AHIMA recognizes that quality health and clinical data are critical resources needed for efficacious healthcare and works to assure that the health information used in care, research, and health management is valid, accurate, complete, trustworthy, and timely.

~Excerpt, AHIMA Vision Statement

Members of the Subcommittees, ladies and gentlemen, good afternoon; I am Michelle Dougherty, MA, RHIA, CHP and I am Director of Research and Development for the AHIMA Foundation. I am here today to testify on behalf of both the American Health Information Management Association (AHIMA) and the Foundation. Thank you for the opportunity to address you today and provide detailed testimony for you to consider.

If you are not familiar with AHIMA; we are an eighty-five year-old non-profit professional association with more than 67,000 individual members who are trained, educated, or certified in health information management (HIM). Members of the HIM profession serve across all segments of the healthcare industry in private and government settings with over 40 different types of employers and more than 120 different roles. HIM education now exists at the associate, baccalaureate, and master degree level and we hope soon to see a number of doctoral programs established.

Among our many goals and objectives has been the desire to see the establishment and use of electronic health records (EHRs) and information exchange. Following the principles of HIM to serve healthcare consumers while maintaining the integrity and confidentiality of their health information and data, HIM professionals serve as stewards of health information where ever it is located and are working to achieve the delivery of information where and when it is needed. This has led AHIMA to be active in the development of transaction, terminology, and classification standards; as well as the development of best practices for the management of health information. It is following these goals that has led AHIMA to address the issue of interest to you today, data integrity, elimination of fraud and abuse, and ensuring the legality of the health record.

Healthcare is at a pivotal point as the focus on adopting EHRs shifts to the use and exchange of high-quality information. Many are coming to realize that implementation alone will not guarantee that the health information generated by these systems is of sufficient quality and integrity, and most importantly that it ensures patient safety.

AHIMA recognizes and supports the vision for EHRs and their ability to support a reformed healthcare system. The strategic and policy imperatives for effective management of health data
and information have become clearer with the Meaningful Use EHR Incentive Program and Patient Protection and Affordable Care Act. Envisioned changes in health care delivery and payment systems will not be feasible without the rapid uptake of health information technology and specifically electronic health records. However, AHIMA members and an increasing number and variety of stakeholders have noted that inadequate attention to the quality and integrity of clinical documentation has the potential to compromise EHR use not only for patient care, care coordination, quality reporting and research; but also for business, compliance, and legal purposes.

Ensuring accurate, trustworthy information from the data to the record level in EHR systems is a high priority for AHIMA. We provide thought leadership, support standards development, and create industry guidance on data quality and records management in the EHR.

**Challenges:**
AHIMA members have consistently identified the following challenges (summarized below and detailed in the Supplemental Section) with clinical documentation and record management in EHR systems when trying to meet the current demands for information for legal and business purposes:

- **Systems must meet the business requirements for a healthcare provider’s record of care for a patient:** The EHR system is the replacement for the patient’s medical record, therefore the system must have the capability to meet today’s demands and requirements (e.g., regulatory, accreditation, payer) for information at the data and record level. It is difficult to produce a complete and comprehensive record of care from EHRs. There is confusion when attempting to harmonize the requirements for a medical record including consistent definitions and content. Challenges include:
  - How to determine what constitutes the official record of care.
  - The type of information/records that can be requested and what is disclosed.
  - How requirements for a medical record apply to an EHR.

- **Record keeping and evidentiary requirements for EHRs are not well understood by EHR developers and users:** EHR systems must have the capability to create, manage, preserve and disclose records that meet legal principles and can stand as official business records. Information and records in EHR systems must be managed through its lifecycle from creation to destruction. EHR systems must include functionality that supports a legally-sound record producing current and historical records for evidentiary purposes.

There has been a general lack of understanding in the provider, vendor, and policy communities regarding the importance of preserving valid, credible information and records in the EHR for official business purposes. Providers assume vendor systems could address record management and evidentiary requirements, vendors have not prioritized this functionality because purchasers have not requested it, and policymakers have been unaware of the need. Meaningful Use EHR standards do not
require systems to create, maintain, and preserve an official record of care.

- **Prioritize data quality and information integrity:** Problems with health information quality and integrity in clinical documentation permeates every use of the information – clinical care, care coordination, consumer engagement, research, quality reporting, billing, oversight, and legal uses. More focus is needed on the data quality, information integrity, and good documentation practices to achieve the policy goals of EHRs. The concept of “collect once and use many” will be compromised if the health information created is inaccurate or erroneous. *If clinical documentation was inaccurate when used for billing or legal purposes, it was wrong when it was used by another clinician, another provider at transition, a researcher, the public health authority, or quality reporting agency.*

**Recommendations:**
It is crucial to address data quality and record-integrity issues now before widespread deployment of interoperable health information exchange. Poor data quality will be amplified with HIE if erroneous, incomplete, redundant, or untrustworthy data and records are allowed to cascade across the healthcare system. AHIMA recommends that policymakers and healthcare leaders prioritize the following:

- **Advance information management and information governance in healthcare:** Healthcare organizations must move - as other information-rich industries have done - to managing information as an asset, and must adopt proactive decision-making and oversight through information asset management, information governance and enterprise information management to achieve a number of specific goals. These goals include: 1) trustworthiness of data, 2) improved speed in decision-making, 3) lower costs, 4) multidisciplinary/cross-business unit teamwork, 5) advancements in
interoperability and exchange, 5) ability to advance future imperatives, and 6) improved stewardship of information.¹

To help advance improved information practices, the HIT Policy Committee could convene a public dialogue and investigation of information governance models and practices for healthcare organizations to improve the value and trustworthiness of information assets.

- **Implement health IT standards for records management and evidentiary support:** The industry must adopt foundational records management and evidentiary support standards (such as HL7 EHR-S Records Management and Evidentiary Support (RM-ES) Functional Profile Standard² and HL7 EHR-System Functional Model, Release 2³). These standards help to ensure that EHR systems can:
  - Manage and preserve information and records through its lifecycle;
  - Establish minimum metadata requirements for digital record evidence;
  - Meet the demands for valid health records; and
  - Render a complete record of care.

To ensure that a baseline level of functionality is included in EHRs, Meaningful Use Stage 3 should reflect adherence to RM-ES functionality and require systems to produce a valid, complete record of care.

- **Work with HHS to reevaluate regulations and policies related to medical records to establish consistent and contemporary requirements:** As healthcare strives to

---

innovate through the use of EHRs and improved information management practices, an evaluation is needed of existing rules, regulations, and payer policies pertaining to medical records and clinical documentation to ensure that they strike a balance between necessary oversight and their use in a contemporary, technology-enabled environment that facilitates interoperable health information exchange. Modifications could align with the Meaningful Use Program as appropriate and ensure current requirements for medical records allow for interoperable health information exchange to support service delivery and payment reform. This would require HHS to develop consensus across multiple departments and agencies including Medicare Conditions of Participation, Medicare payer policies, and related oversight programs and agencies such as survey and accreditation.

- **Utilize the health information management expertise to advance EHRs:** The HIM professional has a comprehensive view of the information management demands and the content in the medical record and its many uses for clinical, quality, research, billing, compliance, and legal purposes. The expertise possessed by HIM professionals should be leveraged by policy-makers, healthcare providers, and vendors to support EHR deployment and provide practical solutions to information integrity, management, and governance advancements.

Thank you for considering our comments today and for receiving AHIMA’s insight and recommendations. I am sure there will be questions today, and in the days and months to come, so please consider this an open invitation to seek more information regarding these subjects from AHIMA and its Foundation. I stand ready to take your questions today.

**AHIMA WRITTEN TESTIMONY SUPPLEMENTAL INFORMATION**

This supplemental information provides additional details to HIM Policy Committee members on the following challenges presented in AHIMA’s written testimony:
• Systems must meet the business requirements for a healthcare provider’s record of care for a patient
• Record keeping and evidentiary requirements for EHRs are not well understood by EHR developers and users
• Prioritize data quality and information integrity

SYSTEMS MUST MEET THE BUSINESS REQUIREMENTS FOR A HEALTHCARE PROVIDER’S RECORD OF CARE FOR A PATIENT:

Traditionally the purpose of the medical record has been to record and justify the patient’s treatment and services, reflect the healthcare actions and services performed, support the diagnosis of a patient’s condition, describe progress, record response to medication and services, and explain outcomes.¹ The medical record is documented through the course of treatment by clinicians who performed services and have direct knowledge of events. Paper-based medical records are typically maintained by episode of care or encounter – a reflection of the payment and oversight processes in healthcare. They are a communication tool for clinicians and provide evidence to support billing, oversight, insurance, peer review, and legal uses.

The advent of technology and use of EHRs allows for significantly improved capabilities to involve patients in their health, wellness, and treatment; maintain a longitudinal view of a person’s health; embed intelligent tools to improve care and decision-making; and allow for real-time communication and access to information by an individual and their care team. Technology allows information in the patient’s medical record to be used at the data, document, and record level.

Current Medical Record Requirements (paper or electronic)

In the move toward better functioning, technology-enabled medical record systems, some of the fundamental functions and requirements for medical records have been lost. If EHR systems are the new method for capturing clinical information for the patient’s medical record, systems must have the capability to meet all demands and requirements for records or documentation. Requirements for medical records are established through clinical appropriateness, professional practice standards, regulatory requirements, payer policies, and case law. Unfortunately, regulations, laws, and standards of practice that apply to medical records have not been uniformly accepted and applied across EHR systems, nor has there been a call to modernize them if they are no longer appropriate in a technology-enabled healthcare organization. The following table provides a snapshot of medical record requirements - regardless of format (paper or electronic) - and their baseline attributes:

<table>
<thead>
<tr>
<th>Summary of Requirement for Medical Record/ Record of Care, Treatment and Services</th>
<th>CMS Conditions of Participation (Hospital)(^5)</th>
<th>Joint Commission Accreditation (Hospital &amp; Ambulatory)(^6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintain a medical record</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Complete and accurate</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Entries authenticated/signed by author (author identified)</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Documentation is timely (entries dated and timed)</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Medical record is retained</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Medical record is accessible</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Medical record is protected against loss, destruction, alteration, unauthorized use</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Content reflects patient care, treatment and services</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Specific content is required (e.g., summaries, orders, etc.)</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Medical record is audited</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

**Evidentiary Requirements for Medical Records**

\(^5\) CMS Conditions of Participation for Hospitals. §482.24(c) Standard.

Medical records are considered official business records of a healthcare organization, provider/clinician, and patient; and are relied on as evidence in many types of official business such as:

- Investigations: criminal or civil litigation, fraud
- Billing: documentation of services billed, medical necessity, claims adjudication, review and audit
- Insurance: liability, life, disability
- Professional/ethical oversight
- Accreditation, certification and licensure of organizations and individuals

The medical record is considered a credible source of evidence detailing care delivery and decision making because it was documented and maintained in the normal course of business; made at or near the time of the matter recorded; and recorded by a person with knowledge of the acts, events, conditions, opinions, or diagnoses. For information created and maintained in computer systems, additional attributes are important to ensure validity and trustworthiness of the information and records including processes for maintaining the system, procedures for entry and retrieval of information, assurances for the reliability and accuracy of the information, and validation that information has not been altered.

**Current Challenges**

There is frequently an erroneous assumption that EHR systems (including those that are certified under the Meaningful Use Program) can meet the current requirements and business uses for medical records. A continued lack of attention jeopardizes the validity and use of medical records created and maintained in EHR systems and creates barriers for policy-makers and

---

7 Generally, statements made outside the court by a party in a lawsuit are considered hearsay and not admissible as evidence. Documentation in the health record is technically hearsay; however, Federal Rules of Evidence (803(6)) and the Uniform Business and Public Records Act adopted by most states allow an exception to the hearsay rule for records maintained in the regular course of business, including health records.
providers to achieve goals of an interoperable healthcare system. Current challenges are summarized below and further described in the next section on record-keeping and evidentiary requirements for EHRs:

- Information and records created over time in a longitudinal system are not retained in a manner that reflects the care delivery process and information available for that point in time (information is overwritten or updated).
- Information can be altered without a standard method for making modifications. In some cases systems do not retain any record of the alteration process.
- Author identity and authentication/signature is weak allowing users to overwrite and claim authorship of another person’s documentation and/or sign another author’s content.
- Chronology of events is difficult to establish.
- Medical records that include all required content that tells the patient’s story (in part or in whole) during their encounter with healthcare provider is difficult to render from an EHR system and the output is difficult to use/understand.

**RECORD KEEPING AND EVIDENTIARY REQUIREMENTS FOR EHRs ARE NOT WELL UNDERSTOOD BY EHR DEVELOPERS AND USERS:**

Traditionally, transaction database systems have struggled to also perform as record management systems. Healthcare providers need EHR systems to perform as both – using and parsing information at the data level and retaining an accurate set of records. A decade ago, HIM professionals who were early adopters of EHR systems reported struggles with basic HIM principles to produce a valid, trustworthy record of care. Despite professional practice guidance
and standards development efforts, the following evidentiary use of records from EHRs has not been well understood. 8

Disclosure:
Disclosing information from multiple EHR applications that have limited report functionality continues to be a challenge. When a full medical record is needed, systems produce volumes of redundant data in a variety of output formats making their use and comprehension very difficult. In some cases the report functionality is flawed creating erroneous information, such as not reflecting information for the point in time required or miscalculating.

Healthcare organizations receive a multitude of requests for health information and records. The disclosure of some of the requested information can be handled through health information exchange organizations and improved patient access tools such as portals. However, there are still many uses and disclosures that require evaluation to assure proper patient authorization and disclosure of information/records. These requests are typically processed through the HIM business unit in a healthcare organization. The push to use and disclose data at a more granular level, as discussed in the PCAST report 9, is an important step for healthcare. However, policymakers must recognize the continued need to retain and disclosure an official medical records for an encounter, episode of care, or for a specified period of time for a host of reasons including: investigations, billing, insurance, professional oversight, accreditation, certification, licensure, and litigation. In addition, some requests may be for records that are years or decades old.

Defining the Official Record of Care (aka Legal Medical Record):


EHR systems are comprised of many different applications and allow flexible set up and views of information. Organizations must determine the information (including view, reports, screen shots, etc.) that comprise the official medical record and official representation of the care and services delivered by the healthcare organization and/or provider. The official representation must not be altered and must be retained over the specified period.

There is not a standard definition for what constitutes the content of the medical record in healthcare. Record of care content differs by provider setting and even state.

Defining the official record of care involves declaring in organizational policy the data and information in the EHR system that constitutes the record of care for an episode of care to ensure compliance and meet business needs for the medical record. Declaring the record is an important first step in the record lifecycle, however EHRs are developed on database platforms. Because the data and information frequently are not document-based, records must be identified in the system and then “locked” to ensure an accurate historical picture for an encounter or episode of care.\(^\text{10}\)

Defining the official record of care is an extremely important step. When requests are received for medical records, organizations must have a consistent set of information that is retained and disclosed. This is particularly important in legal proceedings in which questions of proper handling of information and records may emerge including concerns such as withholding or destroying evidence. Legal precedence is starting to emerge in which courts are asking a healthcare organization to provide their organizational policy defining their official record in an EHR system.

Not all information in the EHR system is considered part of the official record of care for disclosure purposes because today’s EHR systems perform a host of functions that are related to administrative uses, risk management, billing, reporting, etc. EHRs have created new challenges with disclosing the official record of care that organizations must decide how to address uniformly through operating policies such as:

- Disclosure of provenance metadata for a record.
- Disclosure of clinical decision support alerts, prompts, and rules part of the official record care.
- Concerns/complaints about the quality, usability and completeness of the EHR content and output.
- Assistance to requestors to identify the type of information to request to support.
- Handling requests for e-discovery or e-forensics.

**e-Forensics and e-Discovery:**
E-forensics and e-discovery are emerging issues for healthcare organizations that use EHR systems. The poor output from EHR systems and their inability to relay a chronology of events, actions, and responses have resulted in an increase in requests to perform e-forensic investigations to re-construct what occurred at a point in time and who was involved. E-discovery also involves system design, workflow, usability issues, clinician knowledge of system design, etc. Accurate metadata is crucial to forensics and its use in reconstructing an accurate chronology of events and actions.

**Provenance Metadata for Record Life Cycle Events:**
Metadata provides a level of assurance that the record was created and maintained in a legitimate manner and critical in supporting information integrity. The American Bar Association has published a number of resources addressing the importance of metadata in establishing digital record provenance.

In addition to support for information integrity, metadata also provides a mechanism for data analytics and forensics to occur. EHR systems have metadata and audit records, but there is not a standard baseline of minimal features found in all EHR applications. There are not consistent definitions or applications of metadata across all EHR applications making data analytics very difficult. AHIMA supports the standards-development work completed by HL7 EHR Workgroup to advanced new standards pertaining to metadata and audit triggers for record lifecycle events providing a baseline of minimum metadata for record actions that should be incorporated into all EHR systems.

**Maintaining Valid, Trustworthy Records:**
Establishing trustworthy records in systems that did not incorporate basic record-keeping principles continues to be a challenge. For example, court systems require records to be certified as true and accurate, but the issues identified in this testimony illustrate the real challenges for attesting to the validity and accuracy of the records created and maintained in EHR systems. Legal standards of practice have emerged identifying important attributes of electronically
created and stored records including the importance of metadata to establish authenticity and validity.

Information in EHR systems must be managed through its lifecycle to meet the demands for both current data and historical records. To accomplish this, basic records management functions must be consistently incorporated in EHR systems. The gaps in EHR record management functionality are particularly evident when content is scrutinized for legitimacy, accuracy and completeness (such as payment, oversight, litigation, professional licensure review). AHIMA has been a vocal proponent for importance record management and evidentiary support (RM-ES) functions and supported the standards development effort through HL7 to bridge the gap.

Some progress has been made where a handful of functions are identified in the ONC standards and certification rule for meaningful use, but in general the basic RM-ES functions listed below are inconsistently applied across EHR systems. The HL7 attachment outlines the recommendations for 2009 which still apply today, including:

- Minimum metadata set for record lifecycle events;
- Authentication, authorization and access controls;
- Attestation and non-repudiation;
- Alteration, amendment and correction;
- Health record output – quality, accuracy, usability and rendering of the official record of care; and
- Patient identity validation.

PRIORITIZE DATA QUALITY AND INFORMATION INTEGRITY:

Accurate clinical data and documentation is the lifeblood of healthcare – it must by centered on the patient and provide an accurate representation of problems and diagnoses, care and services delivered, care plans, interventions, and the patients response to treatment.

Clinical data collection and documentation have often been impacted by external factors. For example, payment and classification systems have influenced the EHR data collection tools used by clinicians particularly physician progress notes in ambulatory settings. The collection of clinical information is often designed around the classification scheme which influences the type of clinical data collected.

There are four documentation practices that HIM professionals have consistently identified as problematic in EHRs and are contributors to data quality and information integrity issues. These practices should raise red flags for policy-makers because they facilitate the collection of inaccurate data used for communication with other care providers, care coordination, research, quality reporting, and other secondary uses.

System/Database Documentation Design that Defaults Values and Creates Documentation:
In some systems, default documentation populating fields on a template is created by the system, requiring physicians to be diligent editors to accurately reflect the care delivered. Some have designed systems which generate documentation based on a single click (e.g., a click of “all systems reviewed and normal”) which results in a record that states every single body system was reviewed and noting a normal finding when in fact all systems may not have been reviewed and results may not have been normal. From a data quality, reuse and evidentiary perspective, these practices are highly problematic. The value of the medical record is in communicating an accurate clinical picture based on actual events and findings.

**Poorly Designed Documentation Templates:**

Documentation templates can play an important role in improving the efficiency of data collection, ensuring all relevant elements are collected, and enabling a structured format, but they also have limitations:

There may not be a template for a specific problem or visit type, so the content is not a good clinical fit and doesn’t reflect accurately the patient’s condition and services. Templates aren’t the best approach for atypical patients, patients with multiple problems, or extensive interventions that have to be documented in detail.

Templates designed to meet reimbursement criteria may miss relevant clinical information or encourage over documentation to meet reimbursement requirements even when services are not medically necessary or never delivered.

**Cloning/Copy-Paste Practices:**

Cloned documentation continues to be a significant problem in EHRs creating unnecessary redundancy and at times inaccurate information in the EHR. Some EHR systems are designed to facilitate cloning such as popular features like “make me the author” to assume the content of another person’s entry or “demo recall” to copy forward vital signs. Many organizations have developed policies, but non-compliance remains an issue. AHIMA members report that they commonly find cloned documentation in the following types of content:

- H&P (particularly social, medical and family history)
- Visit/clinic notes
- Inpatient progress notes
- Consults
- Vital signs
- Review of systems/physical exam

Further examples include:

- Cloning information from a completely different patient’s record.
- A clinic visit note cloned repeatedly for all patients seen by a physician for a two week period including a procedure and tests.
- Inpatient progress notes where the patient is “doing well” day after day. On the last day they expire.
- Copying documentation from another clinician including their attestation statement.
- Vital signs that never change.

Errors due to Dictation without Validation:

Organizations are moving to new technology-enabled dictation tools, but some of the practices are creating significant data quality problems and errors - specifically dictation without a validation step. This practice forces a physician into the role of editor. AHIMA members anecdotally are report errors in almost all of the voice recognition dictated reports; including incorrect diagnoses, age and other demographic information, or facility name. The accuracy and quality of dictated documentation is very important since transcribed reports are often the most frequently used and exchanged medical record documentation.

The importance of accurate information and documentation in EHR systems cannot be overstated. EHRs have created a seismic shift in the clinician’s workflow and document process. Best practices in documentation to ensure quality have not been well-defined for EHRs and are not well understood by clinicians. While innovations are needed to improve documentation tools and techniques, a back-to-the-basics focus of the importance on data accuracy and quality is crucial before widespread deployment of interoperable health information exchange occurs.