AMIA’s 6th Annual Invitational Policy Meeting

The Future State of Clinical Data Capture and Documentation

December 6-7, 2011
Washington, D.C.
Welcome

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Chair-Elect, AMIA Board of Directors
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... the center of action for more than 4,000 health care professionals, informatics researchers and thought leaders in biomedicine, health care and science. AMIA is an unbiased, authoritative source within the informatics community and the health care industry. AMIA and its members are transforming health care through trusted science, education and practice in biomedical and health informatics.
AMIA Mission

AMIA aims to lead the way in transforming health care through trusted science, education, and the practice of informatics. AMIA connects a broad community of professionals and students interested in informatics. AMIA is the bridge for knowledge and collaboration across a continuum, from basic and applied research to the consumer and public health arenas.
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Opening Remarks

Edward H. Shortliffe, MD, PhD
CEO and President, AMIA
Health Policy Meeting Steering Committee

- Caitlin Cusack, Steering Committee Chair
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Government Leadership Present

- Agency for Healthcare Research and Quality (AHRQ)
- Centers for Disease Control and Prevention (CDC)
- Centers for Medicare and Medicaid Services (CMS)
- Food and Drug Administration (FDA)
- Department of Defense (DoD)
- National Cancer Institute (NCI)
- National Heart, Lung, and Blood Institute (NHLBI)

- National Institutes of Health (NIH) Office of Behavioral and Social Sciences Research (OBSSR)
- National Institute for Standards and Technology (NIST)
- National Library of Medicine (NLM)
- Office of the National Coordinator for Health IT (ONC)
- Veterans Health Affairs (VHA)
Purpose of AMIA’s Policy Meetings

• Elevate important health IT and informatics-related policy topics and influence subsequent public policy deliberations and decisions

• Describe areas for further study or research

• Synthesize and disseminate the conference deliberations, findings, and outcomes to inform the policymaking process
AMIA’s Invitational Health Policy Meetings

- **2006**: Toward a National Framework for the Secondary Use of Health Data
- **2007**: Advancing the Framework: Use of Health Data
- **2008**: Informatics, Evidence-based Care, and Research; Implications for National Policy
- **2009**: Anticipating and Addressing Unintended Consequences of HIT and Policy
- **2010**: Future of Health IT Innovation and Informatics
- **2011**: Future State of Clinical Data Capture and Documentation
- **2012**: Uses of Health Data
Framing the 2011 Meeting

- Caitlin M Cusack, MD, Steering Committee Chair; Insight Informatics
- George Hripcsak, MD, Steering Committee Vice Chair; Columbia University
Meeting Format

• A Working Meeting
• Forward-looking and Policy-focused
• Diverse Participants With Multiple Backgrounds, Opinions and Perspectives
• Interactive and Open Discussions
• Meeting Materials
  • Briefing Book
  • Evaluation Form
  • AMIA Web Site (for post meeting information and materials)
Meeting Format (cont.)

Day One

– Setting the stage
– Two facilitated small group breakout sessions with report-outs to the larger group
– Plenary Session: Jon White, AHRQ
– Closing Plenary Remarks: Farzad Mostashari, ONC

Day Two

– Panel: The Future is Here
– Final breakout session with report out to larger group
– Large group discussion: common themes, policy recommendations, research agenda, action plan and next steps
2011 Meeting Goals

• Articulate a **vision of the future ideal state** of clinical data capture and documentation.

• Identify **guiding principles** for the future ideal state of clinical data capture and documentation, and **strategies** to promote widespread dissemination and application of the principles.

• Consider the strengths and weaknesses of current approaches to clinical data capture and documentation from multiple stakeholder perspectives and identify **knowledge gaps and research priorities**.

• Formulate **recommendations** to attain the ideal state of clinical data capture and documentation.
Post-Meeting Work

AMIA will compile the information from this meeting to:

• Produce a summary report with policy and research recommendations

• Develop a short range action/research plan (2-3 years) that could be pursued by the participants and other stakeholders in order to address the issues

• Disseminate findings and work products through various channels
Setting the Stage

- Continued unprecedented national attention on exchange of health information (HIE) and health information technology (HIT)
- Funding and programs to help accelerate the adoption of EHRs
- Research to extract, combine, analyze, synthesize data
- Initiatives to propel mobile health applications
- Insufficient exploration/focus on source data capture, clinical documentation, clinical workflow, and care delivery
How Did We Get Here and Where Are We Headed?
2011 Meeting Assumptions

- Need to transform the way we capture data and document clinical care
- New technological and technical advances for clinical data capture and documentation
- New and diverse data sources, health technologies and devices for data acquisition, collection and reporting, treatment support, and information dissemination
- Blurring of lines between devices and applications intended primarily for use by providers, and those intended for patients
- Dynamic environmental factors, trends and issues impacting clinical data capture and documentation
Current Environment

• Multiple New Policies, Regulations, Initiatives
  • Regional Extension Centers
  • Beacon Communities
  • State Health Information (State HIE) Exchange
  • State-based health insurance exchanges implementation
  • MU incentives implementation
  • Nationwide Health Information Network Exchange
  • Blue Button Initiative
  • Standards and Certification Criteria for Electronic Health Records
  • ANPRM Metadata Standards
  • Electronic Prescriptions for Controlled Substances
  • ANPRM Common Rule
  • FDA Proposed Guidance of Mobile Medical apps
  • ONC’s Query Health initiative
  • ICD-10 implementation
Current Environment (cont.)

- DHHS Text4Health Task Force recommendations for health text messaging and mobile health programs.
- NIST draft guidance on Technical Evaluation, Testing and Validation of the Usability of Electronic Health Records
- DHHS creating a database of health care claims information to facilitate comparative effectiveness research
- ONC’s “Million Hearts Challenge” to create applications to empower patients
- SAMHSA grants to support the adoption of health IT in organizations serving people with mental and substance use disorders
- NIH Electronic Medical Records and Genomics (eMERGE) Network
- NIH i2b2 (Informatics for Integrating Biology and the Bedside)
- NIH Shared Health Research Information Network (SHRINE)
- IOM Report on adding work history data to MU objectives
- CMS and Joint Commission release Specifications Manual for National Hospital Inpatient Quality Measures to share a single set of common documentation
Current Environment (cont.)
Working Definitions

• Clinical documentation [and data capture] refers to findings, observations, assessments, and care plans that are recorded in an individual's health record. It may include data entered using various methods, such as computer entry, document scanning, voice dictation, and automated acquisition from devices.

• An individual’s health record is the repository of clinical information recorded about that person. The record has many functions.
Time spent on documentation

- 21% of time documenting
- 21% of time documenting
- 1.4 hour/day
  - J Clinical Oncology. 2002;20(24):4722-4726
- Up from 0.3 hours/day in 1976
Why more time?

- More acute care
- More communication (specialization → bigger team)
- More tests
- More interventions
- More focus on quality and monitoring
- More cost containment
- More regulation and oversight
- More lawsuits
- More computers
Uses of the documentation

• **Human readers**
  – Author’s future reference
  – Other **provider** (e.g., nurse, therapist, pharmacist)
  – Patient
  – Researcher
  – Lawyer
  – Payer
  – Compliance officer

• **Automated uses**
  – Alerts and reminders (TB)
  – Quality assurance (HA1c)
  – Research screening (Ca)
Information Properties

**Sensitivity** – all the information that the patient’s team needs to care for the patient is created and documented

**Specificity** – no unneeded information is created and recorded

**Cogency** – the information is created and recorded (structured) in ways that make it easy to read and process and act on by both humans and computers

**Actionable** – guiding the patient’s team in executing effective (safe), efficient and satisfying interventions
Documentation errors

Note in the wrong patient’s chart
  – 0.5% originally
  – 0.3% after pop-up window

IOM Report:
  • Health IT and Patient Safety: Building Safer Systems for Better Care

JAMIA 2011;18:511-4
How are notes used

JAMIA 2011;18:112-7
Measure it

Physician Documentation Quality Instrument (PDQI-22)
PDQI-9 to follow

JAMIA 2008;15:534-41
Automate it

Problem list

JAMIA 2011;18:859-867
Facilitated Discussions/Breakout Sessions

Tuesday:
• Breakout Session #1: Proposed Guiding Principles and Information Attributes
• Breakout Session #2: Challenges and Gaps to Achieving the Future State of Clinical Data Capture And Documentation

Wednesday:
• Breakout Session #3: Recommendations and Action Items
Overarching 2011 Meeting Discussion Questions

• What are the **shortcomings of current approaches** to clinical data capture and documentation and how can they be addressed?

• What are the **challenges** [financial, technological, workflow, operational and clinical] related to the current state of clinical data capture and documentation?

• What **opportunities** exist for addressing existing and anticipated shortcomings and challenges in clinical data capture and documentation?

• What are the **ramifications** of increasing expectations that the electronic health record will be the repository for “all data” needed for multiple and diverse purposes?
Draft Guiding Principles of Clinical Data Capture and Documentation

Clinical data capture and documentation:

1. Be clinically driven and patient-centric – reflecting an individual’s longitudinal and lifetime health status
2. Be efficient – enhancing overall provider efficiency, effectiveness and productivity
3. Be accurate, reliable, valid and complete – enabling high quality care
4. Support multiple uses – including quality and performance measurement and improvement, population health, policymaking, research, education, and payment
5. Enable team collaboration and clinical decision making – including the patient as a member of the team
6. Reflect input from multiple sources – including nuanced medical discourse, structured items and data captured in other systems and devices
Breakout Session 1: Guiding Principles

• Is this the right set of principles?
• Are there principles that should be added to this list?
• Are there principles that should be removed from this list?
• Do these principles have the right level of granularity?
As for the future, your task is not to foresee, but to **enable** it.

--de Saint-Exupery
Breakout Session 2

• What are the gaps between the current state and the ideal future state of clinical data capture and documentation?
• What are the challenges in closing the gaps?
• Why hasn't automated data acquisition technology been more broadly adopted?
Panel Discussion: The Future is Here

• Caitlin Cusack, Moderator
• Jim Cimino, Chief, Laboratory for Informatics Development and Investigator at the NIH Clinical Center and the National Library of Medicine
• Bethany Daily, Administrative Director, Perioperative Strategic/Business Initiatives, Massachusetts General Hospital
• Hal Wolf, Senior Vice President and Chief Operating Officer, The Permanente Federation, Kaiser Permanente
Panel Discussion: The Future is Here

- What innovations are underway at your organization?
- What future innovations do you foresee in healthcare and particularly around clinical data capture and documentation?
- What do you see as the barriers or challenges to such innovation?
- What research questions do you believe require attention?
Breakout Session 3:

• What actions are needed to help realize the future state of clinical data capture and documentation? Strategic and national public policy efforts? Research? Training and education?

• What are specific action items and policy pursuits that we can identify to achieve the future state of clinical data capture and documentation?

• What are the responsibilities of various stakeholders with respect to realizing the future state of clinical data capture and documentation?
THANK YOU!

Any questions?

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