National Healthcare Safety Network (NHSN)

NHSN Analysis:
Advanced Features & Terminology

Training Session for NHSN Hospitals
December 19, 2006
Agenda

- Graphical Output Types
- Advanced Output Options
- Exporting Data
- Creating Output Sets
- Publishing Output Options
- Demonstrate Analysis Capabilities
- Q & A
Questions To Answer

- What Graphics Can I Create?
- What Advanced Features Exist?
- How Can I Export My Data?
- How Can I Combine Output Together?
- How Can I Share Custom Output Options?
- Demo Analysis Capabilities
- Q & A
What Graphics Can I Create?

**Answer:** A user can generate bar charts, pie charts, run charts, and control charts.

A user can create graphical output by clicking the **Run** button beside the desired graphical output option in the Analysis Output Options Treeview. Also, a user can click the **Modify** button beside the output option and then click the **Run** button at the bottom of the design parameter page.
Logged into DHQP Memorial Hospital (ID 10000) as JDS.
Facility DHQP Memorial Hospital (ID 10000) is following PS component.

**Patient Safety Component**

Analysis Output Options

- Expand All
- Collapse All

**Device-Associated Module**

- All Device-Associated Events
- Central Line-Associated BSI
  - CDC Defined Output
    - Line Listing - All CLAB Events
    - Frequency Table - All CLAB Events
    - Bar Chart - All CLAB Events
    - Pie Chart - All CLAB Events
    - Rate Table - CLAB Data for ICU-Other
    - Control Chart - CLAB Data for ICU-Other
    - Rate Table - UCAB/CLAB Data for NICU
    - Control Chart - UCAB/CLAB Data for NICU
    - Rate Table - CLAB Data for SCA
    - Control Chart - CLAB Data for SCA
Patient Safety Component
Analysis Output Options

- Device-Associated Module
  - All Device-Associated Events
  - Central Line-Associated BSI
    - CDC Defined Output
      - Line Listing - All CLAB Events
      - Frequency Table - All CLAB Events
      - Bar Chart - All CLAB Events
      - Pie Chart - All CLAB Events
      - Rate Table - CLAB Data for ICU-Other
      - Control Chart - CLAB Data for ICU-Other
      - Rate Table - UCAB/CLAB Data for NICU
      - Control Chart - UCAB/CLAB Data for NICU
      - Rate Table - CLAB Data for SCA
      - Control Chart - CLAB Data for SCA

Bar Chart
Pie Chart
Control Chart
Key Terms

- **Control Chart**: A line plot that displays values of a given measure over time that includes one or more additional lines to indicate whether or not the measure is in control.

- **Run Chart**: A basic line plot of values over time for a given measure.
What Advanced Features Exist?

**Answer:** A user can create new custom output options “from scratch,” make use of custom fields when creating output and define & output custom rates.

In the Advanced section of the Analysis Output Option Treeview, a user can click **Create New Custom Option** to have greater flexibility in accessing Analysis Data Sets and Output Options.
Patient Safety Component
Analysis Output Options

Expand All  Collapse All

- Device-Associated Module
- Procedure-Associated Module
- Medication-Associated Module

Advanced
- Create New custom Option
  - Event-level Data
  - Procedure-level Data
  - Device Denominator-level Data
  - Pathogen-level Data
- My Custom Output
- Published Output

Click to create advanced output options
How Can I Export My Data?

**Answer:** A user can perform three types of exports

1. Facility Data Export
2. Analysis Data Set Export
3. Output Data Set Export

A user can export their facility’s entire data, a specific Analysis Data Set, or Output Data Set using a number of popular file formats (e.g. MS Excel).
Welcome to the NHSN Home Page.

Use the Navigation bar on the left to access the features of the application.

Facility Data Export
Line Listing

Analysis Data Set: CLAB_Events

Modify Attributes of the Output:
- Last Modified On: 12/18/2006
- Output Type: Line Listing
- Output Name: Line Listing - All CLAB Events
- Output Title: Line Listing for All Central Line-Associated BSI Events

Select output format:
- Output Format: HTML

Use Variable Labels

Analysis Data Set Export
Key Terms

- **Facility Data Export**: an export that creates a copy of all facility data and places these data in a user-specified file format.

- **Analysis Data Set Export**: an export that creates a copy of an Analysis Data Set in a user-specified file format.

- **Output Data Set Export**: an export that creates a copy of an Output Data Set in a user-specified file format.
How Can I Combine Output?

**Answer:** A user can combine output together from two or more output options (e.g., line listing, frequency table, rate table) by creating an Output Set.

An Output Set can be created by expanding the My Custom Output section of the Analysis Output Option Treeview, expanding the Output Sets section and clicking **Create New Output Set**.
Create a new Output Set

Patient Safety Component
Analysis Output Options

Generate Data Sets
- Device-Associated Module
- Procedure-Associated Module
- Medication-Associated Module
- Advanced
- My Custom Output
  - Rate Table - CLAB Data for ICU-Other
  - My Custom Line Listing - All CLAB Events
  - Custom #1 Line Listing - All CAU Events

Output Sets
- Create New Output Set
  - New Set 1
- Published Output
Key Term

- **Output Set**: an output option that groups two or more existing individual output options that are CDC-Defined, custom or published output.
How Can I Share Custom Output Options?

**Answer:** A user can share a custom output option by publishing it.

Each custom output option that a user creates can be published by clicking the **Publish** button at the bottom of the design parameter page for that output option. The design parameter page will be displayed when clicking the **Modify** button beside the output option to be published.
Key Term

- **Published Output Option**: a custom output option that has been published by a user. This published output option can be modified without changing the original design.
Support

- Online help messages within NHSN
- Email: nhsn@cdc.gov
- Phone support:
  800-893-0485 or 404-498-1250
- Members website:
  http://www.cdc.gov/ncidod/dhqpp/nhsn_members.html
Questions?