The Electronic Health Record and Meaningful Use:
Where do we go from here?

5th Annual NDNQI Data Use Conference

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Nurses and Health IT

- Technology junkies--nurses don't want to be passive users of technology
- What nurses *want*...
  ◦ Electronic Health Records
  ◦ Systems that provide tracking, documentation, and communication
  ◦ Integrated and interoperable systems and data
  ◦ Functionality that eliminates "work arounds"

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Nurses and Health IT

- Nurses want devices that are integrated, voice activated, handheld, use biometrics, provide translation, are portable, are wireless, auto populate, and are "smart."
- Health IT should eliminate waste in nursing workflow resulting from:
  - Inefficient work patterns
  - Interruptions
  - Missing supplies/equipment/medications
  - Inaccessible information/documentation

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Meaningful Use: A Review

- American Recovery and Reinvestment Act of 2009 provided for incentive payments for the meaningful use of certified EHR technology through HITECH (Health Information Technology for Economic and Clinical Health Act).
- Payments made through CMS to "eligible providers" (EP), eligible hospitals, and critical access hospitals.
- EPs include all healthcare professionals in an integrated healthcare community including nurses (RNs), advance practice registered nurses (APRNs), and other clinicians as well as expanding sites to include patient centered care delivered by interdisciplinary teams.

Meaningful Use Definitions

- EHR — electronic health record
- EMR — electronic medical record
- PHR — personal health record
- Interoperability — technical structure creates, transmits, stores, manages, and exchanges health information
- Use Case

Meaningful Use Definitions

- Use Cases (examples)
  - General laboratory orders
  - Long term care assessments
  - Common device connectivity
  - Newborn screening
  - Patient-provider secure messaging
  - Immunizations and response management
  - Quality (reporting)
  - Consumer access to clinical information
  - Laboratory orders and results reporting
  - Harmonized electronic health record

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Federal HIT Advisory Committees

HIT Policy Committee

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Federal HIT Advisory Committees

HIT Policy Committee
- Meaningful Use
- Certification/Adoption
- Information Exchange
- Nationwide Health Information Network
- Strategic Plan
- Privacy and Security Policy (Tiger Team)
- Governance
- Quality Measures (Tiger Teams)
- PCAST Report

Federal HIT Advisory Committees

HIT Standards Committee

Judy Murphy, RN, FACMI, FHIMSS
Vice President, Information Services
Aurora Health Care, Milwaukee, WI

Federal HIT Advisory Committees

HIT Standards Committee

▸ Clinical Operations

▸ Clinical Quality

▸ Privacy and Security

▸ Implementation

▸ Vocabulary

Why Meaningful Use?

▸ It's all about *quality*

▸ Need to move from systems that are designed to manage and share financial data to those that address **clinical** data

▸ Desire to transform health care

▸ Use certified EHR technology to improve:
  ◦ Quality
  ◦ Efficiency
  ◦ Safety

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Why Meaningful Use?

It's not about the technology, it's how you use the data!

Impact will only be realized if we use EHRs in meaningful way

- Electronic *Health* Record versus Electronic *Medical* Record
- Greater adoption and use to achieve full potential of EHR
  - Exchanging information
  - Entering orders with decision support
- Improve patient safety and health care quality
- Track and trend patient outcomes

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Meaningful Use: the Rules

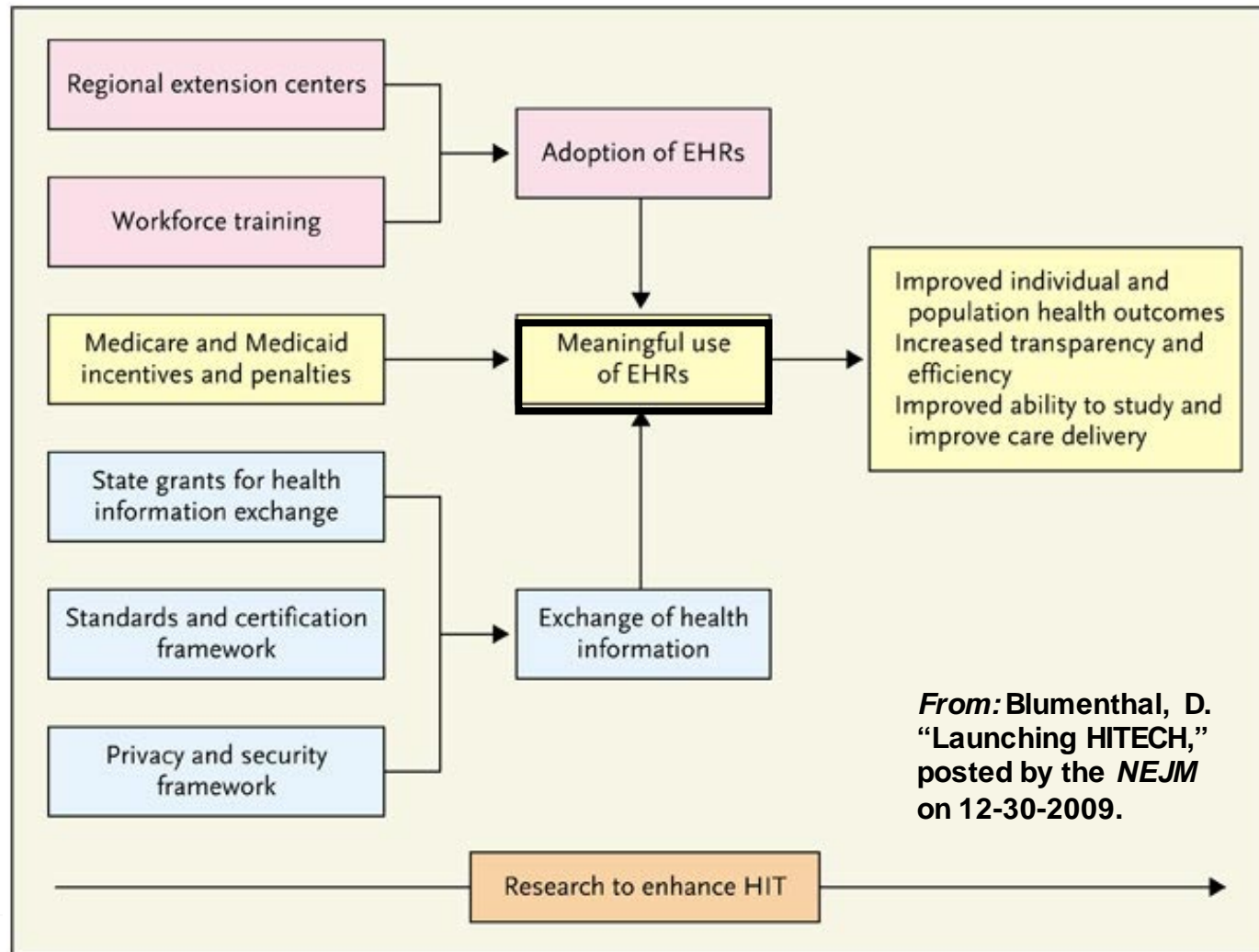Criteria developed by:
  Health IT Policy Committee
  Health IT Standards Committee
  National Center for Vital Health Statistics
  Public input

Meaningful Use: One tool

From: Blumenthal, D. "Launching HITECH," posted by the *NEJM* on 12-30-2009.

Meaningful Use: Stage 1 Criteria

2011

▸Electronically capture health information in a coded format

▸Use information to track key clinical conditions

▸Report clinical quality measures and public health information

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Meaningful Use: Stage 1 Criteria

- 25 objectives/measures for EPs
  - 15 Core measures; 10 "menu" items
- 24 objectives/measures for eligible hospitals
  - 14 Core measures; 10 "menu" items
- Submit aggregate clinical quality measure numerator, denominator, and exclusion data

Meaningful Use: Stage 1

▸ Relevant clinical requirements:
▸ CPOE for EPs = 30%
▸ CPOE for Eligible hospitals = 30% medication orders
▸ E-Prescribing = 40% of prescriptions
▸ Clinical Decision Support = 1 rule
▸ Provide 50% of patients with e-copy of health information and discharge summaries *if requested*

Meaningful Use: Stage 2

- Recommendations out for 45 days of public comment--ends February 25, 2011
- 2012--Expand Stage 1 criteria
  - Disease management
  - Clinical decision support
  - Medication management
  - Patient access to own health information
  - Transitions in care
  - Quality measurement and research
  - Bi-directional communication with public health

Meaningful Use: Stage 3

▸ Achieve improvements in quality, safety and efficiency

▸ Decision support for national high priority conditions

▸ Patients access self management tools

▸ Access to comprehensive patient data

▸ Improve population health outcomes

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Meaningful Use: Incentive Payments

- Qualifying EP--begins 2011
  ◦ Receive up to $44,000 over 5 years from Medicare

  OR

  ◦ Receive up to $63,750 over 5 years from Medicaid
- Hospitals base payment $2Million

Meaningful Use: Incentive Payments

- Sign-up started January 3, 2011
  ◦ 80% hospitals; 41% office-based physicians say they are ready
- Payment reduced for those not demonstrating meaningful use of certified EHR technology in 2015

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Getting to Meaningful Use

- Requires successful implementation and adoption of EHRs
- EHR implementation is a quality effort *not IT*
- Change Management process essential
- Adoption of Standards
  - Vocabulary
  - Content exchange
  - Data transport
  - Privacy and security

Getting to Meaningful Use:
Impact of Electronic Health Records

- Complete and accurate information
    - Know more about patients
- Better access to information
    - Make better decisions
- Patient empowerment
- Increase safety
- Reduce costs

Getting to Meaningful Use for Nursing

Vocabularies

- SNOMED
  - Systematized Nomenclature of Medicine
- SNOMED CT—Reference Terminology and Clinical Terms
- LOINC--Logical Observation Identifiers, Names, and Codes
- HL7—Health level 7

Getting to Meaningful Use for Nursing

Interface nursing terminologies recognized by ANA:

- NANDA -North American Nursing Diagnoses Association
- NIC — Nursing Intervention Classification
- NOC--Nursing Outcomes Classification
- CCC — Clinical Care Classification
- Omaha System
- PNDS--Perioperative Nursing Data Set
- ICNP — International Classification of Nursing Practice

Meaningful Use Agenda for Nursing

- Transform clinical workflows
- Recommendation in IOM Future of Nursing Report
- Meaningful contributions
- Tools to leverage describing what is happening with patients
- Nursing vocabulary—structured format for data
- Assure greater inclusion of data describing nursing care

Meaningful Use Agenda for Nursing

- Nurse Charting dilemma--We tell the patient's story
- If we don't write it down does anyone care?
- Should we abandon the narrative?
- Electronic formats require structured data
  - Evidence of care
  - Quality issues
  - Interactional patterns
  - Clarification of orders
  - Patient's experience

Meaningful Use Agenda for Nursing

Kaiser Permanente and the Department of Veterans Affairs collaborative initiated the "Tipping Point"

- Improve quality outcomes through evidence based nursing practice
- Measure the impact of nursing care on patient outcomes by capturing select data in EHR
- Imbed quality measures sensitive to nursing care in meaningful use critieria for adoption

Meaningful Use Agenda for Nursing

- ANA taking the lead with Alliance for Nursing Informatics to introduce **"pressure ulcer prevention"** as a quality measure sensitive to nursing care for adoption in meaningful use incentives
- 3Million adults per year treated for pressure ulcers (hospital, LTC, home)
- Cost in excess of $15Billion/year
- Goal to ↓Cost, ↓Patient and Staff burden
- Move from prevalence to *prevention*

Meaningful Use Agenda for Nursing

Knowledge-Based Nursing Initiative University of Wisconsin, Milwaukee and Aurora Health System

▸ Transform practice and research

▸ Improve care across all venues by infusing research and evidence-based nursing knowledge into nursing workflows with decision support

◦ Facilitate clinical decisions
◦ Populate data repositories as care is documented
◦ Analyze data in repositories

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Nursing contributions to Meaningful Use

- Nurses integral to data collection
- Nurse informaticists are essential!
- Interoperable digital networks allow for care to move to different places and are not as time sensitive
- Inputs:
  - Digital workflow
  - Computerized knowledge management
  - Decision support
- Teams share activities enabled by interoperable EHRs and PHR

HIT Journeys — Stories from the Road (ONC)

Cherokee Indian Hospital, Cherokee, NC

- Serves 14,000 Eastern Band Cherokee Indians
- EHR screens
  - Domestic violence
  - Tobacco and alcohol use
- Measures clinical outcomes
  - LDL cholesterol
  - Blood pressure
- Summaries to discuss with patients
- Reduce free text entries = greater efficiency

Cherokee, NC

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HIT Journeys – Stories from the Road (ONC)
Bayou La Batre Clinic

- Dr. Regina Benjamin
- Nurse Nell Borsage
- Hurricane Georges 1999
- Hurrican Katrina 2005
- "Baked Charts" to restore paper records
- Clinic burned down and all records destroyed
- Relied on memory and intuition
- Couldn't *NOT* afford to have an EHR

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HIT Journey--Visiting Nursing Service of New York State

- Largest non-profit home care provider in US--138,000 patients served annually
  - 3,500 nurse and therapists
  - orders from 22,000 MDs
- Patient centered medical home--collect and analyze data--current and retrospective
- Improve Outcomes:
  - Monitor and maintain chronic conditions
- Decrease Utilization:
  - Prevent ED visits and hospital admissions

Nurses and Meaningful use – Engaging Patients and Families

Plugged in patients

- Fosters collaborative decision making
- Improves patient experience
  - better outcomes
  - reduced readmissions
- Need to address privacy and security barriers
- Nurses are great translators and facilitators

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Nurses Look to the Future

- What do we need to do?
- Incorporate nursing terminologies into meaningful use vocabularies of EHRs
- Continue to develop and promote use of nursing terminologies--- incorporate into SNOMED

CoolClips.com

Nurses Look to the Future

▸ Help change culture in our organizations

Nurses Look to the Future

Naysayers:

- "Can you imagine if car companies were legislated (incented) to implement automation and safety changes that caused them to cut production in half…and cause the workers to be a bit distracted from what they were doing on the other 50%….how healthy would that be for the industry? And for the cost and quality of cars?"

Nurses Look to the Future

Naysayers:
- The money is not enough--there is greater payment in over treating
- The government shouldn't be telling us what to do

Nurses Look to the Future

Technology Transforming Nursing Practice--
recommendations of the Initiative on the Future
of Nursing

▸ Identification and testing of new and existing technologies
intended to support nursing decision-making and care delivery

▸ Capture costs and benefits of a range of care technologies
intended to support nursing decision-making and care delivery

▸ Identification of the contributions of various health care
professionals make to the design and development, purchase,
implementation and evaluation of devices and information
technology products

▸ Develop a measure of "meaningful use" of HIT by nurses

Nurses Look to the Future

Look for organizations that leverage their EHR

- Coordinate care
- Set up medical homes
- Promote team based care
- Embrace fee-for-value
- Automate essential processes like medication reconciliation

Nurses Look to the Future

Nurses Look to the Future

- Nursing workflow is a focus of HIT so nurses are more efficient, and produce safer care
- Nurses drive technology/EHR design decisions and evaluation to speed adoption
- Systems are all interoperable for exchanging data
- Nurses are seen as meaningful users of data and technology
- Nurses leverage NDNQI data to advance meaningful use nursing quality measures

Get involved

Onward and upward to achieving meaningful use

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