Impact of ICD-10-CM/PCS on the National Health Care Surveys

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National Health Care Surveys

- **National Ambulatory Medical Care Survey (NAMCS)**
  - Visits to office-based physicians and community health center providers.
  - Since 1973, annual since 1989

- **National Hospital Ambulatory Medical Care Survey (NHAMCS)**
  - Visits to Emergency Departments, Outpatient Departments, and Ambulatory Surgery Locations
  - Annual survey since 1992

- **National Hospital Care Survey**
  - Visits to hospitals, including both inpatient and outpatient settings (emergency, outpatient, and ambulatory surgery)
  - Ongoing since 2011
NAMCS/NHAMCS Data Collection

- **Facility-level data**
  - Collected through in-person interviews
  - Includes visit volume, EHR adoption, other administrative questions

- **Visit-level data**
  - Sample of visits for a pre-selected period of time
  - Abstracted onto Patient Record forms (PRFs)
  - Includes patient demographics, reason for visit, diagnosis, procedures, and medications
NHCS Data Collection

- **Facility-level data**
- **Visit data**
  - Electronic data for all inpatients and ambulatory visits:
    - Electronic health record (EHR) data
    - Uniform Bill (UB) 04 administrative claims data
    - State data files
  - Abstracted data for a sample of ED and OPD visits including ambulatory surgery:
    - Oversampling of ED substance-involved visits
    - Clinical information (e.g., labs, medications)
Abstracted Ambulatory Data: Diagnosis and Procedure Data

- **Before 2012 (ICD-9-CM)**
  - Paper PRFs
  - Data keyed and coded by a contractor

- **2012 – 2015 (ICD-9-CM)**
  - Computerized PRFs on secure laptops
  - Data entered as verbatim fields and also selected from a dropdown menu
  - Verbatim fields still coded by contractor

- **2016 (ICD-10-CM/PCS)**
  - Computerized PRFs
  - Verbatim fields only; no dropdown menus
Abstracted Ambulatory Data: Dropdown Menus

**A look at the Dropdown Menus**

- Started in 2012
- Lists of most commonly entered diagnoses and procedures from previous years of data
- Abstractor asked to write in the verbatim data, and then select the appropriate entry from the dropdown menu
- Menu selections were mapped to **ICD-9-CM** codes in data processing

**Analysis of 2012 data found a 10% error rate between verbatim entries and dropdown menus**
Data Uses

- Changes in utilization and practice
  - Diagnoses, tests/procedures, prescribing

- Quality of care
  - Impact of performance measures and educational campaigns
  - Healthy People 2010 & 2020 objectives

- Health disparities

- Condition-specific rates
  - Chronic conditions
  - Injuries

Impact of ICD-10: Ambulatory Operations

- **Training**
  - Train field representatives to record more detail for diagnosis and procedures verbatim fields

- **Recruitment**
  - Physician groups and hospitals may be reluctant to participate because of ICD-10-CM/PCS implementation demands

- **Coding the data**
  - Contractor must train staff to code verbatim diagnosis and procedure data into ICD-10-CM/PCS
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Dual-Coding ICD-9 and ICD-10

- Last quarter of 2014 verbatim data coded into both ICD-9 and ICD-10
  - Diagnosis
  - Procedures
  - Cause of injury

- Issues identified
  - Lack of specificity in verbatim (no text describing severity/laterality)
  - Difference in codes available
    - e.g. Cellulitis and abscess
      - 1 code in ICD-9; 2 in ICD-10
Impact of ICD-10: NHCS Operations

- **Recruitment:**
  - Reluctance to participate because of ICD-10 implementation demands on IT staff

- **Sampling of ED and OPD visits:**
  - Update diagnoses codes for sampling ED substance-involved visits
  - Update diagnoses codes for sampling OPD non-procedure visits
Impact of ICD-10: Data Analysis

- Educate staff

- Convert thousands of diagnosis and procedure codes from ICD-9-CM to ICD-10-CM/PCS

  - Examples:
    - Coronary atherosclerosis
      - 8 ICD-9-CM codes (414.00-414.07)
      - 40 ICD-10-CM codes (forward and backward coding)
    - Angioplasty
      - 1 ICD-9-CM code (39.50)
      - 854 ICD-10-PCS codes (forward and backward coding)
Impact of ICD-10: Data Analysis (Cont.)

- **Update data processing, data check, and data analysis computer programs**

- **2015 estimates:**
  - 12 months of data with ICD-9-CM codes and 3 months with ICD-10-CM/PCS codes

- **Trend analysis:**
  - Develop inpatient and ambulatory crosswalks from ICD-9-CM to ICD-10-CM/PCS
    - Top 20 diagnoses and procedures?
    - Top 100 diagnoses and procedures?
Impact of ICD-10: Data Dissemination

- Develop new web tables and publication templates
- Release web tables and publications in a timely manner
- Educate data users:
  - Develop documentation for public use files
  - Develop documentation for trend analyses
Thank you!