5.4.26).
2. **SHALL** contain exactly one [1..1] **templateId** (CONF:4417-31091) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.5.1.2.2" (CONF:4417-31097).
  - b. **SHALL** contain exactly one [1..1] **@extension**="2019-08-01" (CONF:4417-31098).
3. **SHALL** contain exactly one [1..1] **code** (CONF:4417-31092).
  - a. This code **SHALL** contain exactly one [1..1] **@code**="46240-8" History of Encounters (CONF:4417-31099).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem**="2.16.840.1.113883.6.1" (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:4417-31100).
4. **SHALL** contain exactly one [1..1] **entry** (CONF:4417-31089) such that it

- a. **SHALL** contain exactly one [1..1] First Admission Encounter in a Lab Identified Report LTCF (identifier: urn:hl7ii:2.16.840.1.113883.10.20.5.1.3.4:2019-08-01) (CONF:4417-31090).
5. **SHALL** contain exactly one [1..1] **entry** (CONF:4417-31093) such that it
  - a. **SHALL** contain exactly one [1..1] Transfer From Acute Care Facility to LTCF in Past Four Weeks (identifier: urn:hl7ii:2.16.840.1.113883.10.20.5.1.3.5:2019-08-01) (CONF:4417-31394).

**Figure 4: Encounters Section in an LTCF Report Example**

```

<section>
  <!-- [HAI Normative R1]HAI Section Generic Constraints -->
  <templateId root="2.16.840.1.113883.10.20.5.4.26" />
  <!-- [HAI LTCF R1D1] Encounters Section in an LTCF Report -->
  <templateId root="2.16.840.1.113883.10.20.5.1.2.2" extension="2019-08-01" />
  <code code="46240-8" codeSystem="2.16.840.1.113883.6.1"
    displayName="History of Encounters" />
  <title>Encounters</title>
  <text>
    ...
  </text>
  <entry typeCode="DRIV">
    <encounter classCode="ENC" moodCode="EVN">
      <!-- [C-CDA R2.1] Encounter Activity (V3) -->
      <templateId root="2.16.840.1.113883.10.20.22.4.49" extension="2015-08-01" />
      <!-- [HAI LTCF R1D1] First Admission Encounter in a Lab Identified Report LTCF
-->
      <templateId root="2.16.840.1.113883.10.20.5.1.3.4"
        extension="2019-08-01" />
      ...
    </encounter>
  </entry>
  <!-- The Resident has been transferred from an acute facility
    in the past 4 weeks? = TRUE-->
  <entry typeCode="DRIV">
    <observation classCode="OBS" moodCode="EVN">
      <!-- [HAI LTCF R1D1] Transfer From Acute Care Facility to LTCF in Past Four
Weeks -->
      <templateId root="2.16.840.1.113883.10.20.5.1.3.5"
        extension="2019-08-01" />
      ...
    </observation>
  </entry>
</section>

```

## 2.1.2 Findings Section in a Laboratory Identified Report LTCF

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.5.1.2.1:2019-08-01 (closed)]

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**Table 17: Findings Section in a Laboratory Identified Report LTCF Contexts**

Contained By:	Contains:
<a href="#">Laboratory Identified MDRO or CDI Event Report for LTCF</a> (required)	<a href="#">Pathogen Identified Observation in a Lab Identified Report LTCF</a> (required)

This template records a laboratory-identified microorganism. It records one microorganism (if more were identified, each is recorded in a separate report), and details about the specimen collection.

**Table 18: Findings Section in a Laboratory Identified Report LTCF Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.5.1.2.1:2019-08-01)					
templateId	1..1	SHALL		<a href="#">4417-31065</a>	
@root	1..1	SHALL		<a href="#">4417-31067</a>	2.16.840.1.113883.10.20.5.1.2.1
@extension	1..1	SHALL		<a href="#">4417-31068</a>	2019-08-01
code	1..1	SHALL		<a href="#">4417-31066</a>	
@code	1..1	SHALL		<a href="#">4417-31069</a>	18769-0
@codeSystem	1..1	SHALL		<a href="#">4417-31070</a>	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
entry	1..1	SHALL		<a href="#">4417-31063</a>	
observation	1..1	SHALL		<a href="#">4417-31064</a>	<a href="#">Pathogen Identified Observation in a Lab Identified Report LTCF (identifier: urn:hl7ii:2.16.840.1.113883.10.20.5.1.3.3:2019-08-01)</a>

1. Conforms to [HAI Section Generic Constraints](#) template (identifier: urn:oid:2.16.840.1.113883.10.20.5.4.26).
2. **SHALL** contain exactly one [1..1] **templateId** (CONF:4417-31065) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.5.1.2.1" (CONF:4417-31067).
  - b. **SHALL** contain exactly one [1..1] **@extension**="2019-08-01" (CONF:4417-31068).

3. **SHALL** contain exactly one [1..1] **code** (CONF:4417-31066).
  - a. This code **SHALL** contain exactly one [1..1] **@code**="18769-0" Findings Section (CONF:4417-31069).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem**="2.16.840.1.113883.6.1" (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:4417-31070).
4. **SHALL** contain exactly one [1..1] **entry** (CONF:4417-31063) such that it
  - a. **SHALL** contain exactly one [1..1] [Pathogen Identified Observation in a Lab Identified Report LTCF](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.5.1.3.3:2019-08-01) (CONF:4417-31064).

**Figure 5: Findings Section in an Laboratory Identified Report LTCF Example**

```

<section>
  <!-- [HAI Normative R1] HAI Section Generic Constraints -->
  <templateId root="2.16.840.1.113883.10.20.5.4.26" />
  <!-- [HAI LTCF R1D1] Findings Section in a Laboratory Identified
    Report LTCF -->
  <templateId root="2.16.840.1.113883.10.20.5.1.2.1"
    extension="2019-08-01" />
  <code codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
    code="18769-0" displayName="Findings" />
  <title>Lab-identified organism</title>
  <text>...</text>
  <entry typeCode="DRIV">
    <observation classCode="OBS" moodCode="EVN">
      <!-- [C-CDA R2.1] Result Observation -->
      <templateId root="2.16.840.1.113883.10.20.22.4.2"
        extension="2015-08-01"/>
      <!-- [HAI LTCF R1D1] Pathogen Identified Observation in a Lab
        Identified Report LTCF -->
      LTCF -->
      <templateId root="2.16.840.1.113883.10.20.5.1.3.3"
        extension="2019-08-01"/>
      ...
    </observation>
  </entry>
</section>

```

### 2.1.3 NHSN Comment Section

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.5.5.61:2017-04-01 (closed)]

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**Table 19: NHSN Comment Section Contexts**

Contained By:	Contains:
<a href="#">Laboratory Identified MDRO or CDI Event Report for LTCF</a> (optional)	<a href="#">NHSN Comment</a> (required)

The NHSN Comment Section contains the NHSN Comment template. This section is not specific to any one report and contains comments that are relevant to the whole report (it is not specific to any section of a report).

**Table 20: NHSN Comment Section Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.5.5.61:2017-04-01)					
templateId	1..1	SHALL		<a href="#">3311-172</a>	
@root	1..1	SHALL		<a href="#">3311-180</a>	2.16.840.1.113883.10.20.5.5.61
@extension	1..1	SHALL		<a href="#">3311-181</a>	2017-04-01
code	1..1	SHALL		<a href="#">3311-173</a>	
@code	1..1	SHALL		<a href="#">3311-182</a>	86468-6
@codeSystem	1..1	SHALL		<a href="#">3311-183</a>	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
entry	1..1	SHALL		<a href="#">3311-179</a>	
act	1..1	SHALL		<a href="#">3311-184</a>	<a href="#">NHSN Comment (identifier: urn:hl7ii:2.16.840.1.113883.10.20.5.6.243:2017-04-01)</a>

1. Conforms to [HAI Section Generic Constraints](#) template (identifier: urn:oid:2.16.840.1.113883.10.20.5.4.26).
2. **SHALL** contain exactly one [1..1] **templateId** (CONF:3311-172) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.5.5.61" (CONF:3311-180).
  - b. **SHALL** contain exactly one [1..1] **@extension**="2017-04-01" (CONF:3311-181).
3. **SHALL** contain exactly one [1..1] **code** (CONF:3311-173).
  - a. This code **SHALL** contain exactly one [1..1] **@code**="86468-6" Report Comment Section (CONF:3311-182).

- b. This code **SHALL** contain exactly one [1..1]  
@codeSystem="2.16.840.1.113883.6.1" (CodeSystem: LOINC  
urn:oid:2.16.840.1.113883.6.1) (CONF:3311-183).
4. **SHALL** contain exactly one [1..1] **entry** (CONF:3311-179) such that it
  - a. **SHALL** contain exactly one [1..1] [NHSN Comment](#) (identifier:  
urn:hl7ii:2.16.840.1.113883.10.20.5.6.243:2017-04-01) (CONF:3311-184).

**Figure 6: NHSN Comment Section Example**

```
<section>
  <!-- HAI Section Generic Constraints -->
  <templateId root="2.16.840.1.113883.10.20.5.4.26" />
  <!-- [HAI R3D2] NHSN Comment Section -->
  <templateId root="2.16.840.1.113883.10.20.5.5.61" extension="2017-04-01" />
  <code code="86468-6"
    displayName="Report comment section"
    codeSystem="2.16.840.1.113883.6.1"
    codeSystemName="LOINC" />
  <title>Comment</title>
  <text>...</text>
  <entry typeCode="DRIV">
    <act classCode="ACT" moodCode="EVN">
      <!-- [HAI R3D2] Comment -->
      <templateId root="2.16.840.1.113883.10.20.5.6.243" extension="2017-04-01" />
      ...
    </act>
  </entry>
</section>
```

#### 2.1.4 Report No Events Section

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.5.5.62:2018-04-01  
(closed)]

Published as part of NHSN Healthcare Associated Infection (HAI) Reports  
Release 3, STU 3 - US Realm

**Table 21: Report No Events Section Contexts**

Contained By:	Contains:
<a href="#">MDRO and CDI LabID Event Reporting Monthly Summary Data for LTCF</a> (optional)	<a href="#">Report No Events</a> (required)

The Report No Events Section contains the Report No Events template. This section is available for use in any report. If this section is present in a report it must contain at least one entry.

**Table 22: Report No Events Section Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.5.5.62:2018-04-01)					
templateId	1..1	SHALL		<a href="#">3357-30604</a>	
@root	1..1	SHALL		<a href="#">3357-30608</a>	2.16.840.1.113883.10.20.5.5.62
@extension	1..1	SHALL		<a href="#">3357-30609</a>	2018-04-01
code	1..1	SHALL		<a href="#">3357-30605</a>	
@code	1..1	SHALL		<a href="#">3357-30610</a>	90252-8
@codeSystem	1..1	SHALL		<a href="#">3357-30611</a>	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
entry	1..*	SHALL		<a href="#">3357-30606</a>	
act	1..1	SHALL		<a href="#">3357-30910</a>	<a href="#">Report No Events (identifier: urn:hl7ii:2.16.840.1.113883.10.20.5.6.249:2018-04-01)</a>

1. Conforms to [HAI Section Generic Constraints](#) template (identifier: urn:oid:2.16.840.1.113883.10.20.5.4.26).
2. **SHALL** contain exactly one [1..1] **templateId** (CONF:3357-30604) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.5.5.62" (CONF:3357-30608).
  - b. **SHALL** contain exactly one [1..1] **@extension**="2018-04-01" (CONF:3357-30609).
3. **SHALL** contain exactly one [1..1] **code** (CONF:3357-30605).
  - a. This code **SHALL** contain exactly one [1..1] **@code**="90252-8" Report No Events section (CONF:3357-30610).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem**="2.16.840.1.113883.6.1" (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:3357-30611).
4. **SHALL** contain at least one [1..\*] **entry** (CONF:3357-30606) such that it
  - a. **SHALL** contain exactly one [1..1] [Report No Events](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.5.6.249:2018-04-01) (CONF:3357-30910).

**Figure 7: Report No Events Section Example**

```
<section>
  <!-- HAI Section Generic Constraints -->
  <templateId root="2.16.840.1.113883.10.20.5.4.26" />
  <!-- [HAI R3D3] Report No Events Section -->
  <templateId root="2.16.840.1.113883.10.20.5.5.62" extension="2018-04-01" />
  <code codeSystem="2.16.840.1.113883.6.1"
    codeSystemName="LOINC"
    code="90252-8"
    displayName="Report No Events Section" />
  <title>Report No Events</title>
  <text>
    <table>
      <tbody>
        <tr>
          <td>Report no infection surveillance events - Methicillin-resistant
Staphylococcus aureus</td>
        </tr>
      </tbody>
    </table>
  </text>
  <entry typeCode="DRIV">
    <act classCode="ACT" moodCode="EVN">
      <!-- [HAI R3D3] Report No Events-->
      <templateId root="2.16.840.1.113883.10.20.5.6.249" extension="2018" />
      ...
    </act>
  </entry>
  ...
</section>
```

### 2.1.5 Summary Data Section LTCF

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.5.1.2.3:2019-08-01  
(closed)]

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Long Term Care Facilities (LTCF), Release 1 - US Realm

**Table 23: Summary Data Section LTCF Contexts**

Contained By:	Contains:
<a href="#">MDRO and CDI LabID Event Reporting Monthly Summary Data for LTCF</a> (required)	<a href="#">Summary Encounter LTCF</a> (required)

This template is used in some LTCF population summary reports. The specific counts to be reported in the section vary by report topic, but the section itself conveys the same kind of information wherever used, therefore, the section is represented by the same LOINC section code whatever the data reported.

**Table 24: Summary Data Section LTCF Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.5.1.2.3:2019-08-01)					
templateId	1..1	SHALL		<a href="#">4417-31187</a>	
@root	1..1	SHALL		<a href="#">4417-31193</a>	2.16.840.1.113883.10.20.5.1.2.3
@extension	1..1	SHALL		<a href="#">4417-31194</a>	2019-08-01
code	1..1	SHALL		<a href="#">4417-31188</a>	
@code	1..1	SHALL		<a href="#">4417-31195</a>	51900-9
@codeSystem	1..1	SHALL		<a href="#">4417-31196</a>	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
entry	1..1	SHALL		<a href="#">4417-31191</a>	
encounter	1..1	SHALL		<a href="#">4417-31352</a>	<a href="#">Summary Encounter LTCF (identifier: urn:hl7ii:2.16.840.1.113883.10.20.5.1.3.15:2019-08-01)</a>

1. Conforms to [HAI Section Generic Constraints](#) template (identifier: urn:oid:2.16.840.1.113883.10.20.5.4.26).
2. **SHALL** contain exactly one [1..1] **templateId** (CONF:4417-31187) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.5.1.2.3" (CONF:4417-31193).
  - b. **SHALL** contain exactly one [1..1] **@extension**="2019-08-01" (CONF:4417-31194).
3. **SHALL** contain exactly one [1..1] **code** (CONF:4417-31188).
  - a. This code **SHALL** contain exactly one [1..1] **@code**="51900-9" Summary Data Section (CONF:4417-31195).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem**="2.16.840.1.113883.6.1" (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:4417-31196).
4. **SHALL** contain exactly one [1..1] **entry** (CONF:4417-31191) such that it
  - a. **SHALL** contain exactly one [1..1] [Summary Encounter LTCF](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.5.1.3.15:2019-08-01) (CONF:4417-31352).

**Figure 8: Summary Data Section LTCF Example**

```
<section>
  <!-- [HAI Normative R1] HAI Section Generic Constraints -->
  <templateId root="2.16.840.1.113883.10.20.5.4.26" />
  <!-- [HAI LTCF R1D1] Summary Data Section LTCF -->
  <templateId root="2.16.840.1.113883.10.20.5.1.2.3" extension="2019-08-01" />
  <code codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" code="51900-9"
    displayName="Summary Section" />
  <title>Summary Data</title>
  <text>...</text>
  <entry typeCode="DRIV">
    <encounter classCode="ENC" moodCode="EVN">
      <!-- Summary Encounter LTCF [R1D1] -->
      <templateId root="2.16.840.1.113883.10.20.5.1.3.15" extension="2019-08-01"
        />
      ...
    </encounter>
  </entry>
</section>
```

### 3 ENTRY-LEVEL TEMPLATES

#### 3.1 Antibiotic Treatment at Time of Transfer

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.5.1.3.12:2019-08-01 (closed)]

Published as part of NHSN Healthcare Associated Infection (HAI) Report for Long Term Care Facilities (LTCF), Release 1 - US Realm

**Table 25: Antibiotic Treatment at Time of Transfer Contexts**

Contained By:	Contains:
<a href="#">Transfer From Acute Care Facility to LTCF in Past Four Weeks</a> (optional)	

This observation records whether the resident was on antibiotic therapy for the reported pathogen at the time of transfer to the LTCF.

NOTE: If the resident was NOT transferred from an acute care facility in the past 4 weeks, this template SHALL NOT be present.

**Table 26: Antibiotic Treatment at Time of Transfer Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.5.1.3.12:2019-08-01)					
@classCode	1..1	SHALL		<a href="#">4417-31227</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">4417-31228</a>	urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN
templateId	1..1	SHALL		<a href="#">4417-31235</a>	
@root	1..1	SHALL		<a href="#">4417-31236</a>	2.16.840.1.113883.10.20.5.1.3.12
@extension	1..1	SHALL		<a href="#">4417-31237</a>	2019-08-01
code	1..1	SHALL		<a href="#">4417-31224</a>	
@code	1..1	SHALL		<a href="#">4417-31230</a>	1375-5
@codeSystem	1..1	SHALL		<a href="#">4417-31388</a>	urn:oid:2.16.840.1.113883.6.277 (cdcNHSN) = 2.16.840.1.113883.6.277
statusCode	1..1	SHALL		<a href="#">4417-31225</a>	
@code	1..1	SHALL		<a href="#">4417-31231</a>	urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed
value	1..1	SHALL	BL	<a href="#">4417-31226</a>	

1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:4417-31227).
2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:4417-31228).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:4417-31235) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.5.1.3.12" (CONF:4417-31236).
  - b. **SHALL** contain exactly one [1..1] **@extension**="2019-08-01" (CONF:4417-31237).
4. **SHALL** contain exactly one [1..1] **code** (CONF:4417-31224).
  - a. This code **SHALL** contain exactly one [1..1] **@code**="1375-5" Resident on antibiotic therapy for this specific organism at the time of transfer (CONF:4417-31230).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem**="2.16.840.1.113883.6.277" (CodeSystem: cdcNHSN urn:oid:2.16.840.1.113883.6.277 **STATIC**) (CONF:4417-31388).
5. **SHALL** contain exactly one [1..1] **statusCode** (CONF:4417-31225).

- a. This statusCode **SHALL** contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:4417-31231).
6. **SHALL** contain exactly one [1..1] value with @xsi:type="BL" (CONF:4417-31226).  
Note: Resident was on antibiotic therapy for this specific organism type at the time of transfer to your facility

**Figure 9: Antibiotic Treatment at Time of Transfer Example**

```
<observation classCode="OBS" moodCode="EVN">
  <!-- [HAI LTCF R1D1] Antibiotic Treatment at Time of Transfer -->
  <templateId root="2.16.840.1.113883.10.20.5.1.3.12" extension="2019-08-01" />
  <code code="1375-5"
    displayName="Resident on antibiotic therapy for this specific organism
    at the time of transfer"
    codeSystem="2.16.840.1.113883.6.277" codeSystemName="cdcNHSN" />
  <statusCode code="completed" />
  <!-- Resident was on antibiotic therapy for this organism at the time of transfer -->
  <!-- set value="true" if this resident was on antibiotic therapy for this
    organism at the time of transfer. Set value="false" if this resident was
    not on antibiotic therapy for this organism at the time of transfer -->
  <value xsi:type="BL" value="true" />
</observation>
```

### 3.2 First Admission Encounter in a Lab Identified Report LTCF

[encounter: identifier urn:hl7ii:2.16.840.1.113883.10.20.5.1.3.4:2019-08-01 (closed)]

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**Table 27: First Admission Encounter in a Lab Identified Report LTCF Contexts**

Contained By:	Contains:
<a href="#">Encounters Section in an LTCF Report</a> (required)	

This template records the date of first admission to the facility. This is the date the resident first entered the facility. This date remains the same even if the resident leaves the facility (for example, transfers to another facility) for short periods of time (less than 30 consecutive days). If the resident leaves the facility and is away for 30 or more consecutive days, the date of first admission should be updated to the date of return to the facility

**Table 28: First Admission Encounter in a Lab Identified Report LTCF Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
encounter (identifier: urn:hl7ii:2.16.840.1.113883.10.20.5.1.3.4:2019-08-01)					
@classCode	1..1	SHALL		<a href="#">4417-31083</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ENC
@moodCode	1..1	SHALL		<a href="#">4417-31084</a>	urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN
templateId	1..1	SHALL		<a href="#">4417-31077</a>	
@root	1..1	SHALL		<a href="#">4417-31086</a>	2.16.840.1.113883.10.20.22.4.49
templateId	1..1	SHALL		<a href="#">4417-31424</a>	
@root	1..1	SHALL		<a href="#">4417-31425</a>	2.16.840.1.113883.10.20.5.1.3.4
@extension	1..1	SHALL		<a href="#">4417-31426</a>	2019-08-01
id	1..1	SHALL		<a href="#">4417-31072</a>	
@nullFlavor	1..1	SHALL		<a href="#">4417-31078</a>	NA
code	1..1	SHALL		<a href="#">4417-31073</a>	
@code	1..1	SHALL		<a href="#">4417-31079</a>	1373-0
@codeSystem	1..1	SHALL		<a href="#">4417-31395</a>	urn:oid:2.16.840.1.113883.6.277 (cdcNHSN) = 2.16.840.1.113883.6.277
effectiveTime	1..1	SHALL		<a href="#">4417-31074</a>	
low	1..1	SHALL		<a href="#">4417-31088</a>	

1. Conforms to Encounter Activities template (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.49).
2. **SHALL** contain exactly one [1..1] @classCode="ENC" Encounter (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:4417-31083).
3. **SHALL** contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:4417-31084).
4. **SHALL** contain exactly one [1..1] templateId (CONF:4417-31077) such that it
  - a. **SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.49" (CONF:4417-31086).
5. **SHALL** contain exactly one [1..1] templateId (CONF:4417-31424) such that it
  - a. **SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.10.20.5.1.3.4" (CONF:4417-31425).

- b. **SHALL** contain exactly one [1..1] **@extension**="2019-08-01" (CONF:4417-31426).
- 6. **SHALL** contain exactly one [1..1] **id** (CONF:4417-31072) such that it
  - a. **SHALL** contain exactly one [1..1] **@nullFlavor**="NA" (CONF:4417-31078).
- 7. **SHALL** contain exactly one [1..1] **code** (CONF:4417-31073).
  - a. This code **SHALL** contain exactly one [1..1] **@code**="1373-0" Date first admitted to facility (CONF:4417-31079).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem**="2.16.840.1.113883.6.277" (CodeSystem: cdcNHSN urn:oid:2.16.840.1.113883.6.277) (CONF:4417-31395).
- 8. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:4417-31074).
  - a. This effectiveTime **SHALL** contain exactly one [1..1] **low** (CONF:4417-31088).  
Note: Date first admitted to facility

**Figure 10: First Admission Encounter in a Lab Identified Report LTCF Example**

```

<entry typeCode="DRIV">
  <encounter classCode="ENC" moodCode="EVN">
    <!-- [C-CDA R2.1] Encounter Activity (V3) -->
    <templateId root="2.16.840.1.113883.10.20.22.4.49" />
    <!-- [HAI LTCF R1D1] First Admission Encounter in a Lab Identified Report LTCF-->
    <templateId root="2.16.840.1.113883.10.20.5.1.3.4"
      extension="2019-08-01" />
    <id nullFlavor="NA" />
    <code code="1373-0" displayName="Date first admitted to facility"
      codeSystem="2.16.840.1.113883.6.277" codeSystemName="cdcNHSN" />
    <effectiveTime>
      <!-- Date of first admission is defined as the date the resident
        first entered the facility within the past 30 days.
        This date remains the same even if the resident leaves the
        facility (for example transfers to another facility) for
        short periods of time (less than 30 days). If the resident
        leaves the facility and is away for 30 or more consecutive days,
        the date of first admission should be updated to the date of
        return to the facility. -->
      <low value="20190101" />
    </effectiveTime>
  </encounter>
</entry>

```

### 3.3 NHSN Comment

[act: identifier urn:hl7ii:2.16.840.1.113883.10.20.5.6.243:2017-04-01 (closed)]

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Release 3, STU 2 - US Realm

**Table 29: NHSN Comment Contexts**

Contained By:	Contains:
<a href="#">NHSN Comment Section</a> (required)	

A comment is free text information of less than 2000 characters. A comment can contain information that is relevant to the whole report (it is not specific to any section of a report).

**Table 30: NHSN Comment Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
act (identifier: urn:hl7ii:2.16.840.1.113883.10.20.5.6.243:2017-04-01)					
@classCode	1..1	SHALL		<a href="#">3311-87</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT
@moodCode	1..1	SHALL		<a href="#">3311-88</a>	urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN
templateId	1..1	SHALL		<a href="#">3311-79</a>	
@root	1..1	SHALL		<a href="#">3311-89</a>	2.16.840.1.113883.10.20.5.6.243
@extension	1..1	SHALL		<a href="#">3311-92</a>	2017-04-01
code	1..1	SHALL		<a href="#">3311-80</a>	
@code	1..1	SHALL		<a href="#">3311-90</a>	86467-8
@codeSystem	1..1	SHALL		<a href="#">3311-91</a>	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
text	1..1	SHALL		<a href="#">3311-81</a>	

1. **SHALL** contain exactly one [1..1] **@classCode**="ACT" Act (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:3311-87).
2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:3311-88).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:3311-79) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.5.6.243" (CONF:3311-89).
  - b. **SHALL** contain exactly one [1..1] **@extension**="2017-04-01" (CONF:3311-92).
4. **SHALL** contain exactly one [1..1] **code** (CONF:3311-80).
  - a. This code **SHALL** contain exactly one [1..1] **@code**="86467-8" Report comment Narrative (CONF:3311-90).

- b. This code **SHALL** contain exactly one [1..1]  
**@codeSystem**="2.16.840.1.113883.6.1" (CodeSystem: LOINC  
urn:oid:2.16.840.1.113883.6.1) (CONF:3311-91).
5. **SHALL** contain exactly one [1..1] **text** (CONF:3311-81).
  - a. The length of the free text comment **SHALL** be less than 2000 characters (CONF:3311-93).

**Figure 11: NHSN Comment Example**

```
<act classCode="ACT" moodCode="EVN">
  <!-- [HAI R3D2] NHSN Comment -->
  <templateId root="2.16.840.1.113883.10.20.5.6.243" extension="2017-04-01" />
  <code code="86467-8"
    displayName="Report comment Narrative"
    codeSystem="2.16.840.1.113883.6.1"
    codeSystemName="LOINC" />
  <!-- Less than 2000 characters -->
  <text>NHSN text comment that is less than 2000 characters.</text>
</act>
```

### 3.4 Pathogen Identified Observation in a Lab Identified Report LTCF

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.5.1.3.3:2019-08-01 (closed)]

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**Table 31: Pathogen Identified Observation in a Lab Identified Report LTCF Contexts**

Contained By:	Contains:
<a href="#">Findings Section in a Laboratory Identified Report LTCF</a> (required)	<a href="#">Specimen Collection Procedure in a Lab Identified Report LTCF</a> (required)

This template records the laboratory-identified microorganism type. The specific organism type is recorded in value.

**Table 32: Pathogen Identified Observation in a Lab Identified Report LTCF Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.5.1.3.3:2019-08-01)					
@classCode	1..1	SHALL		<a href="#">4417-31053</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">4417-31054</a>	urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN
templateId	1..1	SHALL		<a href="#">4417-31046</a>	
@root	1..1	SHALL		<a href="#">4417-31058</a>	2.16.840.1.113883.10.20.22.4.2
templateId	1..1	SHALL		<a href="#">4417-31421</a>	
@root	1..1	SHALL		<a href="#">4417-31422</a>	2.16.840.1.113883.10.20.5.1.3.3
@extension	1..1	SHALL		<a href="#">4417-31423</a>	2019-08-01
id	1..1	SHALL		<a href="#">4417-31043</a>	
@nullFlavor	1..1	SHALL		<a href="#">4417-31052</a>	NA
code	1..1	SHALL		<a href="#">4417-31040</a>	
@code	1..1	SHALL		<a href="#">4417-31048</a>	41852-5
@codeSystem	1..1	SHALL		<a href="#">4417-31049</a>	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
statusCode	1..1	SHALL		<a href="#">4417-31041</a>	
@code	1..1	SHALL		<a href="#">4417-31050</a>	urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed
effectiveTime	1..1	SHALL		<a href="#">4417-31056</a>	
value	1..1	SHALL	CD	<a href="#">4417-31055</a>	urn:oid:2.16.840.1.114222.4.11.3194 (NHSNSignificantPathogenCode)
entryRelationship	1..1	SHALL		<a href="#">4417-31038</a>	
@typeCode	1..1	SHALL		<a href="#">4417-31047</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP
procedure	1..1	SHALL		<a href="#">4417-31039</a>	<a href="#">Specimen Collection Procedure in a Lab Identified Report LTCF (identifier: urn:hl7ii:2.16.840.1.113883.10.20.5.1.3.2:2019-08-01)</a>

1. Conforms to Result Observation template (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.2).
2. **SHALL** contain exactly one [1..1] @classCode="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:4417-31053).

3. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:4417-31054).
4. **SHALL** contain exactly one [1..1] **templateId** (CONF:4417-31046) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.2" (CONF:4417-31058).
5. **SHALL** contain exactly one [1..1] **templateId** (CONF:4417-31421) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.5.1.3.3" (CONF:4417-31422).
  - b. **SHALL** contain exactly one [1..1] **@extension**="2019-08-01" (CONF:4417-31423).
6. **SHALL** contain exactly one [1..1] **id** (CONF:4417-31043).
  - a. This id **SHALL** contain exactly one [1..1] **@nullFlavor**="NA" (CONF:4417-31052).
7. **SHALL** contain exactly one [1..1] **code** (CONF:4417-31040).
  - a. This code **SHALL** contain exactly one [1..1] **@code**="41852-5" Microorganism identified (CONF:4417-31048).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem**="2.16.840.1.113883.6.1" (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:4417-31049).
8. **SHALL** contain exactly one [1..1] **statusCode** (CONF:4417-31041).
  - a. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" Completed (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:4417-31050).
9. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:4417-31056).
10. **SHALL** contain exactly one [1..1] **value** with **@xsi:type**="CD", where the code **SHALL** be selected from ValueSet [NHSNSignificantPathogenCode](#) urn:oid:2.16.840.1.114222.4.11.3194 **DYNAMIC** (CONF:4417-31055).  
Note: Specific Organism Type
11. **SHALL** contain exactly one [1..1] **entryRelationship** (CONF:4417-31038) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode**="COMP" Has component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:4417-31047).
  - b. **SHALL** contain exactly one [1..1] [Specimen Collection Procedure in a Lab Identified Report LTCF](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.5.1.3.2:2019-08-01) (CONF:4417-31039).

**Table 33: NHSNSignificantPathogenCode**

Value Set: NHSNSignificantPathogenCode urn:oid:2.16.840.1.114222.4.11.3194 (Clinical Focus: NHSN surveillance reporting: This value set contains codes describing the significant pathogen identified.),(Data Element Scope: A coded observation value representing the type of significant pathogen.),(Inclusion Criteria: ),(Exclusion Criteria: )  This value set was imported on 9/16/2020 with a version of Latest. Value Set Source: <a href="https://vsac.nlm.nih.gov/valueset/2.16.840.1.114222.4.11.3194/expansion">https://vsac.nlm.nih.gov/valueset/2.16.840.1.114222.4.11.3194/expansion</a>			
Code	Code System	Code System OID	Print Name
113727004	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Vancomycin resistant enterococcus (organism)
115329001	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Methicillin resistant Staphylococcus aureus (organism)
2010-7	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	MDR-Acinetobacter
2016-4	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	CephR-Klebsiella
2017-2	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	CRE-Klebsiella
2018-0	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	CRE-E. coli
2019-8	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	CRE-Enterobacter
417943000	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Methicillin susceptible Staphylococcus aureus (organism)
5933001	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Clostridioides difficile (organism)

**Figure 12: Pathogen Identified Observation in a Lab Identified Report LTCF Example**

```
<entry typeCode="DRIV">
  <observation classCode="OBS" moodCode="EVN">
    <!-- [C-CDA R1.1] Result Observation -->
    <templateId root="2.16.840.1.113883.10.20.22.4.2" />
    <!-- [HAI LTCF R1D1] Pathogen Identified Observation in a
      Lab Identified Report LTCF -->
    <templateId root="2.16.840.1.113883.10.20.5.1.3.3"
      extension="2019-08-01" />
    <id nullFlavor="NA" />
    <code codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
      code="41852-5" displayName="Microorganism Identified" />
    <statusCode code="completed" />
    <effectiveTime nullFlavor="NA" />
    <!-- Specific Organism Type -->
    <value xsi:type="CD" codeSystem="2.16.840.1.113883.6.96"
      codeSystemName="SNOMED CT" code="5933001"
      displayName="Clostridioides difficile (organism)" />
    <!-- Specimen collection procedure contains specimen collection encounter -->
    <entryRelationship typeCode="COMP">
      <procedure classCode="PROC" moodCode="EVN">
        <!-- Specimen Collection Procedure in a Lab Identified Report LTCF -->
        <templateId root="2.16.840.1.113883.10.20.5.1.3.2"
          extension="2019-08-01" />
        ...
      </procedure>
    </entryRelationship>
  </observation>
</entry>
```

### 3.5 Report No Events

[act: identifier urn:hl7ii:2.16.840.1.113883.10.20.5.6.249:2018-04-01  
(closed)]

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Release 3, STU 3 - US Realm

**Table 34: Report No Events Contexts**

Contained By:	Contains:
<a href="#">Report No Events Section</a> (required)	

This template represents the statement that there are no events to report for a particular type of event.

**Table 35: Report No Events Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
act (identifier: urn:hl7ii:2.16.840.1.113883.10.20.5.6.249:2018-04-01)					
@classCode	1..1	SHALL		<a href="#">3357-30599</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT
@moodCode	1..1	SHALL		<a href="#">3357-30600</a>	urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN
templateId	1..1	SHALL		<a href="#">3357-28468</a>	
@root	1..1	SHALL		<a href="#">3357-28470</a>	2.16.840.1.113883.10.20.5.6.249
@extension	1..1	SHALL		<a href="#">3357-28471</a>	2018-04-01
code	1..1	SHALL		<a href="#">3357-28469</a>	

1. **SHALL** contain exactly one [1..1] **@classCode**="ACT" Act (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:3357-30599).
2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:3357-30600).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:3357-28468) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.5.6.249" (CONF:3357-28470).
  - b. **SHALL** contain exactly one [1..1] **@extension**="2018-04-01" (CONF:3357-28471).
4. **SHALL** contain exactly one [1..1] **code** (CONF:3357-28469).
  - a. If this is a Neonatal Intensive Care Unit (NICU) Summary Report then the code **SHALL** be selected from ValueSet NHSNReportNoEventsNICU urn:oid:2.16.840.1.113883.10.20.5.9.19 **DYNAMIC** (CONF:3357-30905).
  - b. If this is an Intensive Care Unit (ICU) Summary Report then the code **SHALL** be selected from ValueSet NHSNReportNoEventsICU urn:oid:2.16.840.1.113883.10.20.5.9.18 **DYNAMIC** (CONF:3357-30906).
  - c. If this is a Vascular Access Type Report (VAT) Summary Report then the code **SHALL** be selected from ValueSet NHSNReportNoEventsDialysis urn:oid:2.16.840.1.113883.10.20.5.9.22 **DYNAMIC** (CONF:3357-30907).
  - d. If this is a Prevention Process and Outcome Measures (POM) Summary Report then the code **SHALL** be selected from ValueSet NHSNReportNoEventsMDRO urn:oid:2.16.840.1.113883.10.20.5.9.21 **DYNAMIC** (CONF:3357-30908).
  - e. If this is a Specialty Care Area (SCA) Summary Report then the code **SHALL** be selected from ValueSet NHSNReportNoEventsSCA urn:oid:2.16.840.1.113883.10.20.5.9.20 **DYNAMIC** (CONF:3357-30909).
  - f. If this is an Outpatient Procedure Component Denominator for Same Day Outcome Measures Report then the code **SHALL** be selected from ValueSet NHSNReportNoEventsOPCSameDayOutcomeMeasures urn:oid:2.16.840.1.113883.10.20.5.9.33 **DYNAMIC** (CONF:3357-30913).

- g. If this is an Antimicrobial Resistance Option (ARO) Summary Report then the code **SHALL** be selected from ValueSet NHSNReportNoEventsAR urn:oid:2.16.840.1.113883.10.20.5.9.35 **DYNAMIC** (CONF:3357-30914).
- h. If this is an MDRO and CDI LabID Event Reporting Monthly Summary Data for LTCF then the code **SHALL** be selected from ValueSet NHSNReportNoEventsMDROCDI (urn:oid:2.16.840.1.113883.10.20.5.1.9.1) **DYNAMIC** (CONF:3357-30915).

**Table 36: NHSNReportNoEventsNICU**

Value Set: NHSNReportNoEventsNICU urn:oid:2.16.840.1.113883.10.20.5.9.19

(Clinical Focus: NHSN surveillance reporting: indicators for reporting no events with denominators for neonatal intensive care unit (NICU)), (Data Element Scope: Code identifying that no event of interest occurred.), (Inclusion Criteria: ), (Exclusion Criteria: )

This value set was imported on 9/16/2020 with a version of Latest.

Value Set Source:

<https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.10.20.5.9.19/expansion>

Code	Code System	Code System OID	Print Name
1313-6	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Report No Events: NICU: PedVAE: birth weight under 750 grams
1314-4	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Report No Events: NICU: PedVAE: birth weight 751-1000 grams
1316-9	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Report No Events: NICU: PedVAE: birth weight 1001-1500 grams
1317-7	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Report No Events: NICU: PedVAE: birth weight 1501-2500 grams
1318-5	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Report No Events: NICU: PedVAE: birth weight over 2500 grams
1319-3	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Report No Events: NICU: PedVAE: Extremely preterm (<28 weeks)
1330-0	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Report No Events: NICU: PedVAE: Very preterm (28 to <32 weeks)
1331-8	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Report No Events: NICU: PedVAE: Moderate to late preterm (32 to <37 weeks)
1332-6	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Report No Events: NICU: PedVAE: Term (>=37 weeks)
3014-8	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Report No Events: NICU: CLABSI: under 750 grams
...			

**Table 37: NHSNReportNoEventsICU**

Value Set: NHSNReportNoEventsICU urn:oid:2.16.840.1.113883.10.20.5.9.18 (Clinical Focus: NHSN surveillance reporting: indicators for reporting no events with denominators for intensive care unit),(Data Element Scope: Code identifying that no event of interest occurred.),(Inclusion Criteria: ),(Exclusion Criteria: )  This value set was imported on 9/16/2020 with a version of Latest. Value Set Source: <a href="https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.10.20.5.9.18/expansion">https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.10.20.5.9.18/expansion</a>			
Code	Code System	Code System OID	Print Name
1338-3	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Report No Events: ICU: PedVAE
3010-6	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Report No Events: ICU: CLABSI
3011-4	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Report No Events: ICU: CAUTI
3012-2	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Report No Events: ICU: VAE
3013-0	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Report No Events: ICU: PedVAP

**Table 38: NHSNReportNoEventsDialysis**

Value Set: NHSNReportNoEventsDialysis urn:oid:2.16.840.1.113883.10.20.5.9.22 (Clinical Focus: NHSN surveillance reporting: indicators for reporting no events with denominators for dialysis),(Data Element Scope: Code identifying that no event of interest occurred.),(Inclusion Criteria: ),(Exclusion Criteria: )  This value set was imported on 9/16/2020 with a version of Latest. Value Set Source: <a href="https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.10.20.5.9.22/expansion">https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.10.20.5.9.22/expansion</a>			
Code	Code System	Code System OID	Print Name
3052-8	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Report No Events: Dialysis: intravenous antimicrobial start
3053-6	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Report No Events: Dialysis: positive blood culture
3054-4	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Report No Events: Dialysis: pus, redness, or increased swelling at vascular access site

**Table 39: NHSNReportNoEventsMDRO**

Value Set: NHSNReportNoEventsMDRO urn:oid:2.16.840.1.113883.10.20.5.9.21 (Clinical Focus: NHSN surveillance reporting: indicators for reporting no events with denominators for LabID Event),(Data Element Scope: Code identifying that no event of interest occurred.),(Inclusion Criteria: ),(Exclusion Criteria: )  This value set was imported on 9/16/2020 with a version of Latest. Value Set Source: <a href="https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.10.20.5.9.21/expansion">https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.10.20.5.9.21/expansion</a>			
Code	Code System	Code System OID	Print Name
1306-0	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Report No Events: Infection Surveillance: MSSA
1307-8	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Report No Events: LabID Event (All specimens): MSSA
1308-6	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Report No Events: LabID Event (Blood specimens only): MSSA
3029-6	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Report No Events: Infection Surveillance: MRSA
3030-4	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Report No Events: LabID Event (All specimens): MRSA
3031-2	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Report No Events: LabID Event (Blood specimens only): MRSA
3032-0	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Report No Events: Infection Surveillance: VRE
3033-8	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Report No Events: LabID Event (All specimens): VRE
3034-6	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Report No Events: LabID Event (Blood specimens only): VRE
3035-3	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Report No Events: Infection Surveillance: CephR Klebsiella
...			

**Table 40: NHSNReportNoEventsSCA**

Value Set: NHSNReportNoEventsSCA urn:oid:2.16.840.1.113883.10.20.5.9.20 (Clinical Focus: NHSN surveillance reporting: indicators for reporting no events with denominators for specialty care area / oncology),(Data Element Scope: Code identifying that no event of interest occurred.),(Inclusion Criteria: ),(Exclusion Criteria: )  This value set was imported on 9/16/2020 with a version of Latest. Value Set Source: <a href="https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.10.20.5.9.20/expansion">https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.10.20.5.9.20/expansion</a>			
Code	Code System	Code System OID	Print Name
1339-1	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Report No Events: SCA: PedVAE
3024-7	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Report No Events: SCA: TCLAB
3025-4	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Report No Events: SCA: PCLAB
3026-2	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Report No Events: SCA: CAUTI
3027-0	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Report No Events: SCA: VAE
3028-8	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Report No Events: SCA: PedVAP

**Table 41: NHSNReportNoEventsOPCSameDayOutcomeMeasures**

Value Set: NHSNReportNoEventsOPCSameDayOutcomeMeasures urn:oid:2.16.840.1.113883.10.20.5.9.33 (Clinical Focus: NHSN surveillance reporting: indicators for reporting no events with denominators for Outpatient Procedure Component Same Day Outcome Measures),(Data Element Scope: Code identifying that no event of interest occurred.),(Inclusion Criteria: ),(Exclusion Criteria: )  This value set was imported on 9/16/2020 with a version of Latest. Value Set Source: <a href="https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.10.20.5.9.33/expansion">https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.10.20.5.9.33/expansion</a>			
Code	Code System	Code System OID	Print Name
1340-9	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	No same day outcome measures (events) reported this month

**Table 42: NHSNReportNoEventsAR**

Value Set: NHSNReportNoEventsAR urn:oid:2.16.840.1.113883.10.20.5.9.35 (Clinical Focus: NHSN surveillance reporting: indicator for reporting no events with denominators for antimicrobial resistance),(Data Element Scope: Code identifying that no event of interest occurred.),(Inclusion Criteria: ),(Exclusion Criteria: )  This value set was imported on 9/16/2020 with a version of Latest. Value Set Source: <a href="https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.10.20.5.9.35/expansion">https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.10.20.5.9.35/expansion</a>			
Code	Code System	Code System OID	Print Name
1341-7	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Report No Events: Antimicrobial Resistance (AR)

**Table 43: NHSNReportNoEventsMDROLTCF**

Value Set: NHSNReportNoEventsMDROLTCF urn:oid:2.16.840.1.113883.10.20.5.1.9.1 (Clinical Focus: NHSN surveillance reporting: indicators for reporting no events with denominators for LTCF),(Data Element Scope: Code identifying that no event of interest occurred.),(Inclusion Criteria: ),(Exclusion Criteria: )  This value set was imported on 9/16/2020 with a version of Latest. Value Set Source: <a href="https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.10.20.5.1.9.1/expansion">https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.10.20.5.1.9.1/expansion</a>			
Code	Code System	Code System OID	Print Name
1307-8	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Report No Events: LabID Event (All specimens): MSSA
3030-4	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Report No Events: LabID Event (All specimens): MRSA
3033-8	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Report No Events: LabID Event (All specimens): VRE
3036-1	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Report No Events: LabID Event (All specimens): CephR Klebsiella
3039-5	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Report No Events: LabID Event (All specimens): CRE-E. coli
3042-9	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Report No Events: LabID Event (All specimens): CRE-Enterobacter
3045-2	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Report No Events: LabID Event (All specimens): CRE-Klebsiella
3048-6	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Report No Events: LabID Event (All specimens): MDR-Acinetobacter
3051-0	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Report No Events: LabID Event (All specimens): C. difficile

**Figure 13: Report No Events Example**

<pre> &lt;act classCode="ACT" moodCode="EVN"&gt;   &lt;!-- [HAI R3D3] Report No Events --&gt;   &lt;templateId root="2.16.840.1.113883.10.20.5.6.249" extension="2018-04-01" /&gt;   &lt;code code="3029-6"     displayName="Report no infection surveillance events - Methicillin-resistant Staphylococcus aureus"     codeSystem="2.16.840.1.113883.6.277"     codeSystemName="cdcNHSN" /&gt; &lt;/act&gt; </pre>
---

### 3.6 Specimen Collection Procedure in a Lab Identified Report LTCF

[procedure: identifier urn:hl7ii:2.16.840.1.113883.10.20.5.1.3.2:2019-08-01 (closed)]

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**Table 44: Specimen Collection Procedure in a Lab Identified Report LTCF Contexts**

Contained By:	Contains:
<a href="#">Pathogen Identified Observation in a Lab Identified Report LTCF</a> (required)	

This template represents the specimen collection procedure and records the date the specimen was collected and the specimen type.

**Table 45: Specimen Collection Procedure in a Lab Identified Report LTCF Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
procedure (identifier: urn:hl7ii:2.16.840.1.113883.10.20.5.1.3.2:2019-08-01)					
@classCode	1..1	SHALL		<a href="#">4417-31031</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = PROC
@moodCode	1..1	SHALL		<a href="#">4417-31032</a>	urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN
templateId	1..1	SHALL		<a href="#">4417-31060</a>	
@root	1..1	SHALL		<a href="#">4417-31061</a>	2.16.840.1.113883.10.20.5.1.3.2
@extension	1..1	SHALL		<a href="#">4417-31062</a>	2019-08-01
code	1..1	SHALL		<a href="#">4417-31396</a>	
@code	1..1	SHALL		<a href="#">4417-31397</a>	urn:oid:2.16.840.1.113883.6.96 (SNOMED CT) = 17636008
effectiveTime	1..1	SHALL		<a href="#">4417-31368</a>	
low	1..1	SHALL		<a href="#">4417-31369</a>	
participant	1..1	SHALL		<a href="#">4417-31024</a>	
@typeCode	1..1	SHALL		<a href="#">4417-31033</a>	urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = PRD
participantRole	1..1	SHALL		<a href="#">4417-31025</a>	
@classCode	1..1	SHALL		<a href="#">4417-31034</a>	urn:oid:2.16.840.1.113883.5.110 (HL7RoleClass) = SPEC
playingEntity	1..1	SHALL		<a href="#">4417-31026</a>	
code	1..1	SHALL		<a href="#">4417-31027</a>	urn:oid:2.16.840.1.114222.4.11.3249 (NHSNSpecimenTypeCode)
@nullFlavor	0..1	MAY		<a href="#">4417-31239</a>	urn:oid:2.16.840.1.113883.5.1008 (HL7NullFlavor) = UNK

1. **SHALL** contain exactly one [1..1] **@classCode**="PROC" Procedure (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **URN:OID:**
2. ) (CONF:4417-31031).
3. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:4417-31032).
4. **SHALL** contain exactly one [1..1] **templateId** (CONF:4417-31060) such that it

- a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.5.1.3.2" (CONF:4417-31061).
  - b. **SHALL** contain exactly one [1..1] **@extension**="2019-08-01" (CONF:4417-31062).
- 5. **SHALL** contain exactly one [1..1] **code** (CONF:4417-31396).
  - a. This code **SHALL** contain exactly one [1..1] **@code**="17636008" Specimen collection (procedure) (CodeSystem: SNOMED CT urn:oid:2.16.840.1.113883.6.96) (CONF:4417-31397).
- 6. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:4417-31368).
  - a. This effectiveTime **SHALL** contain exactly one [1..1] **low** (CONF:4417-31369).  
Note: Date specimen collected
- 7. **SHALL** contain exactly one [1..1] **participant** (CONF:4417-31024).
  - a. This participant **SHALL** contain exactly one [1..1] **@typeCode**="PRD" Product (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90 **STATIC**) (CONF:4417-31033).
  - b. This participant **SHALL** contain exactly one [1..1] **participantRole** (CONF:4417-31025).
    - i. This participantRole **SHALL** contain exactly one [1..1] **@classCode**="SPEC" Specimen (CodeSystem: HL7RoleClass urn:oid:2.16.840.1.113883.5.110 **STATIC**) (CONF:4417-31034).
    - ii. This participantRole **SHALL** contain exactly one [1..1] **playingEntity** (CONF:4417-31026).

To record a specimen type, **@code** SHALL be present.

- 1. This playingEntity **SHALL** contain exactly one [1..1] **code**, which **SHALL** be selected from ValueSet [NHSNSpecimenTypeCode](#) urn:oid:2.16.840.1.114222.4.11.3249 **DYNAMIC** (CONF:4417-31027).  
Note: Specimen type
  - a. This code **MAY** contain zero or one [0..1] **@nullFlavor**="UNK" Unknown (CodeSystem: HL7NullFlavor urn:oid:2.16.840.1.113883.5.1008) (CONF:4417-31239).

**Table 46: NHSNSpecimenTypeCode**

Value Set: NHSNSpecimenTypeCode urn:oid:2.16.840.1.114222.4.11.3249 (Clinical Focus: NHSN surveillance reporting: This value set contains codes describing the type of specimen.),(Data Element Scope: A code identifying the type of entity playing the role of specimen. A code identifying the type of specimen.),(Inclusion Criteria: ),(Exclusion Criteria: )  This value set was imported on 9/16/2020 with a version of Latest. Value Set Source: <a href="https://vsac.nlm.nih.gov/valueset/2.16.840.1.114222.4.11.3249/expansion">https://vsac.nlm.nih.gov/valueset/2.16.840.1.114222.4.11.3249/expansion</a>			
Code	Code System	Code System OID	Print Name
110893002	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Cutaneous cytologic material (specimen)
110894008	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Mammary cytologic material (specimen)
110896005	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Subcutaneous cytologic material (specimen)
110903005	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Nasal cytologic material (specimen)
110926003	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Gallbladder cytologic material (specimen)
110931001	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Penis cytologic material (specimen)
110933003	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Prostate cytologic material (specimen)
110935005	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Testis cytologic material (specimen)
110937002	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Seminal vesicle cytologic material (specimen)
110939004	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Vas deferens cytologic material (specimen)
...			

**Figure 14: Specimen Collection Procedure in a Lab Identified Report LTCF Example**

```
<procedure classCode="PROC" moodCode="EVN">
  <!-- [HAI LTCF R1D1] Specimen Collection Procedure in a Lab Identified Report LTCF -->
  <templateId root="2.16.840.1.113883.10.20.5.1.3.2" extension="2019-08-01" />
  <code code="17636008" codeSystem="2.16.840.1.113883.6.96" />
  <!-- Date specimen collected -->
  <effectiveTime value="20190119" />
  <!-- Specimen type -->
  <participant typeCode="PRD">
    <participantRole classCode="SPEC">
      <playingEntity>
        <!-- Specimen Source/type -->
        <code codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"
          code="119339001" displayName="stool specimen"> </code>
      </playingEntity>
    </participantRole>
  </participant>
</procedure>
```

### 3.7 Summary Data Observation LTCF

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.5.1.3.14:2019-08-01 (closed)]

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**Table 47: Summary Data Observation LTCF Contexts**

Contained By:	Contains:
<a href="#">Summary Encounter LTCF</a> (required)	

This template represents the number of days, residents, episodes, or events reported as summary data in some LTCF population-summary reports. The documentationOf/serviceEvent/code in the header identifies the intended content of the report. For example, cdcNHSN code 1891-1 indicates that the data content is "MDRO and CDI LabID Event Reporting Monthly Summary Data for LTCF". NHSN protocol specifies which data to report for each type of content. The data required by NHSN for most types of content, at time of publication, are shown in the table below.

Most Summary Data Observations are a simple code-value pair. The code element identifies the datum being reported, and the value element records a number of days, residents, episodes, or events. For example, cdcNHSN code 1369-8 indicates that the data content is "Number of Resident days".

The table of codes for a particular report indicate what data are required at time of publication for the NHSN protocol. Accordingly, the Summary Encounter will contain the same number of Summary Data Observations as codes in the table.

**Table 48: Summary Data Observation LTCF Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.5.1.3.14:2019-08-01)					
@classCode	1..1	SHALL		<a href="#">4417-31324</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">4417-31325</a>	urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN
templateId	1..1	SHALL		<a href="#">4417-31320</a>	
@root	1..1	SHALL		<a href="#">4417-31326</a>	2.16.840.1.113883.10.20.5.1.3.14
@extension	1..1	SHALL		<a href="#">4417-31336</a>	2019-08-01
code	1..1	SHALL		<a href="#">4417-31321</a>	
statusCode	1..1	SHALL		<a href="#">4417-31322</a>	
@code	1..1	SHALL		<a href="#">4417-31334</a>	urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed
value	1..1	SHALL		<a href="#">4417-31323</a>	

1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:4417-31324).
2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:4417-31325).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:4417-31320) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.5.1.3.14" (CONF:4417-31326).
  - b. **SHALL** contain exactly one [1..1] **@extension**="2019-08-01" (CONF:4417-31336).
4. **SHALL** contain exactly one [1..1] **code** (CONF:4417-31321).
  - a. If this is an MDRO and CDI Monthly Summary Data Report, NHSN protocol requires, at the time of publication, the code shall be selected from Codes for MDRO and CDI Summary Data LTCF (2.16.840.1.113883.10.20.5.1.5.9.2) (CONF:4417-31332).
5. **SHALL** contain exactly one [1..1] **statusCode** (CONF:4417-31322).
  - a. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" Completed (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:4417-31334).
6. **SHALL** contain exactly one [1..1] **value** (CONF:4417-31323).
  - a. If the observation reports a number of days, the value of value/xsi:type **SHALL** be PQ and the value of value/@unit **SHALL** be d. If the observation reports a number of residents, episodes, or events the value of value/@xsi:type **SHALL** be INT. If the value is a code, the value of value/@xsi:type **SHALL** be CD (CONF:4417-31335).

**Table 49: Codes for MDRO and CDI Summary Data LTCF**

Value Set: Codes for MDRO and CDI Summary Data LTCF urn:oid:2.16.840.1.113883.10.20.5.1.5.9.2 (Clinical Focus: NHSN surveillance reporting: monthly reporting denominators for LTCF),(Data Element Scope: Code identifying the type of observation.),(Inclusion Criteria: ),(Exclusion Criteria: )			
This value set was imported on 9/16/2020 with a version of Latest. Value Set Source: <a href="https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.10.20.5.1.5.9.2/expansion">https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.10.20.5.1.5.9.2/expansion</a>			
Code	Code System	Code System OID	Print Name
1369-8	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Resident days
1370-6	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Resident admissions
1371-4	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Number of admissions on C. difficile treatment
1372-2	cdcNHSN	urn:oid:2.16.840.1.113883.6.277	Number of C. difficile treatment starts

**Figure 15: Summary Data Observation LTCF Example**

<pre> &lt;observation classCode="OBS" moodCode="EVN"&gt;   &lt;!-- [HAI LTCF R1D1] Summary Data Observation LTCF --&gt;   &lt;templateId root="2.16.840.1.113883.10.20.5.1.3.14" extension="2019-08-01" /&gt;   &lt;code codeSystem="2.16.840.1.113883.6.277" codeSystemName="cdcNHSN" code="1369-8"     displayName="Resident days" /&gt;   &lt;statusCode code="completed" /&gt;   &lt;value xsi:type="PQ" unit="d" value="100" /&gt; &lt;/observation&gt; </pre>
---

### 3.8 Summary Encounter LTCF

[encounter: identifier urn:hl7ii:2.16.840.1.113883.10.20.5.1.3.15:2019-08-01 (closed)]

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**Table 50: Summary Encounter LTCF Contexts**

Contained By:	Contains:
<a href="#">Summary Data Section LTCF</a> (required)	<a href="#">Summary Data Observation LTCF</a> (required)

This template records a set of summary data for a population in the defined NHSN protocol. Each datum is recorded as a Summary Data Observation LTCF. The table of codes for a particular report indicate what data are required at time of publication for the NHSN protocol. Accordingly, the Summary Encounter LTCF will contain the same number of Summary Data Observation LTCFs as codes in the table. A participant element records the location to which the data pertains. It has three parts: a location id, a location type code, and a scoping entity. The location id has the form <id

root="..." extension="..." /> representing a location such as ward 9W, or <id root="..." /> representing the whole facility (i.e., FACWIDEIN).

**Table 51: Summary Encounter LTCF Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
encounter (identifier: urn:hl7ii:2.16.840.1.113883.10.20.5.1.3.15:2019-08-01)					
@classCode	1..1	SHALL		<a href="#">4417-31342</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ENC
@moodCode	1..1	SHALL		<a href="#">4417-31343</a>	urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN
templateId	1..1	SHALL		<a href="#">4417-31337</a>	
@root	1..1	SHALL		<a href="#">4417-31344</a>	2.16.840.1.113883.10.20.5.1.3.15
@extension	1..1	SHALL		<a href="#">4417-31351</a>	2019-08-01
participant	1..1	SHALL		<a href="#">4417-31338</a>	
@typeCode	1..1	SHALL		<a href="#">4417-31345</a>	urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = LOC
participantRole	1..1	SHALL		<a href="#">4417-31339</a>	
@classCode	1..1	SHALL		<a href="#">4417-31346</a>	urn:oid:2.16.840.1.113883.5.41 (HL7EntityClass) = SDLOC
id	1..1	SHALL		<a href="#">4417-31362</a>	
@root	1..1	SHALL		<a href="#">4417-31363</a>	
@extension	1..1	SHALL		<a href="#">4417-31364</a>	
entryRelationship	1..*	SHALL		<a href="#">4417-31340</a>	
@typeCode	1..1	SHALL		<a href="#">4417-31350</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP
observation	1..1	SHALL		<a href="#">4417-31341</a>	<a href="#">Summary Data Observation LTCF (identifier: urn:hl7ii:2.16.840.1.113883.10.20.5.1.3.14:2019-08-01)</a>

1. **SHALL** contain exactly one [1..1] @classCode="ENC" Encounter (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:4417-31342).
2. **SHALL** contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:4417-31343).
3. **SHALL** contain exactly one [1..1] templateId (CONF:4417-31337) such that it

- a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.5.1.3.15" (CONF:4417-31344).
  - b. **SHALL** contain exactly one [1..1] **@extension**="2019-08-01" (CONF:4417-31351).
- 4. **SHALL** contain exactly one [1..1] **participant** (CONF:4417-31338) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode**="LOC" Location (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90 **STATIC**) (CONF:4417-31345).
  - b. **SHALL** contain exactly one [1..1] **participantRole** (CONF:4417-31339).
    - i. This participantRole **SHALL** contain exactly one [1..1] **@classCode**="SDLOC" Service Delivery Location (CodeSystem: HL7EntityClass urn:oid:2.16.840.1.113883.5.41 **STATIC**) (CONF:4417-31346).
    - ii. This participantRole **SHALL** contain exactly one [1..1] **id** (CONF:4417-31362).

The value of **@root** must be the NHSN assigned Facility OID.

- 1. This id **SHALL** contain exactly one [1..1] **@root** (CONF:4417-31363).  
Note: Facility ID #

The value of **@extension** must be a value registered with NHSN

- 2. This id **SHALL** contain exactly one [1..1] **@extension** (CONF:4417-31364).  
Note: Location Code=FACWIDEIN

- 5. **SHALL** contain at least one [1..\*] **entryRelationship** (CONF:4417-31340) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode**="COMP" Has component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 **STATIC**) (CONF:4417-31350).
  - b. **SHALL** contain exactly one [1..1] [Summary Data Observation LTCF](#) (identifier: urn:h17ii:2.16.840.1.113883.10.20.5.1.3.14:2019-08-01) (CONF:4417-31341).

**Figure 16: Summary Encounter LTCF Example**

```
<entry typeCode="DRIV">
  <encounter classCode="ENC" moodCode="EVN">
    <!-- [HAI LTCF R1D1] Summary Encounter LTCF -->
    <templateId root="2.16.840.1.113883.10.20.5.1.3.15" extension="2019-08-01" />
    <!-- the location id and type -->
    <participant typeCode="LOC">
      <participantRole classCode="SDLOC">
        <!-- In-facility locations, FACWIDEIN, require the root with an extension
and code element. -->
        <id root="2.16.840.1.113883.3.117.1.1.5.1.1" extension="FACWIDEIN" />
        <code codeSystem="2.16.840.1.113883.6.259"
          codeSystemName="HL7 HealthCareServiceLocation" code="1250-0"
          displayName="Facility-Wide Inpatient (FACWIDEIN)" />
      </participantRole>
    </participant>
    <!-- Total number of Resident Days -->
    <entryRelationship typeCode="COMP">
      ...
    </entryRelationship>
    <!-- Number of Resident admissions -->
    <entryRelationship typeCode="COMP">
      ...
    </entryRelationship>
    <!-- Number of Resident admissions on C. diff Treatment -->
    <entryRelationship typeCode="COMP">
      ...
    </entryRelationship>
    <!-- number of C. diff Treatment starts -->
    <entryRelationship typeCode="COMP">
      ...
    </entryRelationship>
  </encounter>
</entry>
```

### 3.9 Transfer From Acute Care Facility to LTCF in Past Four Weeks

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.5.1.3.5:2019-08-01 (closed)]

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**Table 52: Transfer From Acute Care Facility to LTCF in Past Four Weeks Contexts**

Contained By:	Contains:
<a href="#">Encounters Section in an LTCF Report</a> (required)	<a href="#">Antibiotic Treatment at Time of Transfer</a> (optional)

This observation records whether the resident was transferred from an acute care facility to the LTCF in the four weeks prior to the positive specimen collection date.

If the resident was transferred from an acute facility in the past four weeks, set value='true', effectiveTime/low to the date of transfer, and include the contained template Antibiotic Treatment at Time of Transfer to LTCF.

If the resident was not transferred from an acute facility in the past four weeks, set the value='false', effectiveTime/@nullFlavor="NA". NOTE: If the resident was transferred from an acute care facility in the last four weeks, the template SHALL contain 'Antibiotic Treatment at Time of Transfer'. If the resident was not transferred from an acute care facility in the past four weeks, the optional contained template 'Antibiotic Therapy Treatment at Time of Transfer' SHALL NOT be present.

**Table 53: Transfer From Acute Care Facility to LTCF in Past Four Weeks Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.5.1.3.5:2019-08-01)					
@classCode	1..1	SHALL		<a href="#">4417-31376</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">4417-31377</a>	urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN
templateId	1..1	SHALL		<a href="#">4417-31372</a>	
@root	1..1	SHALL		<a href="#">4417-31378</a>	2.16.840.1.113883.10.20.5.1.3.5
@extension	1..1	SHALL		<a href="#">4417-31379</a>	2019-08-01
code	1..1	SHALL		<a href="#">4417-31370</a>	
@code	1..1	SHALL		<a href="#">4417-31373</a>	1374-8
@codeSystem	1..1	SHALL		<a href="#">4417-31386</a>	urn:oid:2.16.840.1.113883.6.277 (cdcNHSN)
statusCode	1..1	SHALL		<a href="#">4417-31371</a>	
@code	1..1	SHALL		<a href="#">4417-31374</a>	urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed
effectiveTime	1..1	SHALL		<a href="#">4417-31380</a>	
@nullFlavor	0..1	MAY		<a href="#">4417-31416</a>	urn:oid:2.16.840.1.113883.5.1008 (HL7NullFlavor) = NA
low	0..1	SHOULD		<a href="#">4417-31390</a>	
value	1..1	SHALL	BL	<a href="#">4417-31375</a>	
entryRelationship	0..1	MAY		<a href="#">4417-31381</a>	
observation	1..1	SHALL		<a href="#">4417-31382</a>	<a href="#">Antibiotic Treatment at Time of Transfer (identifier: urn:hl7ii:2.16.840.1.113883.10.20.5.1.3.12:2019-08-01</a>

1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:4417-31376).
2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:4417-31377).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:4417-31372) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.5.1.3.5" (CONF:4417-31378).

- b. **SHALL** contain exactly one [1..1] **@extension**="2019-08-01" (CONF:4417-31379).
- 4. **SHALL** contain exactly one [1..1] **code** (CONF:4417-31370).
  - a. This code **SHALL** contain exactly one [1..1] **@code**="1374-8" Resident transferred from acute care facility in past 4 weeks (CONF:4417-31373).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem** (CodeSystem: cdcNHSN urn:oid:2.16.840.1.113883.6.277) (CONF:4417-31386).
- 5. **SHALL** contain exactly one [1..1] **statusCode** (CONF:4417-31371).
  - a. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" Completed (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:4417-31374).

If the resident was not transferred from an acute facility in the past four weeks, set the effectiveTime/@nullFlavor to NA.

If the resident was transferred from an acute facility in the past four weeks, set effectiveTime/low to the date of transfer.

- 6. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:4417-31380).
  - a. This effectiveTime **MAY** contain zero or one [0..1] **@nullFlavor**="NA" Not Applicable (CodeSystem: HL7NullFlavor urn:oid:2.16.840.1.113883.5.1008) (CONF:4417-31416).
  - b. This effectiveTime **SHOULD** contain zero or one [0..1] **low** (CONF:4417-31390).  
Note: Date of last transfer from acute care to your facility
- 7. **SHALL** contain exactly one [1..1] **value** with @xsi:type="BL" (CONF:4417-31375).  
Note: Has resident been transferred from an acute care facility in the past 4 weeks?

If the resident was transferred from an acute facility in the past four weeks, the contained template Antibiotic Treatment at Time of Transfer in a Lab Identified Report LTCF **SHALL** be included.

- 8. **MAY** contain zero or one [0..1] **entryRelationship** (CONF:4417-31381).
  - a. The entryRelationship, if present, **SHALL** contain exactly one [1..1] [Antibiotic Treatment at Time of Transfer](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.5.1.3.12:2019-08-01) (CONF:4417-31382).

**Figure 17: Transfer From Acute Care Facility to LTCF in Past Four Weeks = TRUE Example**

```
<observation classCode="OBS" moodCode="EVN">
  <!-- [HAI LTCF R1D1] Transfer From Acute Care Facility to LTCF in Past Four Weeks -->
  <templateId root="2.16.840.1.113883.10.20.5.1.3.5"
    extension="2019-08-01" />
  <code code="1374-8"
    displayName="Resident transferred from acute care facility in past 4 weeks"
    codeSystem="2.16.840.1.113883.6.277" codeSystemName="cdcNHSN" />
  <statusCode code="completed" />
  <!-- Date of transfer from acute care to LTCF -->
  <effectiveTime>
    <low value="20190125" />
  </effectiveTime>
  <value xsi:type="BL" value="true"/>
  <entryRelationship typeCode="REFR">
    <!-- Resident on antibiotic therapy for this specific organism at the time of
    transfer -->
    <observation classCode="OBS" moodCode="EVN">
      <!-- [HAI LTCF R1D1] Antibiotic Treatment at Time of Transfer -->
    <templateId root="2.16.840.1.113883.10.20.5.1.3.12"
      ...
    </observation>
  </entryRelationship>
</observation>
```

**Figure 18: Transfer From Acute Care Facility to LTCF in Past Four Weeks= FALSE Example**

```
<!-- The Resident has not been transferred from an acute facility in
the past 4 weeks? Value = FALSE -->
<observation classCode="OBS" moodCode="EVN">
  <!-- [HAI LTCF R1D1] Transfer From Acute Care Facility to LTCF in
  Past Four Weeks -->
  <templateId root="2.16.840.1.113883.10.20.5.1.3.5"
    extension="2019-08-01" />
  <code code="1374-8"
    displayName="Resident transferred from acute care facility
    in past 4 weeks"
    codeSystem="2.16.840.1.113883.6.277" codeSystemName="cdcNHSN" />
  <statusCode code="completed" />
  <!-- Date of transfer from acute care to LTCF is NA because
  there was no transfer -->
  <effectiveTime nullFlavor="NA" />
  <!-- The resident was not transferred from acute care in the
  past 4 weeks -->
  <value xsi:type="BL" value="false"/>
</observation>
```

## 4 TEMPLATE IDS IN THIS GUIDE

**Table 54: Template List**

Template Title	Template Type	templateId
<a href="#">HAI Population Summary Report Generic Constraints</a>	document	urn:oid:2.16.840.1.113883.10.20.5.4.28
<a href="#">HAI Single-Person Report Generic Constraints LTCF</a>	document	urn:hl7ii:2.16.840.1.113883.10.20.5.1.1.3:2019-08-01
<a href="#">Healthcare Associated Infection Report</a>	document	urn:oid:2.16.840.1.113883.10.20.5.4.25
<a href="#">Laboratory Identified MDRO or CDI Event Report for LTCF</a>	document	urn:hl7ii:2.16.840.1.113883.10.20.5.1.1.1:2019-08-01
<a href="#">MDRO and CDI LabID Event Reporting Monthly Summary Data for LTCF</a>	document	urn:hl7ii:2.16.840.1.113883.10.20.5.1.1.2:2019-08-01
<a href="#">Encounters Section in an LTCF Report</a>	section	urn:hl7ii:2.16.840.1.113883.10.20.5.1.2.2:2019-08-01
<a href="#">Findings Section in a Laboratory Identified Report LTCF</a>	section	urn:hl7ii:2.16.840.1.113883.10.20.5.1.2.1:2019-08-01
<a href="#">HAI Section Generic Constraints</a>	section	urn:oid:2.16.840.1.113883.10.20.5.4.26
<a href="#">NHSN Comment Section</a>	section	urn:hl7ii:2.16.840.1.113883.10.20.5.5.61:2017-04-01
<a href="#">Report No Events Section</a>	section	urn:hl7ii:2.16.840.1.113883.10.20.5.5.62:2018-04-01
<a href="#">Summary Data Section LTCF</a>	section	urn:hl7ii:2.16.840.1.113883.10.20.5.1.2.3:2019-08-01
<a href="#">Antibiotic Treatment at Time of Transfer</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.5.1.3.12:2019-08-01
<a href="#">First Admission Encounter in a Lab Identified Report LTCF</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.5.1.3.4:2019-08-01
<a href="#">NHSN Comment</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.5.6.243:2017-04-01
<a href="#">Pathogen Identified Observation in a Lab Identified Report LTCF</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.5.1.3.3:2019-08-01
<a href="#">Report No Events</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.5.6.249:2018-04-01
<a href="#">Specimen Collection Procedure in a Lab Identified Report LTCF</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.5.1.3.2:2019-08-01
<a href="#">Summary Data Observation LTCF</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.5.1.3.14:2019-08-01
<a href="#">Summary Encounter LTCF</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.5.1.3.15:2019-08-01
<a href="#">Transfer From Acute Care Facility to LTCF in Past Four Weeks</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.5.1.3.5:2019-08-01

**Table 55: Template Containments**

<b>Template Title</b>	<b>Template Type</b>	<b>templateId</b>
<a href="#"><u>HAI Population Summary Report Generic Constraints</u></a>	document	urn:oid:2.16.840.1.113883.10.20.5.4.28
<a href="#"><u>HAI Single-Person Report Generic Constraints LTCF</u></a>	document	urn:hl7ii:2.16.840.1.113883.10.20.5.1.1.3:2019-08-01
<a href="#"><u>Healthcare Associated Infection Report</u></a>	document	urn:oid:2.16.840.1.113883.10.20.5.4.25
<a href="#"><u>Laboratory Identified MDRO or CDI Event Report for LTCF</u></a>	document	urn:hl7ii:2.16.840.1.113883.10.20.5.1.1.1:2019-08-01
<a href="#"><u>NHSN Comment Section</u></a>	section	urn:hl7ii:2.16.840.1.113883.10.20.5.5.61:2017-04-01
<a href="#"><u>NHSN Comment</u></a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.5.6.243:2017-04-01
<a href="#"><u>Findings Section in a Laboratory Identified Report LTCF</u></a>	section	urn:hl7ii:2.16.840.1.113883.10.20.5.1.2.1:2019-08-01
<a href="#"><u>Pathogen Identified Observation in a Lab Identified Report LTCF</u></a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.5.1.3.3:2019-08-01
<a href="#"><u>Specimen Collection Procedure in a Lab Identified Report LTCF</u></a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.5.1.3.2:2019-08-01
<a href="#"><u>Encounters Section in an LTCF Report</u></a>	section	urn:hl7ii:2.16.840.1.113883.10.20.5.1.2.2:2019-08-01
<a href="#"><u>First Admission Encounter in a Lab Identified Report LTCF</u></a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.5.1.3.4:2019-08-01
<a href="#"><u>Transfer From Acute Care Facility to LTCF in Past Four Weeks</u></a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.5.1.3.5:2019-08-01
<a href="#"><u>Antibiotic Treatment at Time of Transfer</u></a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.5.1.3.12:2019-08-01
<a href="#"><u>MDRO and CDI LabID Event Reporting Monthly Summary Data for LTCF</u></a>	document	urn:hl7ii:2.16.840.1.113883.10.20.5.1.1.2:2019-08-01
<a href="#"><u>Report No Events Section</u></a>	section	urn:hl7ii:2.16.840.1.113883.10.20.5.5.62:2018-04-01
<a href="#"><u>Report No Events</u></a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.5.6.249:2018-04-01
<a href="#"><u>Summary Data Section LTCF</u></a>	section	urn:hl7ii:2.16.840.1.113883.10.20.5.1.2.3:2019-08-01
<a href="#"><u>Summary Encounter LTCF</u></a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.5.1.3.15:2019-08-01
<a href="#"><u>Summary Data Observation LTCF</u></a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.5.1.3.14:2019-08-01
<a href="#"><u>HAI Section Generic Constraints</u></a>	section	urn:oid:2.16.840.1.113883.10.20.5.4.26

# 5 VALUE SETS IN THIS GUIDE

**Table 56: Value Sets**

Name	OID	URL
<a href="#">Administrative Gender (HL7 V3)</a>	urn:oid:2.16.840.1.113883.1.11.1	<a href="https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.1/expansion">https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.1/expansion</a>
<a href="#">Codes for MDRO and CDI Summary Data LTCF</a>	urn:oid:2.16.840.1.113883.10.20.5.1.5.9.2	<a href="https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.10.20.5.1.5.9.2/expansion">https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.10.20.5.1.5.9.2/expansion</a>
<a href="#">Ethnicity</a>	urn:oid:2.16.840.1.114222.4.11.837	<a href="https://vsac.nlm.nih.gov/valueset/2.16.840.1.114222.4.11.837/expansion">https://vsac.nlm.nih.gov/valueset/2.16.840.1.114222.4.11.837/expansion</a>
<a href="#">NHSNPopulationSummaryReportTypeCode</a>	urn:oid:2.16.840.1.114222.4.11.3595	<a href="https://vsac.nlm.nih.gov/valueset/2.16.840.1.114222.4.11.3595/expansion">https://vsac.nlm.nih.gov/valueset/2.16.840.1.114222.4.11.3595/expansion</a>
<a href="#">NHSNPrimaryResidentServiceType</a>	urn:oid:2.16.840.1.113883.10.20.5.1.5.9.3	<a href="https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.10.20.5.1.5.9.3/expansion">https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.10.20.5.1.5.9.3/expansion</a>
<a href="#">NHSNRaceCategory</a>	urn:oid:2.16.840.1.114222.4.11.7232	<a href="https://vsac.nlm.nih.gov/valueset/2.16.840.1.114222.4.11.7232/expansion">https://vsac.nlm.nih.gov/valueset/2.16.840.1.114222.4.11.7232/expansion</a>
<a href="#">NHSNReportNoEventsAR</a>	urn:oid:2.16.840.1.113883.10.20.5.9.35	<a href="https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.10.20.5.9.35/expansion">https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.10.20.5.9.35/expansion</a>
<a href="#">NHSNReportNoEventsDialysis</a>	urn:oid:2.16.840.1.113883.10.20.5.9.22	<a href="https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.10.20.5.9.22/expansion">https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.10.20.5.9.22/expansion</a>
<a href="#">NHSNReportNoEventsICU</a>	urn:oid:2.16.840.1.113883.10.20.5.9.18	<a href="https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.10.20.5.9.18/expansion">https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.10.20.5.9.18/expansion</a>
<a href="#">NHSNReportNoEventsMDRO</a>	urn:oid:2.16.840.1.113883.10.20.5.9.21	<a href="https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.10.20.5.9.21/expansion">https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.10.20.5.9.21/expansion</a>
<a href="#">NHSNReportNoEventsMDROLTCF</a>	urn:oid:2.16.840.1.113883.10.20.5.1.9.1	<a href="https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.10.20.5.1.9.1/expansion">https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.10.20.5.1.9.1/expansion</a>
<a href="#">NHSNReportNoEventsNICU</a>	urn:oid:2.16.840.1.113883.10.20.5.9.19	<a href="https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.10.20.5.9.19/expansion">https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.10.20.5.9.19/expansion</a>
<a href="#">NHSNReportNoEventsOPCSameDayOutcomeMeasures</a>	urn:oid:2.16.840.1.113883.10.20.5.9.33	<a href="https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.10.20.5.9.33/expansion">https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.10.20.5.9.33/expansion</a>
<a href="#">NHSNReportNoEventsSCA</a>	urn:oid:2.16.840.1.113883.10.20.5.9.20	<a href="https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.10.20.5.9.20/expansion">https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.10.20.5.9.20/expansion</a>
<a href="#">NHSNSignificantPathogenCode</a>	urn:oid:2.16.840.1.114222.4.11.3194	<a href="https://vsac.nlm.nih.gov/valueset/2.16.840.1.114222.4.11.3194/expansion">https://vsac.nlm.nih.gov/valueset/2.16.840.1.114222.4.11.3194/expansion</a>
<a href="#">NHSNSpecimenTypeCode</a>	urn:oid:2.16.840.1.114222.4.11.3249	<a href="https://vsac.nlm.nih.gov/valueset/2.16.840.1.114222.4.11.3249/expansion">https://vsac.nlm.nih.gov/valueset/2.16.840.1.114222.4.11.3249/expansion</a>

## 6 CODE SYSTEMS IN THIS GUIDE

**Table 57: Code Systems**

<b>Name</b>	<b>OID</b>
Administrative Gender	urn:oid:2.16.840.1.113883.5.1
cdcNHSN	urn:oid:2.16.840.1.113883.6.277
CPT4	urn:oid:2.16.840.1.113883.6.12
Healthcare Provider Taxonomy (HIPAA)	urn:oid:2.16.840.1.113883.6.101
HL7ActClass	urn:oid:2.16.840.1.113883.5.6
HL7ActionCode	urn:oid:2.16.840.1.113883.5.4
HL7ActMood	urn:oid:2.16.840.1.113883.5.1001
HL7ActRelationshipType	urn:oid:2.16.840.1.113883.5.1002
HL7ActStatus	urn:oid:2.16.840.1.113883.5.14
HL7Confidentiality	urn:oid:2.16.840.1.113883.5.25
HL7ContextControl	urn:oid:2.16.840.1.113883.5.1057
HL7EntityClass	urn:oid:2.16.840.1.113883.5.41
HL7NullFlavor	urn:oid:2.16.840.1.113883.5.1008
HL7ParticipationType	urn:oid:2.16.840.1.113883.5.90
HL7RoleClass	urn:oid:2.16.840.1.113883.5.110
HSLOC	urn:oid:2.16.840.1.113883.6.259
LOINC	urn:oid:2.16.840.1.113883.6.1
ObservationInterpretation	urn:oid:2.16.840.1.113883.5.83
Race & Ethnicity - CDC	urn:oid:2.16.840.1.113883.6.238
RxNorm	urn:oid:2.16.840.1.113883.6.88
SNOMED CT	urn:oid:2.16.840.1.113883.6.96
UCUM	urn:oid:2.16.840.1.113883.6.8