Overview: National Hospital Care Survey

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NCHS Board of Scientific Counselors Meeting

January 23, 2015

NCHS gathers data in many health care settings

- Doctors' offices
- **Hospitals**
  - **Inpatient setting**
  - **Ambulatory care settings**
    - Emergency Departments (EDs)
    - Outpatient Departments (OPDs)
    - Ambulatory Surgery Locations (ASLs)
- **Freestanding ambulatory surgery centers (ASCs)**
- Nursing homes
- Home health care agencies
- Hospices
- Residential care facilities

NHCS Background

The National Hospital Care Survey (NHCS) integrates three long-standing surveys:

- NHDS - the longest continuously fielded sample of inpatient care from 1965-2010

- NHAMCS - surveying hospital EDs and OPDs since 1992, hospital ASLs since 2009, and freestanding ASCs since 2010

- DAWN - collected data on drug-involved ED visits since 1970s; conducted by SAMHSA from 1992-2011

Purpose of NHCS

- Describes national patterns of health care in hospital-based settings.

- Provides nationally representative data of encounters in non-institutional, non-federal hospitals with six or more staffed inpatient beds.
  - Inpatient discharges
  - ED visits including drug-involved visits
  - OPD visits including ambulatory surgery

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Goal and Objectives of NHCS

- Goal:
  - Move toward electronic collection of health care data.

- Objectives:
  - Continue to provide national health care statistics.
  - Permit special studies, as needed.
  - Link episodes of care across hospital units as well as link to other data sources such as the National Death Index and Medicare data.

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Data Collection Opportunities

- Special Studies - sampling patients with specific characteristics and collect richer data from the medical record
  - Substance-involved visits for SAMHSA
- Expanded data on the Healthcare Organization
  - Accountable Care Organization
- Expanded facility level data
  - EHRs, Palliative Care Unit, Staffing issues
- Link encounters across hospital units, both inpatient and ambulatory, and with other data sources
  - Continuity of care

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Opportunities for Linkage

- Link within the same sampled hospital:
  - Inpatient re-admissions within year and across years
  - Inpatients who visited ED within 24-72 hours
  - Repeat ED visits
  - Link care delivered ED, inpatient and/or OPD

- Link to the National Death Index:
  - 30 , 60 or 90 day mortality
    - A recent test of linking 2011 NHCS inpatient data to the 2011 NDI yielded match rate of 94 percent for those "known" to be dead.

- Link to Medicare data
  - Patient cognitive and functional status over time
  - Patient utilization of providers not at sampled hospital

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Opportunities for Surveillance

- Trends and estimates of ED visits to drug abuse
- Trends and incidence of AMI, heart failure and stroke
- Trends and point prevalence of healthcare acquired infections and antimicrobial use

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Opportunities for Health Services Research

- Impact of ACOs and other changes in health care delivery on hospital care

- Impact of EHRs with clinical decision support on quality of care

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Opportunities for Healthcare Organizations

- Readmission rates and the characteristics of patients who are readmitted

- 30 day Mortality Rates

- Rates of hospital-acquired conditions

- Length of stay and intensive care use

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Sample design

- Target universe is inpatient discharges and in-person visits made to EDs, OPDs including ambulatory surgery in:
  - Non-institutional hospitals
  - Non-federal hospitals
  - Hospital has six or more staffed inpatient beds
- A base sample of 500 hospitals was drawn as well as a reserve sample of 500 hospitals.

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Data collected

1. Electronic data for all inpatients and ambulatory visits:
   - Electronic health record (EHR) data
     - Demographics
     - Diagnoses and procedures
     - Clinical data (e.g., medications, labs, tests, imaging)
   - Uniform Bill (UB) 04 administrative claims data:
     - Demographics
     - Diagnoses and procedures
     - Charges for services (e.g., ICU use, physical therapy)
   - State data files
     - Demographics
     - Diagnoses and procedures

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Data collected continued

2. Abstracted data for a sample of ED and OPD visits including ambulatory surgery:

- Oversampling of ED drug-involved visits
- Clinical information (e.g., labs, medications)

 Note : No abstraction done if required EHR data provided

3. Facility level data:

- Information needed for weighting (e.g., total discharges, total ED visits)
- Ambulatory interview

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Protected Health Information (PHI)

For both inpatient and ambulatory data PHI will be collected :

- Patient identifiers such as:
  - Name; Address; Zip code; Social security number and Medical record number
- Physician identifiers such as:
  - Attending National Provider Identifier (NPI) and Operating NPI

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Project Status: Recruitment

- Recruitment of hospitals has proved difficult.
  - 100 hospitals recruited
  - For 2013 data collection, 93 provided inpatient data and 85 ambulatory data

- New recruitment strategy adopted.
  - Targeting 250 hospitals with 300 staffed beds or more
  - In-person site visits with contractor and NCHS staff
  - Add a minimum of 50 hospitals for 2014 and 2015 data collections

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Key Challenges to Participation

- Competing demands

- Timing of the request

- Lack of resources to devote

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Challenges to Participation: COMPETING DEMANDS

- Hospitals have numerous mandatory reporting requirements
  - CMS quality indicator requirements as one example
- In addition, they face numerous voluntary requests
- Other compliance and reporting demands

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Challenges to Participation: TIMING

- ICD-10 implementation in 2014 and now 2015—a major drain on resources

- EHR systems: conversion, implementation, and achieving meaningful use

- At the same time, all other requirements for reporting and delivering care continue

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Challenges to Participation: RESOURCES

- Burden of the request is non-trivial

- Electronic data issues

- Abstraction issues

- Incentives offered for initial set-up and complete data transmission ($500)

- Informal discussions about how much cash would be needed were inconclusive

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Focus groups

- Conducted with both soft ("delayers") and hard refusing hospitals

- Burden was a key issue

- Why cash fails: what hospitals really needed was a staff person who could be devoted to the task

  - Really, <u>no</u> amount of cash could overcome this obstacle

  - Time barriers: even if they could afford augmented staff, the effort involved in bringing someone up to speed was prohibitive

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Activities to move NHCS forward

- Development of HL7 Implementation Guide
- EHR developmental work:
  - Census pilot studies
  - Vendor study

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HL7 Implementation Guide

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Home > Standards > Product Brief

Introduction to HL7 Standards

Master Grid of Standards

Primary Standards

Foundational Standards

Clinical and Administrative Domains

EHR Profiles

Implementation Guides

Rules and References

Education & Awareness

IP Policy

Section 5: Implementation Guides

HL7 Implementation Guide for CDA® R2: National Health Care Surveys (NHCS), Release 1 - US Realm

DESCRIPTION

The HL7 Implementation Guide for CDA Release 2: National Health Care Surveys (NHCS), Release 1 - US Realm will provide a standardized format for implementers to submit data to fulfill requirements of the Centers for Disease Control and Prevention/National Center for Health Statistics/National Health Care Surveys. This guide will support automatic extraction of the data from a provider's electronic health record (EHR) system or data repository. The data are collected through three surveys of ambulatory care services in the United States: the National Ambulatory Medical Care Survey (NAMCS) with information from physicians and two national hospital care surveys: the National Hospital Ambulatory Medical Care Surveys (NHAMCS) and the National Hospital Care Survey (NHCS) with data from hospital emergency (ED) and outpatient departments (OPD).

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Benefits

- Creates a standardized format to represent ambulatory healthcare data collected by the NCHS

- Enables automation of the survey data collection process by using CDA to streamline the collection of data and increase the sample pool by allowing all providers who participate in the surveys to do so electronically

- Supports physician offices/hospitals ability to participate in the NCHS surveys by providing electronic files from their EHRs

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Target Audience

- The audience for this implementation guide includes the architects and developers of healthcare information technology (HIT) systems in the US Realm that exchange patient clinical data in ambulatory care settings.

- CDC/NCHS is collaborating and in discussion with Epic, Allscripts and Cerner to support NHCS data collection

- CDC/NCHS is in discussion with ONC and CMS regarding MU3

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Thank you!!

More information about NHCS can be found at http://www.cdc.gov/nchs/nhcs.htm

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