

Electronic Health Record Use Case Briefing Document

Office of the National Coordinator for Health Information Technology

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In the following paragraphs and pages you will find the broad and specific charges to this workgroup, some definitions to assure consistent communications, and some background information. We have also included some questions that may be useful starting points for your discussion and ask that, working with ONC, you endorse final highly specified recommendations regarding what is to be accomplished by year's end, the specific populations which will derive benefit, and the critical actions that must be taken for successful implementation. Your presentation of these recommendations at the March 7th Community meeting will shape the intent of the Community in this area.

Charges for the Electronic Health Record Workgroup

- **Broad Charge for the Workgroup:** Make recommendations to the Community on ways to achieve widespread adoption of certified EHRs, minimizing gaps in adoption among providers.
- **Specific Charge for the Workgroup:** Make recommendations to the Community so that within one year, standardized, widely available and secure solutions for accessing current and historical laboratory results and interpretations is deployed for clinical care by authorized parties.

Who is involved in making this happen?

- **Patients** - Members of the public who require healthcare services and present in ambulatory and emergency room environments for the provision healthcare. May also include a patient proxy, which is a person who can provide information about the patient (e.g., a spouse, guardian, or person with a valid power of attorney) and who is authorized to give consent for sharing of the patient's data if the patient is a minor or incapacitated.
- **Clinicians** - In ambulatory and emergency room settings, the healthcare providers with direct patient interface in the delivery of care, including physicians, nurses, clinical supervisors.
- **Healthcare Delivery Organizations** - Organizations, such as hospitals, physician practices, which manage the delivery of care and capture data patient encounter / episode in electronic form.
- **Laboratory Organizations** - Medical laboratories, in either in a hospital or ambulatory environment, which analyze specimens as ordered by clinicians to assess the health status of patients.
- **RHIO** - An organization that provides clinical data access services to authorized users across a defined population (usually a geographic region).

- **Responders** - The Responder perspective covers all responder interactions with the goal of providing relevant lab results of an identified patient to a requesting caregiver for use in clinical care.
- **Public** - Consumers of health care services and information; stakeholders in the overall health care system.
Locator - Authorized person who seeks data on behalf of a caregiver. May be the caregiver in person or may be a staff member who is preparing data for the caregiver's use (e.g., physician's office staff).
- **Regional Network Infrastructure Affiliations** - An organization which supports secure and reliable network transmission between health delivery agencies involved in the management of health information and provides indexing of patient identifiers and metadata on clinical information sources.
- **Data Sources** - Systems or networks which provide laboratory data or associated patient information (e.g., maintains master patient index).
- **Administrator** - Administrators, broadly speaking, engage in a common set of functions to meet the health care organization's goals. These may include planning, staffing, data collection, etc.
- **Terminology and Interface Experts** - Perform data mapping and technical activities to support the overall functioning of the system.
- **Clinical Data Manager System** - A system that manages the authentication and authorization of providers, storage of data references, location of patient data and the exchange of data between Lab Data Repositories and the Provider Viewing System.
- **Lab Data Repository** - The electronic repository that stores the lab results generated by the originating lab source.

What is already being done?

ELINCS – Developing a National Lab Data Standard for EHRs

The EHR-Lab Interoperability and Connectivity Standards (ELINCS) project will develop a national standard for the delivery of real-time laboratory results from a lab's information system to an electronic health record. Typically this process can be a fractured one in which lab results are sent to the ordering doctor's office via fax or mail. The results must be filed in the patient's paper chart or manually entered into the physician's EHR.

Modeling the project

1. What is the most efficient and effective model for electronically transmitting lab information? From multiple labs directly into a clinician's electronic

- health record? From multiple labs through a single portal to individual physician EHRs?
2. Given the adoption gap and relatively low penetrance of electronic health records, should we consider the ability for physicians without EHRs to access consolidated lab information through a portal?
 3. What labs should be included, given that pathology reports contain significant text information and very sensitive material?
 4. What historical data is most useful? Should interpretations be limited to normal values?
 5. Should all lab results ordered on a patient be made available to any clinician caring for that patient so that a comprehensive picture can be gained?

Defining the Populations

1. Since over half of the lab tests ordered are conducted in hospital or local laboratories, should we consider a regional approach which could include the NHIN contract sites?

Other

1. At what level will patients control access to data?
2. What are the best ways to authenticate users?
3. How will patients be identified?
4. How will we address variances in how CLIA is applied in different states?
5. How do we drive market development?