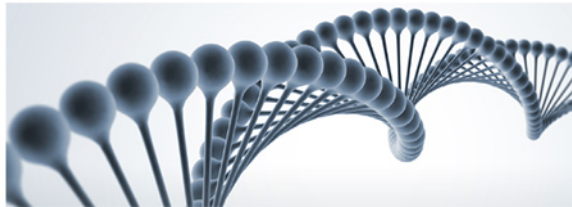


# EHR Innovation and Problem-Solving: Physician Perspective

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# Paper Medical Records

- Records and documents patient health information produced by encounters in one or more care settings
  - Typically includes: patient demographics; progress notes; problems; medications; allergies; vital signs; past medical history; immunizations; laboratory data; and radiology reports
- Provides a history of care, treatment, therapies, interventions and outcomes
- Captures the patient's narrative
- Created, managed, and consulted by authorized providers and staff from across health care settings
- Provides data and information for study and research



# The Digital Medical Record

- Intended to facilitate information sharing while reducing costs
  - Expanding access, improving readability, and enabling technology to more efficiently help organize, interpret, and react to data across care settings
  - Reduces cost for chart storage and management and has the potential to create new efficiencies
- Potential to leverage digital tools to provide clinical reminder alerts, connect experts for health care decision support, and analyze aggregate data for both care management and research
- Additional goals:
  - Improve coordination of care
  - Increase patient participation in care
  - Improve the quality of care

# The Intersection of EHR Design and Policy

- Since the passage of the HITECH Act, the health information technology (health IT) landscape has dramatically shifted
  - Health care providers are using health IT at unprecedented levels. In 2008, <20% of physicians had a basic EHR
  - In 2015, ~80% of physician offices use certified EHR technology to document patient care
- Meaningful Use (MU) sparked most of this uptake
  - CMS regulations govern the physician's use of EHRs
  - ONC regulations govern the criteria required to become certified EHR technology (CEHRT)

# The Intersection of EHR Design and Policy

- Two main drivers for the “look and feel” of EHRs today:
  1. Prior to HITECH, health IT primarily focused on the storage and retrieval of documents and charting/code capture for billing, revenue cycle functions, and other administrative needs
    - Still, a lot of great work was being done in academic medical centers and homegrown provider-designed systems were reflective of physician needs
  2. Post-HITECH, new certified EHR systems were built on legacy technology—requiring vendors to quickly shift gears and accommodate a new, complex set of requirements.
    - EHRs prioritize the capture and measurement of physician actions for MU reporting demands
    - EHR design follows federal development criteria and narrow, federal testing requirements
    - Impact on workflow, downstream uses of the data, and innovation

# Unintended Consequences Have Emerged

- More/new work for clinicians
  - Many legacy EHR vendors have carried over documentation from the paper chart—forcing structured documentation where it is not necessary
  - New focus on computer-based quality measures increase the need to capture complete, structured data, requiring additional documentation by providers
- Workflow issues
  - Complete clinical information at the point of care has not been realized. Physicians must dig through pages of PDFs and manually curate the patient’s medical history
  - Physicians are bombarded with information overload
- Data silos/lack of interoperability and data portability
  - An assumption was made that once clinical data were routinely maintained in a computable format, it could be seamlessly transmitted, integrated, and displayed between EHRs—this is still lacking
- Uncertainty
  - Physicians and patients do not understand privacy and security risks of EHRs and health IT
  - Unclear new liability and legal risks, which may hinder widespread adoption of new tools
  - Uncertainty about how technology impacts documentation, such as copy and paste, delegation of documentation, etc.

# How do we get from *here* to *there*?

- The clinical utility of the medical record must be recovered
  - Documentation must support the direct care of the patient rather than solely payer or federal requirements
  - Time is a limited resource for physicians and must be used responsibly
  - Secondary uses of medical data should be derived from information already being captured.
    - A balance must be struck between “this should be collected” vs. “will this help me achieve my patient’s goals”
- New models of care provide an opportunity
  - CMS has taken steps in MACRA to reduce the reporting burden on physicians
    - A reduction in the number of measures and rewarding physicians for activities they already perform
    - Less focus on EHR functions and more on tools that help the care team and allow for customization
    - EHR certification must evolve to be responsive to patient and physician needs and flexible to allow new tools to be adopted

# Innovation is on the horizon

- Physicians and patients need to be put back at the center of health IT
  - Documentation in an EHR should be a natural extension of the physician-patient relationship
    - Co-authorship, like what is found in OpenNotes, ensures the medical record is as accurate and up-to-date as possible.
  - Friction found between structured/unstructured documentation must be removed
    - Physicians need options to capture clinical information at the point of care
    - Making health data “computer readable” should not be placed on the backs of physicians, rather should be automatic and done behind the scenes
  - Establish clear care goals
    - The entire care team—including patients—should have 24/7 access to update and review the care plan
    - EHR applications, like those based on the SMART on FHIR platform, may provide the flexibility and customization—no matter the needs of the end user



# The AMA is playing an active role

- The AMA is focused on elevating the physician's perspective in all aspects of the digital health sector:
  - **IDEA Labs**, a student-run biotechnology incubator, to help inspire and support cutting-edge medical technology development from the next generation of young entrepreneurs;
  - **MATTER**, a Chicago health care technology incubator that allows entrepreneurs and physicians the ability to collaborate on the development of new technologies, services and products in a simulated health care environment; and
  - **Health2047**, a San Francisco-based health care innovation company that combines strategy, design and venture disciplines, working in partnership with leading companies, physicians and entrepreneurs to improve health care.

