eDOS

Electronic Directory of Service
Benefits for the adoption of eDOS

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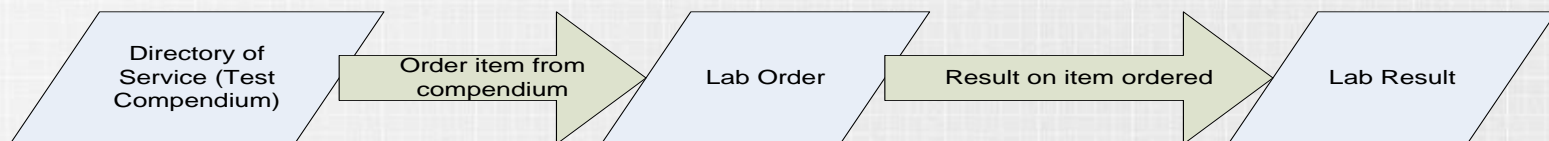
American
Clinical Laboratory
Association

- The American Clinical Laboratory Association (ACLA) is a not-for-profit organization representing the leading independent providers of laboratory services in the United States.

- Its primary purpose is to advocate laws and regulations that recognize the essential role that laboratory services play in delivering cost-effective health care, encourage the highest standards of quality, service and ethical conduct among its members, and promote public awareness about the value of laboratory services in preventing illness, diagnosing disease, and monitoring medical treatment.

- ACLA appreciates the opportunity to participate in this workshop and describe the benefits of eDOS.

eDOS Overview

- 2009: ACLA members collaborate to develop a standard for the electronic exchange of a laboratory's Directory of Services (DOS) in a structured format based on Health Level Seven (HL7).

- 2011: The first eDOS implementation guide is balloted/published as an HL7 standard.

- 2011- present: eDOS has been further enhanced to harmonize with the laboratory order and laboratory result implementation guides developed through the Office of National Coordinator (ONC) Standards & Interoperability Framework (SIF) initiatives for an optimal interoperability solution.

  - Formal title: HL7 Version 2.5.1 Implementation Guide: S&I Framework Laboratory Test Compendium, also referred to as eDOS (Electronic Directory Of Service). The implementation guide is available from www.HL7.org.

| Directory of Service (Test Compendium) | Order item from compendium → | Lab Order | Result on item ordered → | Lab Result |

eDOS includes

- Standardized codes to order laboratory tests (LOINC and local codes); other standard terminologies (HL7, SNOMED, UCUM).

- Specimen requirements (including body site source, type of tube/stopper/additive for blood specimens).

- Additional information from the patient to process the test (Ask at Order Entry [AOE] questions), and a "Starter set" of standardized AOEs.

- Procedure codes and payer policies for Medicare Limited Coverage Processing (MLCP) and Medicare Approved Coverage Processing (MACP).

eDOS Value Statement

- The automation of eDOS can reduce labor costs, improve test ordering accuracy, and support precision medicine by faster roll-out of new labs such as Zika.

- ACLA member laboratory clients report it can take from 30 minutes (simple) to 8 hours (complex) to incorporate a laboratory test into their EHR system for the provider to order.

- Based on client input, ACLA released a 2016 estimate* that demonstrates the potential savings health care providers and facilities can achieve if they move toward the standardized approach eDOS offers for the electronic load and maintenance of a laboratory's test compendium.

*http://www.acla.com/acla-shares-edos-cost-saving-estimate-with-office-of-the-national-coordinator-for-health-it/

eDOS Potential Savings

Illustrative Example:

- Hourly rate of $27.00/hour,
- For manually managed database:
    - 2 hours to manually create and update a test,
    - On average, approximately 200 tests are typically ordered by the clinician,
    - 10% of tests require maintenance annually,
- For eDOS IG supported database updates:
    - Review of tests to approve cross reference will take approximately 30 minutes to review at a rate of 2 tests per hour,
    - On average approximately 200 tests are typically ordered by the clinician,
    - 10% of tests require maintenance.

	Initial Development	Annual Maintenance	Cost for first 5 years
Current Manual Process	$10,800	$1,080	$15,120
With eDOS	$2,700	$270	$3,780

Coming Soon

Clinical Practice Cost Estimator for eDOS

This web-based version of the eDOS (electronic directory of service) Clinical Practice Cost Estimator was produced in collaboration with the American Clinical Laboratory Association (ACLA). Practice managers can use this tool to estimate potential cost savings as a result of using eDOS to automate the initial load and subsequent updates of the laboratory test compendium into an electronic health record (EHR) system.

Number of laboratory tests in initial compendium load:

[ ]

Enter the number of laboratory tests that must be incorporated into the clinicians EHR system in order to provide necessary information for the clinician to order laboratory tests for their patients in an initial load of the laboratory test compendium.

Number of laboratory tests revised annually:

[ ]

Enter the number of laboratory tests that are updated annually and must be incorporated into the clinician's EHR system.

Average hours for practice to incorporate a single lab test into EHR System:

[ ]

Enter the average number of hours for the staff resource to incorporate a lab test into the clinician's EHR system.

Total annual cost for a single employee incorporating laboratory test into EHR System:

- ● Default total annual employee cost: $70,200/year
- ○ Specified total annual employee cost: [ ]

Enter the total annual employee cost of the staff resource incorporating the laboratory directory of service into the clinician's EHR system, or use default $70,200/year ($27/hour for medical practice manager * 2080 hours * 1.25 adjustment for taxes and benefits).

Estimated percentage of time saved on initial load:

- ● 50% time savings
- ○ 75% time savings
- ○ Specified percentage: [ ] % time savings

Enter the estimated percentage of time saved on initial load.

Estimated percentage of time saved on maintenance activities:

- ● 50% time savings
- ○ 75% time savings
- ○ Specified percentage: [ ] % time savings

Enter the estimated percentage of time saved on maintenance activities.

[Reset] [Calculate]

Additional Info and Questions

Additional info located on the ONC wiki sites at:

- 2016 - ONC Tech Lab Standards/Lab US Realm Wiki at:

  https://oncprojectracking.healthit.gov/wiki/display/TechLabSC/Lab+US+Realm?src=contextnavpagetreemode

- 2012-2015 - Archived info at ONC Standards and Interoperability Framework wiki at:

  http://wiki.siframework.org/LOI+-+eDOS?responseToken=0144f736a174f1775f73ffcc05f0dc403

Questions? Contact:

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