

## CDA and Batch Submission

### Batch Submission Timeline

- NHSN version 7.2 went live 8/24/2013 and it is now possible to import Dialysis Event numerator CDAs created using Release 9 (R9) of the NHSN CDA Implementation Guide (IG).
  - R9 versions of these events must be implemented for events that occur on or after 01/01/2014
- Programming for CDA automation using Direct is complete; however, due to new CDC security requirements, it was not implemented with NHSN version 7.2
- After new security standards are met later this year, Direct CDA automation will be implemented in the January 2014 release
- Additional guidance and resources for use of Direct CDA automation will be available in advance via the NHSN CDA distribution list, of which LDO and NRAA contacts are members

### Summary of Direct CDA Automation Process

- Automated send can be used to import CDAs from one or more facilities in a single zip file securely using a Health Information Services Provider (HISP)
  - Learn more about HISPs at [www.directproject.org](http://www.directproject.org) which has a wiki on the topic (direct link to wiki is <http://wiki.directproject.org>)
  - NITOR is CDC's HISP that receives the zipped CDA files
- The zip file may be a maximum of 1 MB or contain up to 300 CDA files

### For Direct CDA automation, each individual facility needs:

1. A unique Object Identifier (OID) to ensure CDAs are reported to the correct NHSN facility
  - These can be requested for all of your facilities at one time: contact the NHSN CDA Helpdesk for assistance ([nhsncda@cdc.gov](mailto:nhsncda@cdc.gov))
2. To enter the OID into NHSN on the Facility Information screen
  - Once an OID has been entered into NHSN, the facility can manually import CDA files now or they can be submitted via Direct CDA Automation after January 2014
3. To complete the CDA activation screen, which will be available in NHSN when batch submission is fully implemented in January 2014

### Submitting CDA files

- Submission of CDA files generates either a success or failure message
  - Manual import of CDA files provides a PDF report
  - Automated send provides a PDF and an XML report
- Facilities can access NHSN and use the Analysis function to create reports of NHSN data

**Q. If both manual data entry and CDA are being used to submit data for a single facility, is there a risk of reporting duplicate event or summary records?**

**A.** No. The variables that are used to determine if a record is a duplicate are patient ID, event type, and event date (for event records) or date and location (for summary data). If an event or summary record is entered manually and then a matching CDA file is submitted, the CDA file will fail to import and the following error message will be provided:

*The record being imported is a duplicate of an event that already exists in NHSN.  
Duplicate records cannot be imported unless the record is meant to overwrite a  
previously entered or imported event. The source system must utilize succession  
management to overwrite existing records.*

Similarly, if a CDA file is imported first and then a user tries to manually enter a duplicate event or summary data record, NHSN will provide the following pop-up error message:



## Expectations around CDA and Batch Submission

### Assurance of Data Quality and Completeness

- All data reported to NHSN must follow NHSN protocols, regardless of the data entry mechanism used
- Compare CDA data to *manually* collected data to ensure completeness and accuracy
  - Manual data collection: refers to a trained staff person independently and prospectively collecting NHSN data from all available data sources (so problems with EHR data aren't also inadvertently introduced into CDA)
  - CDA data validation process:
    1. Verify EHRs used for CDA are complete and accurate
    2. Verify CDA software is programmed to pull EHR information correctly (i.e., data match NHSN specifications in Protocol and tables of instructions)
  - Data submitted by CDA needs to be reproducible: a manual review of facility records and documents should obtain the same data.
- Strongly encourage formal, internal processes to:
  - Document facility-level review and approval of their NHSN data prior to submission
  - Report data quality issues
- We are working on resources to help facility staff review their NHSN data
- Let us know your internal processes within a month of beginning CDA reporting or before 2014 so we can direct your users to the correct pathway for resolving data quality issues
- To ensure that data continue to be submitted correctly, a facility-based NHSN user is expected to have access to NHSN and review the data in NHSN on an ongoing basis to verify data reported via CDA

### CDA Timeline

- Create CDA files > test NHSN import > CDA data validation > identify discrepancies > correct CDA software > re-test > re-validate
- Validate a minimum of 3 months of CDA numerator and denominator records to ensure data meet all specifications of the DE Protocol
  - In facilities with very few dialysis events, more than three months will be required.
- Proposed data submission deadlines for calendar year 2014 are 3 months after the end of each quarter

### Data Corrections

- If errors are found in NHSN: add, edit, and delete records to make corrections, as soon as possible
- Corrections can be done manually or by submitting revised CDA files to overwrite incorrect information

### Timeline

- Be prepared to continue manual reporting until you are certain CDA data are complete and accurate
- Again, even once there is confidence in the CDA data, a facility-based staff person is expected to review NHSN data on an ongoing basis to verify the data continue to be reported completely and correctly