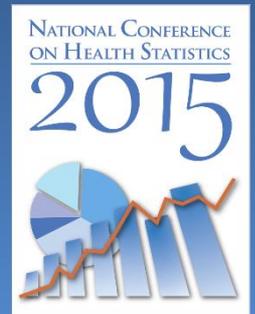# 2015 National Conference on Health Statistics

Michelle Williamson, RN, MS, CPHIT
National Center for Health Statistics

Developing an Interoperability Standard for the National Health Care Surveys

Vision

- Provide a nationally recognized, standardized format for submission of NHCS survey data requirements to enable automatic extraction from EHR or data repositories

- Offer a standardized approach to ONC for NCHS adoption as a Specialized Registry under Meaningful Use

Why participate in the development of Health IT Standards?

NCHS and its partner organizations have developed, implemented and maintained many of the critical standards used in population health and healthcare

- Standard certificates for vital events

- International Classification of Diseases and its clinical modifications

- Uniform data sets for hospital and ambulatory care

Why participate in the Health IT Standards Landscape?

- NCHS relies on States and healthcare providers for much of the data it collects and links data to external data systems

- NCHS data systems potentially could benefit from standardized data collected in electronic health records and personal health records

- NCHS/CDC recognized early on that standards would have implications for population health statistics

President's Health IT Plan

"By computerizing health records, we can avoid dangerous medical mistakes, reduce costs, and improve care."

Former President G. W. Bush
in State of the Union Address on January 20, 2004

Established goal for most Americans to have access to an interoperable electronic health record (EHR) by 2014

Standards are a key component for interoperability

President's HIT Plan

"To lower healthcare cost, cut medical errors, and improve care, we'll computerize the nation's health record in five years, saving billions of dollars in health care costs and countless lives."

President Barack Obama
in First Weekly Address on
January 24, 2009

Consistent with Bush's 2014 goal for electronic health records

American Recovery & Reinvestment Act (ARRA)

- **President Obama signed ARRA on Feb. 17, 2009**

- **ARRA required the Department of Health and Human Services (DHHS) to create, vet and publish an initial set of HIT system standards, implementation specifications and testing criteria to promote adoption and "meaningful use" of EHRs**

- **ARRA is serving to stimulate adoption of HIT**

Health Information Technology for Economic and Clinical Health (HITECH) Act of 2009

TITLE XIII—HEALTH INFORMATION TECHNOLOGY

SEC. 13001. SHORT TITLE; TABLE OF CONTENTS OF TITLE.

(a) SHORT TITLE.—This title (and title IV of division B) may be cited as the "Health Information Technology for Economic and Clinical Health Act" or the "HITECH Act".

(b) TABLE OF CONTENTS OF TITLE.—The table of contents of this title is as follows:

Health Level Seven International (HL7)

- Dedicated to developing standards for the exchange, integration, sharing, and retrieval of electronic health information

- Includes over 2,300 members representing more than 90% of the information systems vendors serving healthcare

- Support of the HL7 Public Health and Emergency Response Work Group (PHER WG) for development of standards

Available at: http://www.hl7.org/about/index.cfm?ref=nav

HL7 Standards Development Process

Project Proposal to Develop HL7 Standard for NCHS/DHCS

- Complete HL7 Project Scope Statement to describe the organization and the need for a new standard

- HL7 Sponsoring Work Groups:
    - Public Health and Emergency Response (PHER) – primary sponsor
    - Structured Documents (SD) – co-sponsor

- Additional levels of approval from the HL7 Domain Experts Steering Division and Technical Steering Committee

HL7 Standards Development Process

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

- Weekly meetings of development team to discuss and resolve requirements including NCHS SMEs and Informaticists; and technical writer

- Mapping of data elements required by the Surveys to existing HL7 CDA templates and creation of new templates

- Identifying standard vocabulary for the standard using SNOMED, LOINC, PHIN VADS

HL7 Standard Example

Cause of Injury, Poisoning, or Adverse Effect (Coded) Example

```xml
<observation classCode="OBS" moodCode="EVN">
    <templateId root="2.16.840.1.113883.10.20.34.3.27"/>
    <id root="b1eae324-7c21-4ef8-8618-0b4478c65721"/>
    <code code="69543-7" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
        displayName="Cause of Injury"/>
    <statusCode code="completed"/>
    <!-- Form Element: Cause of Injury, Poisoning, or Adverse Effect -->
    <value xsi:type="CD"
            code="T42.2X3A"
            displayName="Poisoning by succinimides and oxazolidinediones,
                        assault, initial encounter"
            codeSystemName="ICD10CM"
            codeSystem="2.16.840.1.113883.6.90"/>
</observation>
```

HL7 Standards Development Process

Balloting and Publishing the HL7 IG for CDA R2: National Health Care Surveys (NHCS), Rel. 1 - US Realm

- Ballot package provided to HL7 for industry comments during scheduled ballot period

- Comments received from ballot reviewers

- HL7 PHER WG assisted the development team in resolving comments

- Development team revised document based on comment resolution

- Seek HL7 approval to publish the IG as a Draft Standard for Trial Use (DSTU)

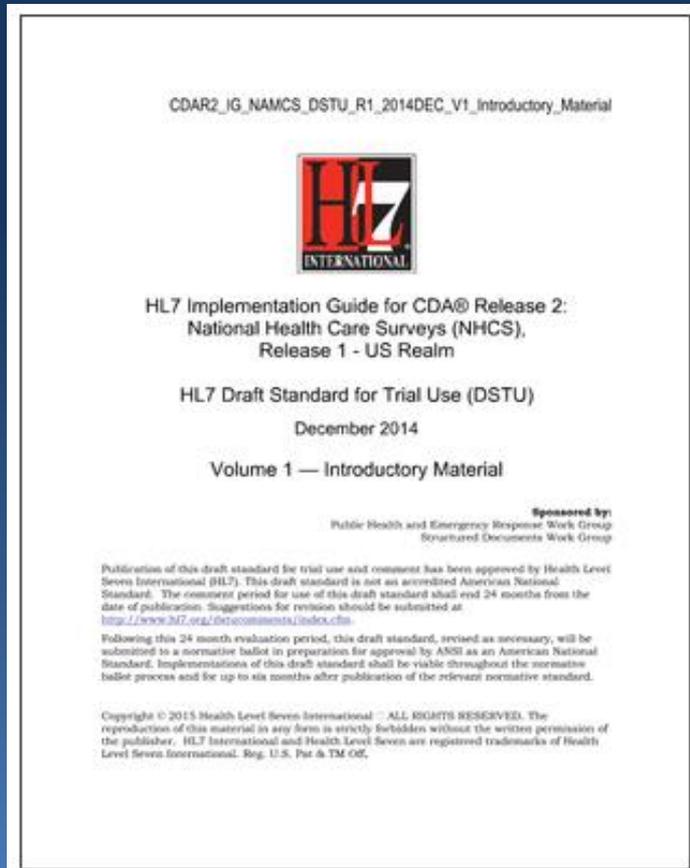# HL7 IG for CDA R2: National Health Care Surveys (NHCS), Rel. 1 – U.S.

Volume One
- Overview of CDA markup standards, design, and use

Volume Two
- Collection of CDA templates for the health care surveys applicable to the US Realm

Future Plans for Standards

CDAR2_IG_NAMCS_DSTU_R1_2014DEC_V1_Introductory_Material

HL7 Implementation Guide for CDA® Release 2:
National Health Care Surveys (NHCS),
Release 1 - US Realm

HL7 Draft Standard for Trial Use (DSTU)

December 2014

Volume 1 — Introductory Material

Sponsored by:
Public Health and Emergency Response Work Group
Structured Documents Work Group

Publication of this draft standard for trial use and comment has been approved by Health Level Seven International (HL7). This draft standard is not an accredited American National Standard. The comment period for use of this draft standard shall end 24 months from the date of publication. Suggestions for revision should be submitted at http://www.hl7.org/dstucomments/index.cfm.

Following this 24 month evaluation period, this draft standard, revised as necessary, will be submitted to a normative ballot in preparation for approval by ANSI as an American National Standard. Implementations of this draft standard shall be viable throughout the normative ballot process and for up to six months after publication of the relevant normative standard.

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- HL7 DSTU two-year period when interested parties can implement the standard

- NCHS plans to seek approval to advance the standard from a DSTU to an HL7 Normative Standard
  - Validated by American National Standard Institute (ANSI)

Next Speaker: Carol DeFrances

Electronic Health Record (EHR) Activities for the National Hospital Care Survey