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.