



July 10, 2015

Mr. Stephen Posnack, Director Office of Standards and Technology  
National Coordinator for Health Information Technology  
Office of the National Coordinator for Health Information Technology  
U.S. Department of Health and Human Services  
Standards and Interoperability Framework Initiative – Task Force  
200 Independence Avenue, S.W.  
Suite 729-D  
Washington, D.C. 20201

DELIVERED ELECTRONICALLY

RE: Estimate of benefits for the adoption of the eDOS Implementation Guide for the electronic delivery of test compendiums

Dear Mr. Posnack,

On behalf of the American Clinical Laboratory Association (“ACLA”) we wish to express our continued support of the Meaningful Use rules and the Laboratory Implementation Guides that help facilitate better patient health. One of the key aspects of facilitating ordering of laboratory tests is the electronic Directory of Services Implementation Guide (eDOS IG) developed by the member organizations of ACLA over 6 years ago and updated by the ONC Standards and Interoperability Framework Initiative (S&I Framework). We believed then as we do now that this Implementation Guide will improve the clinician experience because of the additional diagnostic information that will be available to them if the Electronic Health Record (EHR) vendor takes advantage of all the meta data provided. This in turn, will improve the clinician’s ability to research diagnostic tools to assist in their diagnostic investigation thus improving patient care.

The complexity of many EHR systems has created a situation where limited components of the test are uploaded, thereby providing the bare minimum of information. Often only those tests necessary for the majority of the services the clinician provides are loaded into the database, probably the top 80 to 100 tests and their components. No additional tests are available on-line for the clinician to add as additional diagnostic insight to the individual patient’s need. Providing the additional tests as resource opportunities for research to the clinician would greatly improve the potential patient outcomes. Additionally, the eDOS IG supports interim updates, which allows rapid deployment of new diagnostic tests, for example BRCA.

We firmly believe that the reason to limit the number of tests uploaded into the EHR system is due to the cost per test to build the limited set of data elements. The complexity of cross referencing one test within the EHR system is believed to take 2 to 3 hours even with the minimal number of data elements. Updates are anticipated to take the same amount of time, and are not always done in a timely manner. When tests are obsolete and replaced with improved tests, there have been instances where the obsolete tests have been ordered by the clinician because the updated test is not in the EHR for several days or weeks. The impact is that every patient is then put on a pending list waiting for a response from the clinician to validate what test is acceptable to the clinician as an alternative. This could delay the sample from being processed; therefore impacting the completion of the test performance and ultimately patient care. Often the reason for the delay in updating the EHR database may be that the clinician's staff struggles with finding 2 to 3 hours to perform the necessary updates.

The upload of the eDOS IG will still require medical review before applying the changes. Since this is validation of the proposed changes, it will likely take 30 minutes or less. Using 30 minutes as the target, this reduces the time per test by 75%, but it is likely it can be reduced to less than 5 minutes as users get better at the review process.

It is estimated that annual on-going maintenance will require the update of at least 10% of the tests annually or approximately 1 to 2 tests each month.

For simplicity, the following assumptions are made:

- The hourly rate is \$100.00
- For manually managed database
  - 2 hours to manually create and update the 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 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	\$40,000	\$4,000	\$60,000
With eDOS	\$10,000	\$1,000	\$15,000

Using the figures above, the estimates below were derived using the December 2014 number of Certified EHR providers from the ONC website<sup>1</sup>, and assuming each practice has two laboratory interfaces per practice. For the purpose of the Provider estimate below, two assumed scenarios are included: 1) assumes ten providers/practice and 2) assumes twenty providers/practice.

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<sup>1</sup> Total Providers Reporting the EHR Vendor (Health Care Professionals and Eligible Hospitals) from EHR-vendors-count-dataset.xlsx.

	Estimated 10 providers per group practice			Estimated 20 providers per group practice		
	Initial Development	Annual Maintenance	Cost for first 5 years	Initial Development	Annual Maintenance	Cost for first 5 years
Current manual Process	\$4,071,768,000	\$407,176,800	\$6,107,652,000	\$2,035,844,000	\$203,588,400	\$3,053,826,000
With eDOS	\$1,017,942,000	\$101,794,200	\$1,526,913,000	\$508,971,000	\$50,897,100	\$763,456,500

For the hospital estimate, assumes two lab interfaces per hospital.

	Initial Development	Annual Maintenance	Cost for first 5 years
Current manual Process	\$594,800,000	\$59,480,000	\$892,200,000
With eDOS	\$148,700,000	\$14,870,000	\$223,050,000

Each EHR system has at least two or more laboratory interfaces and, without eDOS, the same costs exist for each non-standard interface. With the adoption of eDOS standard, development cycles and costs can be reduced by implementing a standard interface. The EHR vendor can also incorporate the eDOS into their standard system offering independently from creating a laboratory orders and results interface.

An additional advantage of an eDOS implementation is that tests offered by the laboratory that are not part of the normal ordering pattern of the clinician, could be part of the search feature of the EHR. While a subset of tests in the test compendium may not be directly orderable from the EHR, they can at least be made available to help the clinician in diagnostic research without having to take extra steps to access the full directory, thereby improving the outcomes for the patient.

For the reasons outlined above, we strongly believe there are significant benefits for the adoption of the eDOS Implementation Guide for the electronic delivery of test compendiums. Thank you for your consideration of these comments.

Sincerely,

Thomas B. Sparkman  
Vice President, Government Relations

ATTACHMENT: Addendum: eDOS Estimate Spreadsheet

CC: Gabriel, Meghan (OS/ONC) <Meghan.Gabriel@hhs.gov>

Addendum: eDOS Estimate Spreadsheet

Assumes 10 providers per practice

	Initial Compendium Development	Providers	Annual Compendium Maintenance	Providers	Cost for first 5 years	Providers
December 2014 # Certified EHR providers from ONC website		508971		508971		508971
a Rows a and b assumes 2 lab interfaces per practice, and uses <b>average group practice size of 10</b> (D3, F3, H3/10*2)		101794.2		101794.2		101794.2
b Current manual process	\$40,000	\$4,071,768,000	\$4,000	\$407,176,800	\$60,000	\$6,107,652,000
With eDOS	\$10,000	\$1,017,942,000	\$1,000	\$101,794,200	\$15,000	\$1,526,913,000

Assumes 20 providers per practice

	Initial Compendium Development	Providers	Annual Compendium Maintenance	Providers	Cost for first 5 years	Providers
December 2014 # Certified EHR providers from ONC website		508971		508971		508971
c Rows c and d assumes 2 lab interfaces per practice, and uses <b>average group practice size of 20</b> (D10,F10, H10/20*2)		50897.1		50897.1		50897.1
d Current manual process	\$40,000	\$2,035,884,000	\$4,000	\$203,588,400	\$60,000	\$3,053,826,000
With eDOS	\$10,000	\$508,971,000	\$1,000	\$50,897,100	\$15,000	\$763,456,500

Eligible hospitals

	Initial Compendium Development	Providers	Annual Compendium Maintenance	Providers	Cost for first 5 years	Providers
December 2014 # Certified EHR providers from ONC website		7435		7435		7435
e Rows e and f assumes 2 lab interfaces per hospital (D20, F20, H20*2)		14870.0		14870.0		14870.0
f Current manual process	\$40,000	\$594,800,000	\$4,000	\$59,480,000	\$60,000	\$892,200,000
With eDOS	\$10,000	\$148,700,000	\$1,000	\$14,870,000	\$15,000	\$223,050,000