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# State of California HEALTH AND HUMAN SERVICES AGENCY

Good afternoon, my name is Jonah Frohlich. I am the Deputy Secretary of Health IT in the California Health & Human Services Agency and a member of the Health IT Policy Committee, Information Exchange Workgroup. It is an honor to be asked to testify before this Workgroup on issues related to the electronic exchange of laboratory data.

## The Lab Industry

As you know, the lab market, like the healthcare industry, is highly fragmented. There are over 200,000 certified clinical labs in the US. Over half of these labs are physician office-based, yet they perform only 8 percent of all tests. Hospital-based labs and independent labs represent four percent and three percent of clinical labs respectively; yet together they perform the vast majority – over three-quarters of tests. While approximately one-quarter of physicians nationally have an electronic health record, (an EHR), many still receive faxed lab results that are either manually entered or scanned into the patient record. This is a limitation of both the lab and EHR industry, a limitation I would like to focus on for my testimony today within the context of independent and hospital-based labs.

## Technology Impediments and Standardization

The lab industry's technical capability is highly variable; from large independent labs using modern service-oriented architecture, to small hospitals working on legacy systems that don't effectively support HL7 standards - standards most commonly used for reporting lab tests. Most labs fall under the latter category, and hospital-based labs have far fewer IT resources and less expertise to support electronic lab ordering and results reporting. Yet they provide a significant share of lab testing services.

There is virtually no standardization of lab messaging in the industry today. In my experience working on ELINCS projects – initiatives that use highly constrained HL7 messages or “implementation guides” to support electronic lab results delivery – all hospitals needed considerable outside technical assistance to comply with the standard. Labs required assistance to adopt the LOINC coding scheme; a standard naming system for lab tests, and labs were unprepared to adopt SNOMED or UCUM; standard coding schemes for results and units of measures. The lab information systems the hospitals operated had internal “proprietary” codes for test names, and they had little expertise to “map” these codes to LOINC. These labs relied heavily on external technical assistance to do the necessary mapping for the most frequent 95% of reported tests as required by ELINCS – approximately 150 of the thousands of reportable tests in their databases. Hospitals were unprepared to complete the



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