2013 National ELR Assessment

Welcome and Instructions

Required Completion Date: September 8, 2014

The Council of State and Territorial Epidemiologists (CSTE) is conducting the annual CSTE National Electronic Laboratory Reporting (ELR) Assessment to evaluate the state of ELR in the nation as of December 31, 2013. The assessment was adapted from the independently conducted National ELR Assessment with input from members of the CSTE National ELR Workgroup and Electronic Laboratory & Disease Reporting Subcommittee. We hope to conduct this assessment after the completion of each calendar year.

The purpose of this assessment is to measure the status of current ELR implementation, and the scope of the assessment is divided into seven components:

I. State and Scope of ELR: Status of individual ELR components, if progress has been made, percentages of reportable condition reports received via ELR

II. ELR Data Sources: From where you receive data via ELR, including state labs, national labs, hospital labs; file formats and standardized codes

III. Use of ELR Data: Programmatic use, purposes of use, challenges faced in getting data into the hands of users

IV. ELR System Info and Support: Vendors, security components, who implements technical changes

V. ELR Formats: HL7 messages and documents that system accepts/receives and message types and documents that system sends/creates, non-HL7 formats, local codes

VI. LIS/LIMS: Which LIS and LIMS currently sending data to ELR system

VII. Opinions and Topical Issues: Barriers to full ELR implementation, number of staff responsible for ELR, investments in ELR over time, expected state of ELR in near future, impact of Meaningful Use

We encourage you to seek consultation with others, such as your state epidemiologist or staff with ELR expertise, while completing this assessment. The main respondent should be your jurisdiction's ELR Coordinator or someone with detailed knowledge of your jurisdiction's ELR system.

We recommend printing this assessment as a worksheet to record responses and collect input from your ELR team prior to completing this online tool. Once a response has been initiated, this assessment tool does not permit access to your specific form on computers other than the original machine. For easy printing, a PDF copy of the assessment was attached to the email you used to access this online tool.

Your responses will be kept confidential and shared only in de-identified, aggregate form. CSTE will not release state-specific information in any reports unless otherwise requested of and approved by the state(s).

Please submit your responses by close of business Monday, September 8, 2014.

If you have any questions or concerns during this assessment, please contact Becky Rutledge at rrutledge@cste.org or 770-458-3811.

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Contact Information

Although the assessment may be filled out with the input of multiple people, we need to have only ONE primary contact person. However, it is helpful to have an alternate contact person, in case of difficulties reaching the primary contact. Please list the primary contact, and if possible, an alternate contact.

*1. PRIMARY CONTACT

Name:

Title:

Organization:

Address:

City:

State:

ZIP:

Email Address:

Phone Number:

2. ALTERNATE CONTACT

Name:

Title:

Organization:

Address:

City:

State:

ZIP:

Email Address:

Phone Number:

State and Scope of ELR

3. Does your state/jurisdiction have formal requirements (reporting rules, mandates, legislation, etc.) specifically requiring/regulating electronic lab reporting? (Select all appropriate options)

IMPORTANT: This is for legislation SPECIFIC ONLY to ELR, <u>not for general disease reporting legislation.</u>

- ☐ Yes, for all nationally notifiable disease conditions (check this for "almost all" as well, e.g., "All but HIV").
- ☐ Yes, for some nationally notifiable disease conditions.
- ☐ Yes, for some non-nationally notifiable conditions.
- ☐ No, but we plan to have legislation in place within a year.
- ☐ No, but we are interested.
- ☐ No.

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State and Scope of ELR

If you indicated that your jurisdiction has ELR-specific legislation, rules, or mandates currently in place, please provide the URL where the legislation is posted, and please write a brief statement summarizing how the legislation requires/regulates ELR.

4. URL:

5. Brief Summary of Legislation (the term "Legislation" includes rules and mandates):

6. When was this Legislation put into place?

- Before 2000
- Between 2000 and 2005
- Between 2005 and 2010
- 2011
- 2012
- 2013
- Pending

State and Scope of ELR

7. What percent of reportable condition reports sent to your jurisdiction are received via ELR?

- Not currently IN PRODUCTION, TESTING, or PLANNING for ELR.
- OPERATIONAL ELR system, with 75-100% of reportable condition reports to your jurisdiction being received electronically.
- OPERATIONAL ELR system, with 50-74% of reportable condition reports to your jurisdiction being received electronically.
- OPERATIONAL ELR system, with 25-49% of reportable condition reports to your jurisdiction being received electronically.
- OPERATIONAL ELR system, with 1-24% of reportable condition reports to your jurisdiction being received electronically.
- TESTING - ELR system is in Testing stage but not yet in production.
- PLANNING - ELR system is in Planning stage, prior to moving to Testing.

State and Scope of ELR

8. Specifically, for 2013, what is the status of the individual components of ELR in your jurisdiction?

If N/A, please explain why in comment box.

	Design/Development	Testing	Production/Maintenance	Suspended	Not applicable*
Data transport	○	○	○	○	○
Message validation (syntax and content)	○	○	○	○	○
Data repository (either ELR repository or integrated surveillance system from which data parsed)	○	○	○	○	○
Messaging from CDC	○	○	○	○	○

Comment(s)

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State and Scope of ELR

9. Has your jurisdiction made progress in ELR over the past year? (Check as many as apply)

- ☐ Yes, we have started Planning for ELR
- ☐ Yes, we moved from Planning to Testing stage
- ☐ Yes, we moved from Testing to Operational stage
- ☐ Yes, we increased the number of laboratories participating
- ☐ Yes, we increased the number of program areas (conditions) participating
- ☐ Not really, we are in a Maintenance stage, not a Growth stage.
- ☐ No, we did not progress as we had hoped. If you choose this option, please indicate the primary reason/reasons why little/no progress was made:

ELR Data Sources

10. Since variation still remains in the way Quest Diagnostics reports, please tell us your experiences with Quest lab reporting.

ELR Data Sources

11. Does your jurisdiction employ a web data-entry utility which allows labs to enter their data into a web interface?

- Yes
- No

12. How are the data imported into your target system? (answer only if you answered 'Yes' to #11)

- Imported directly into system
- Translated to HL7 and then imported into system
- Translated into non-HL7 format then imported
- Data not imported

13. Do you consider this as part of your ELR? (answer only if you answered 'Yes' to #11)

- Yes
- No

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ELR Data Sources

For your state/regional public health lab (PHL), select the appropriate answers. Note: if you have multiple labs, select answers that apply to the majority of your labs.

14. Our state public health lab(s) is/are reporting to us through ELR.

- ○ Yes for all
- ○ Yes for some
- ○ No (skip to Question 18)

15. If you chose "Yes for all" or "Yes for some," in Q 14 - what LIS/LIMS is your PHL using?

16. If you chose "Yes for all" or "Yes for some," in Q 14 - What is your PHL sending with regard to file format? Note: Please choose the format for the majority of reports only

- HL7 v2.3.Z
- HL7 v2.3.1
- HL7 v2.4.x
- HL7 v2.5.x
- Non-HL7 (ex. dBASE)
- Web Data Entry

Comment(s)

17. If you chose "Yes for all" or "Yes for some," in Q 14 - What is your PHL sending with regard to standardized codes? Note: Please choose the format for the majority of reports only

- LOINC only
- SNOMED only
- Both LOINC and SNOMED
- No LOINC or SNOMED received
- Not Applicable - Web data entry

Comment(s)

18. If you chose "No," for Question 14, then please check all of the reasons your PHL is NOT reporting through ELR (Select all appropriate options):

- [ ] LIMS not capable of producing HL7 message
- [ ] Messaging transport not set up
- [ ] Programming in progress
- [ ] Test coding is not completed or is problematic
- [ ] Result coding is not completed or is problematic
- [ ] Other, please specify:

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ELR Data Sources

19. What other data sources are using your ELR infrastructure to transmit their data? [If none, skip to Q21]

- ☐ Veterinary labs - if you select this, please specify the vet lab names
- ☐ Poison control centers
- ☐ Syndromic surveillance
- ☐ Case management or EMR systems, sending case data
- ☐ Other, please specify:
- ☐ Immunization registries
- ☐ Cancer registries
- ☐ WIC
- ☐ None

20. If you selected veterinary labs, please specify the vet lab names here:

21. Do you interface with an HIE?

- ○ Yes
- ○ No

22. If you interface with an HIE, how?

- ○ Transport of ELR data only
- ○ Other

23. If you interface with an HIE, is it the exclusive method of receiving ELR information?

- ○ Yes
- ○ No

ELR Data Sources

24. What percentage of hospital labs in your jurisdiction participate in ELR?

- ○ No ELR data currently received - we are in testing or development mode.
- ○ 0%
- ○ 1-10%
- ○ 11-50%
- ○ >50%

25. What percentage of hospital labs in your jurisdiction do you "target" for ELR?

- ○ No ELR data currently received - we are in testing or development mode
- ○ 0%
- ○ 1-10%
- ○ 11-50%
- ○ >50%

26. What is the participation of commercial labs in your ELR system: (Choose all that apply.)

- ☐ Major national labs - some but not all participate.
- ☐ Major national labs - all participate.
- ☐ Regional and smaller labs - fewer than 10% participate
- ☐ Regional and smaller labs - fewer than 50% participate
- ☐ Regional and smaller labs - over 50% participate
- ☐ We have a target number of Regional and smaller labs and have NOT reached it.
- ☐ We have a target number of Regional and smaller labs and HAVE reached it.

Use of ELR Data

27. Does your ELR system route lab data to appropriate county/local public health organizations? (LHDs=Local Health Departments)

- Yes, to all LHDs in state
- Yes, to some LHDs in state
- No, our state does not have LHDs
- No, the ELR data is passed on to other systems that route the data to the LHDs
- No, a single distributed/shared system is accessed by all personnel/programs directly
- No, but we plan to in future
- No, our state/jurisdictional policy does not require data distribution to LHDs

Use of ELR Data

28. Which of the following state/jurisdictional public health personnel/programs use ELR data? (Select all appropriate options)

- ☐ None - no state/jurisdictional programs receiving ELR data
- ☐ General
- ☐ Enteric disease
- ☐ Zoonotic disease
- ☐ Animal disease
- ☐ Arboviral disease
- ☐ Influenza
- ☐ Tuberculosis
- ☐ HIV
- ☐ STD
- ☐ Hepatitis
- ☐ Vaccine preventable disease (VPD)
- ☐ Environmental
- ☐ Lead
- ☐ Poisoning
- ☐ Cancer
- ☐ Occupational
- ☐ Injury
- ☐ Other chronic disease
- ☐ Other programs (please specify)

29. For the programs above, how are the majority receiving ELR data?

- ○ ELR data are received but are manually entered into program's system.
- ○ ELR data are updated directly into the program's standalone system
- ○ ELR data are fed into a centralized repository (e.g., an integrated disease surveillance system or ELR repository), which programs can access

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Use of ELR Data

30. For which purposes are the data received via your ELR system currently used? Check all appropriate boxes.

- ☐ Provide data to county/local health departments
- ☐ Provide data to state program areas
- ☐ Provide data to CDC or other federal agencies
- ☐ Populate an integrated, centralized data store
- ☐ Assist in patient care (test ordering and result posting)
- ☐ Offer health care decision support
- ☐ Contribute to data analysis and visualization
- ☐ Contribute to public use data available on the web
- ☐ Integrate ELR with NBS or similar system
- ☐ Contribute to syndromic surveillance (lab test order patterns)
- ☐ Detect antimicrobial susceptibility patterns
- ☐ Contribute to performance metrics and/or quality control
- ☐ Other (please specify)

Use of ELR Data

31. Does your jurisdiction receive antimicrobial susceptibility results via ELR?

- ○ No
- ○ Yes, for reportable isolates.
- ○ Yes, for reportable isolates AND for selected additional organisms such as *Staphylococcus aureus*.
- ○ Yes for ALL organisms tested by the lab.

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Use of ELR Data

32. What interfaces do you have between your ELR system and disease surveillance/reporting systems? Select all that apply.

- ☐ None- no state/jurisdictional programs receiving production ELR data
- ☐ None- receiving production data, but no interfaces with other systems
- ☐ None- no interfaces because system is completely integrated
- ☐ We have a NEDSS-compatible, integrated disease surveillance system
- ☐ General communicable diseases
- ☐ Blood lead
- ☐ HIV
- ☐ Immunizations
- ☐ STD
- ☐ TB
- ☐ Enterics/foodborne
- ☐ Vectorborne/Zoonotic
- ☐ Other program(s)

Please specify "Other(s)"

33. What do you think are the biggest challenges faced in getting data into the hands of users?

Please rank choices from 1-7, 1 being the most challenging, 7 being the least challenging. If there is an "Other" challenge, please specify below. If a challenge does not apply to your jurisdiction, please choose "N/A."

▼	Lack of integrated surveillance system	☐ N/A
▼	Lack of interest	☐ N/A
▼	Changes in technology	☐ N/A
▼	Lack of [monetary] resources	☐ N/A
▼	Competing priorities	☐ N/A
▼	Lack of standardization	☐ N/A
▼	Other	☐ N/A

34. If there is an "other" challenge, please specify:

Use of ELR Data

35. Of the data received via your ELR system, what percentage is fed into your principal surveillance/data system automatically? i.e., ELR data are not manually re-entered into the surveillance system or data store – this does not preclude normal human interaction such as data cleaning or deduplication, it just means that you have a system that automatically imports ELR data into your main system.

- 0%
- 1-10%
- 11-50%
- 51-75%
- 76-100%

36. Does your ELR feed automatically create disease events in your principal surveillance system without manual invention?

- Yes
- No
- Other (please specify)

37. What are the biggest problems preventing you from automatically importing more of your ELR data into your surveillance/data system?

Please rank choices from 1-6, 1 being the most problematic, 6 being the least problematic.
If there is an "Other" problem, please specify below.
If a problem does not apply to your jurisdiction, please choose "N/A."
If 100% of your ELR data is automatically imported into your surveillance/data system, please skip to the next page.

	Difficulty constructing interface between ELR and the data system	N/A
	We do not have personnel/funding to create the data import/interface	N/A
	We do not have technical expertise to create the data import/interface	N/A
	The ELR data are not standardized enough between labs to allow automatic importation	N/A
	There are data quality issues with the ELR data that prevent automatic importation	N/A
	Other	N/A

38. If there is an "other" problem, please specify:

Use of ELR Data

39. Do clinical laboratories utilize the same ELR infrastructure as hospital laboratories for reporting all notifiable diseases?

- Yes
- No

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ELR System Info and Support

If you purchased your ELR components/system, please indicate the vendor and system below. If the vendor is not included in the list, please select 'Other' for both vendor and system. If the vendor is included but you purchased a different system, please select the vendor and choose 'Other' under system. Note: If you are working with more than one vendor and system (e.g., both Orion Rhapsody and IBM WebSphere), please utilize the "secondary" system option. If you are working with >2, then please just choose the top 2.

40. Primary Vendor

- ○ Atlas
- ○ CDC
- ○ Consilience
- ○ Collaborative Software Initiative
- ○ Alere Analytics
- ○ Eclipsys
- ○ IBM
- ○ Information Technology International
- ○ Microsoft
- ○ NeoTools
- ○ Orion
- ○ Quovadx
- ○ STC
- ○ Sybase
- ○ Other

Other (please specify)

41. Primary System

- ○ BizTalk
- ○ Cloverleaf
- ○ ECMap, ECGateway
- ○ eLink
- ○ LabWorks
- ○ Maven
- ○ NBS/PHIN MS/MSS
- ○ NeoIntegrate
- ○ PHS3
- ○ Rhapsody
- ○ WebSphere IIS DataStage Enterprise
- ○ Other

Other (please specify)

42. Secondary Vendor

- ○ Atlas
- ○ CDC
- ○ Consilience
- ○ Collaborative Software Initiative
- ○ Alere Analytics
- ○ Eclipsys
- ○ IBM
- ○ Information Technology International
- ○ Microsoft
- ○ NeoTools
- ○ Orion
- ○ Quovadx
- ○ STC
- ○ Sybase
- ○ Other

Other (please specify)

43. Secondary System

- BizTalk
- Cloverleaf
- ECMap, ECGateway
- eLink
- LabWorks
- Maven
- NBS/PHIN MS/MSS
- NeoIntegrate
- PHS3
- Rhapsody
- WebSphere IIS DataStage Enterprise
- Other

Other (please specify)

ELR System Info and Support

44. What NEDSS/PHIN components are you currently utilizing in your ELR system? For each, indicate Production or Test status.

	Not using this component	Production - using in our production system	Test - we are testing this component
eWebit	○	○	○
NEDSS Messaging Subscription Service (MSS)	○	○	○
PHIN MS	○	○	○
PHIN VADS	○	○	○
Rhapsody (Orion)	○	○	○
NEDSS Case Notification	○	○	○
Other	○	○	○

Please specify "Other"

ELR System Info and Support

45. Which of these security components are you currently utilizing in your ELR system? For each, indicate Production or Test status.

	Not using this component	Production - using in our production system	Test - we are testing this component
State firewall	○	○	○
Partner firewall	○	○	○
Active Encryption (ex. PGP - i.e., other than as part of a VPN or other component)	○	○	○
Certificates - state issued	○	○	○
Certificates - certifying authority	○	○	○
VPN	○	○	○
SSL	○	○	○
sFTP	○	○	○
Other	○	○	○

Please specify "Other"

ELR System Info and Support

46. For both Production and Test systems: In general, if you require technical changes made to your ELR system, who designs and implements those technical changes? (choose as many as apply)

- ☐ a pool of IT resources at your jurisdiction
- ☐ dedicated ELR IT personnel
- ☐ dedicated ELR non-IT personnel
- ☐ a vendor
- ☐ a contractor
- ☐ CDC

47. Of your answer(s) above, who is the primary resource for designing and implementing technical changes to your ELR system?

- ○ a pool of IT resources at your jurisdiction
- ○ dedicated ELR IT personnel
- ○ dedicated ELR non-IT personnel
- ○ a vendor
- ○ a contractor
- ○ CDC

ELR Formats

Which of the following Health Level 7 (HL7) formats will your ELR system ACCEPT and SEND: (Only indicate those currently accepted/sent, not formats that you COULD accept/send if you were to spend some time setting them up)

ORU = Unsolicited Transmission of an Observation
OUL = Unsolicited Specimen Oriented Observation Message
ADT = Admission, Discharge and Transfer
ORM = General Order message
CDA R1 = Clinical Document Architecture, Release One
CDA R2 = Clinical Document Architecture, Release Two

48. Versions that your ELR system ACCEPTS/RECEIVES

	Not working with this	Receiving in testing/development stages	Receiving in our production system
2.2	○	○	○
2.3.z	○	○	○
2.3.1	○	○	○
2.4	○	○	○
2.5	○	○	○
2.5.1	○	○	○
2.6	○	○	○
2.7.1	○	○	○

49. Message Types that your ELR system ACCEPTS/RECEIVES

	Not working with this	Receiving in testing/development stages	Receiving in our production system
ORU	○	○	○
OUL	○	○	○
ADT	○	○	○
ORM	○	○	○

50. Documents that your ELR system ACCEPTS/RECEIVES

	Not working with this	Receiving in testing/development stages	Receiving in our production system
CDA R1	○	○	○
CDA R2	○	○	○

51. Versions your ELR SENDS/CREATES

	Not working with this	Sending in testing/development stages	Sending in our production system
2.2	○	○	○
2.3.z	○	○	○
2.3.1	○	○	○
2.4	○	○	○
2.5	○	○	○
2.5.1	○	○	○
2.6	○	○	○
2.7.1	○	○	○

52. Message Types your ELR SENDS/CREATES

	Not working with this	Sending in testing/development stages	Sending in our production system
ORU	○	○	○
OUL	○	○	○
ADT	○	○	○
ORM	○	○	○

53. Documents your ELR SENDS/CREATES

	Not working with this	Sending in testing/development stages	Sending in our production system
CDA R1	○	○	○
CDA R2	○	○	○

ELR Formats

54. Can your system process HL7 version 2.x messages in the alternative XML format, in addition to the traditional delimited format?

- Yes
- No

ELR Formats

55. Which of the following non-HL7 formats does your ELR system currently accept? (Only indicate those currently accepted, not formats that you COULD accept if you were to spend some time setting them up)

- [ ] None - we do not have a production ELR system yet
- [ ] None - only HL7 accepted
- [ ] XML (not including HL7 rendered as XML)
- [ ] Delimited text (tab, space, comma or other character)
- [ ] MS Excel
- [ ] MS Access
- [ ] dBase
- [ ] Other (please specify)

ELR Formats

56. What percentage of the electronic lab reports that you currently receive is non-HL7 format?

- No ELR data currently received - we are in Testing or Development mode
- 0%
- 1-10%
- 11-50%
- >50%

ELR Formats

57. What percentage of the lab reports that you currently receive is transmitted to you through manual Web data entry?

- No ELR data currently received OR we are in Testing or Development mode
- 0%
- 1-10%
- 11-50%
- >50%

ELR Formats

58. How do you receive your LOINC and SNOMED codes/information and updates?

Select all appropriate options.

- ☐ Participating labs send us their tables/files directly
- ☐ From the CDC
- ☐ We find them on our own

59. List the source(s) of your LOINC codes:

60. List the source(s) of your SNOMED codes:

ELR Formats

61. Do you accept messages from submitters that contain local codes (i.e., not LOINC or SNOMED)?

- Yes
- No

62. If yes, what percent of your reports contain ONLY local codes for Tests?

- No ELR data currently received OR we are in Testing or Development mode
- 0%
- 1-10%
- 11-50%
- >50%

63. If yes, what percent of your reports contain ONLY local codes for Results?

- No ELR data currently received OR we are in Testing or Development mode
- 0%
- 1-10%
- 11-50%
- >50%

64. If yes, do you (the public health agency) translate the local codes to LOINC and SNOMED?

- Yes, LOINC only
- Yes, SNOMED only
- Yes, both LOINC and SNOMED
- No

ELR Formats

65. Can you process NIST (National Institute of Standards and Technology) messages? (http://www.itl.nist.gov/div897/ctg/messagemaker/ for more information)

- Yes
- No
- Haven't tested but plan to
- Haven't tested and no plans to test

LIS/LIMS

66. Which of these major lab information systems / lab information management systems* are currently sending/planning to send reportable diseases to your ELR system?

The purpose of this question is to identify vendors known to support HL7 standard messages – i.e., it is informative only, not for data analysis. Check box if answer is "yes" and leave blank if answer is "no" or not applicable.

*** LIS/LIMS list adapted from CAP TODAY, November 2012, http://www.cap.org/apps/docs/cap_today/1112/1112_laboratory_information_systems_produ**

	HL7	Non-HL7
Aspyra, LLC - CyberLab	☐	☐
BtB Software - BtB Software LIMS	☐	☐
Cerner - Cerner Millennium PathNet	☐	☐
Cerner - Health Century	☐	☐
ChemWare - Horizon	☐	☐
Clinical Information Systems - CIS LAB	☐	☐
Clinical Software Solutions - CLIN1 LAB	☐	☐
Clinlab - Clinlab LIS	☐	☐
Common Cents Systems - ApolloLIMS	☐	☐
Comp Pro Med - Polytech	☐	☐
CompuGroup Medical - LabDAQ Laboratory Information System	☐	☐
Computer Programs and Systems - CPSI System	☐	☐
Computer Service and Support - CLS2000	☐	☐
Diamond Computing - LabGEM	☐	☐
Elekta Software - IntelliLab	☐	☐
Entre Technology Group - Genesys NonStopLab	☐	☐
Epic - Beaker Laboratory Information System	☐	☐
HEX Laboratory Systems -	☐	☐

LAB/HEX		
J&S Medical Associates - LabTrak	☐	☐
LabSoft - LabNet	☐	☐
LigoLab - Ligolab LIS	☐	☐
McKesson - Horizon Lab	☐	☐
Medcom Information Systems - Medcom Lab Manager	☐	☐
Meditech - Magic	☐	☐
NetLIMS NJ LLC - AutoLIMS	☐	☐
Orchard Software - Orchard Harvest LIS	☐	☐
Psyche Systems - WindoPath (formally LabWeb)	☐	☐
Quality Software Systems - LabHealth	☐	☐
SCC Soft Computer - SoftLab	☐	☐
Schuyler House - SchuyLab	☐	☐
Siemens Medical Solutions - Novius Lab	☐	☐
STARLIMS - STARLIMS Clinical LIMS	☐	☐
Sunquest Information Systems - Sunquest Laboratory	☐	☐
Technidata America - TD-Synergy Suite	☐	☐
Thermo Fisher Scientific Informatics - Thermo Scientific Clinical LIMS	☐	☐
Other	☐	☐

Please specify "Other"

Opinions and Topical Issues

67. What are the five most important barriers to full implementation* of ELR in your jurisdiction?

Please rank FIVE options from 1 (most important) to 5 (less important) by entering numbers 1, 2, 3, 4, 5 in the corresponding cells.

If ELR is fully implemented, enter a 1 in the "N/A, ELR is fully implemented" cell.

E.g., All labs that your jurisdictions wants to report are fully reporting (encompassing national/commercial labs)

N/A, ELR is fully implemented	
Not enough money at health department	
Not enough staff at health department	
Hospitals and other Labs want reimbursement for their start-up costs	
Laboratories have other/competing IT implementation priorities	
Laboratory Information System vendors have not developed appropriate interface modules	
Lack of technical skills and knowledge of health department staff	
Variable content and format of ELR messages from labs	
Lack of authority to compel compliance	
Lack of incentives to encourage compliance	
Not enough internal agency support	
Not enough agency buy-in/prioritization/management support	
Compliance with jurisdiction or agency IT and/or confidentiality standards	

Other

68. If you ranked "Other" as one of the 5 most important barriers to full implementation, please specify that "other" barrier.

Opinions and Topical Issues

69. How many staff are responsible for ELR activities in your jurisdiction? This would include those involved in onboarding, ongoing operations, quality assurance, etc.

	0	1	2	3	4	5+
Full-time staff	○	○	○	○	○	○
Of these full-time staff, how many IT/IS designated staff?	○	○	○	○	○	○
Of these full-time staff, how many are contractors or consultants?	○	○	○	○	○	○
Part-time staff	○	○	○	○	○	○
Part-time assignment to ELR	○	○	○	○	○	○
Of these part-time staff, how many are IT/IS designated staff?	○	○	○	○	○	○
Of these part-time staff, how many are contractors or consultants?	○	○	○	○	○	○

70. Do any of the staff from the question above also have any of the following responsibilities? (Select all appropriate options)

- ☐ PHIN Coordinator (PHIN=Public Health Information Network)
- ☐ HAN Coordinator (HAN=Health Alert Network)
- ☐ BT Coordinator (BT=Bioterrorism)
- ☐ ELR Coordinator
- ☐ EPHT Coordinator (EPHT=Environmental Public Health Tracking)
- ☐ NEDSS Coordinator (NEDSS= National Electronic Disease Surveillance System)
- ☐ Meaningful Use Coordinator
- ☐ HIE Coordinator (HIE=Health Information Exchange)
- ☐ None of the above
- ☐ Other (please specify)

Opinions and Topical Issues

71. Addition of which types of staff would be most useful for your jurisdiction in implementing or maintaining ELR?

Please rank your top three options from 1 (most important) to 3 (less important) by entering numbers 1, 2, 3 in the corresponding cells.

Informaticists	
Messaging Experts	
IT Personnel	
Epidemiologists	
Managers/Project Managers	
Medical technologists	
Clinical pathologists	
Administrative personnel	
Legal personnel	
Other	

Please specify "Other"

72. If you selected "IT Personnel" as one of your top three options, please indicate which type of IT skills you are looking for - check all appropriate skills.

- ☐ Security
- ☐ Database Management - DBM
- ☐ Programming
- ☐ Network
- ☐ Electronic Data Interchange - EDI
- ☐ Other (please specify)

Opinions and Topical Issues

73. What kind of training for existing staff would be most helpful in implementing or maintaining ELR?

Choose all that apply.

- [ ] Security
- [ ] Meaningful Use
- [ ] HL7 v. 2 messages
- [ ] HL7 v. 3 messages
- [ ] Clinical Document Architecture (CDA) documents
- [ ] Coding (as in LOINC or SNOMED)
- [ ] Information technology
- [ ] Project management
- [ ] Transport-layer training. Note: If you select this option, please specify:
- [ ] Laboratory workflow/procedures
- [ ] Cross-training in epi/surveillance
- [ ] Public Health Informatics
- [ ] Other (please specify)

74. If you chose "Transport-layer training," please specify:

- ○ PHINMS
- ○ Direct
- ○ sFTP
- ○ VPN
- ○ HTTP
- ○ Connect

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Opinions and Topical Issues

What is the approximate amount your state has invested (2000-present) in meeting state and federal requirements/standards for ELR, IDR (integrated data repository), and web-based disease surveillance systems*? Inclusive of both program-area and IT staffing, hardware, software, maintenance, hosting, etc.
* Include Blood Lead, STD, TB, HIV where appropriate. Also note, scroll to bottom of list for choices "had not yet started ELR" and "had started ELR but this financial information no longer available".

75. For ELR Only:

- ○ About $1 million
- ○ $1-2 million
- ○ $2-3 million
- ○ $3-4 million
- ○ $4-5 million
- ○ $5-6 million
- ○ $6-7 million
- ○ $7-8 million
- ○ $8-9 million
- ○ $9-10 million
- ○ >$10 million
- ○ Have not yet started ELR
- ○ Have started ELR but this financial information is no longer available
- ○ Don't know/unable to determine

Comment(s)

76. For ELR, IDR, and web-based disease surveillance systems together:

- ○ About $1 million
- ○ $1-2 million
- ○ $2-3 million
- ○ $3-4 million
- ○ $4-5 million
- ○ $5-6 million
- ○ $6-7 million
- ○ $7-8 million
- ○ $8-9 million
- ○ $9-10 million
- ○ >$10 million
- ○ Have not yet started ELR
- ○ Have started ELR but this financial information is no longer available
- ○ Don't know/unable to determine

Comment(s)

Opinions and Topical Issues

Of the amount identified in the previous questions, which three of the following do you feel constitute the majority of expenditures?

77. Most expensive

- Program-area staff
- IT staff
- Hardware
- Software
- Other (please specify)
- Maintenance
- Hosting
- Bundled IT services, e.g., ASP
- N/A

78. Second most expensive

- Program-area staff
- IT staff
- Hardware
- Software
- Other (please specify)
- Maintenance
- Hosting
- Bundled IT services, e.g., ASP
- N/A

79. Third most expensive

- Program-area staff
- IT staff
- Hardware
- Software
- Other (please specify)
- Maintenance
- Hosting
- Bundled IT services, e.g., ASP
- N/A

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Opinions and Topical Issues

How could you best benefit from the experiences of those already working in ELR? Please choose responses for your top 3 ways you could benefit.

80. Most important

- Business info, documentation - lab recruitment, QC, etc.
- Technical info, documentation - shared code, maps, etc.
- Contact info for other ELR specialists
- Regional ELR in-person meetings
- Expanded meeting opportunities at conferences
- Increased peer-reviewed publications, successes, solutions.
- Other (please specify)

81. Second most important

- Business info, documentation - lab recruitment, QC, etc.
- Technical info, documentation - shared code, maps, etc.
- Contact info for other ELR specialists
- Regional ELR in-person meetings
- Expanded meeting opportunities at conferences
- Increased peer-reviewed publications, successes, solutions.
- Other (please specify)

82. Third most important

- Business info, documentation - lab recruitment, QC, etc.
- Technical info, documentation - shared code, maps, etc.
- Contact info for other ELR specialists
- Regional ELR in-person meetings
- Expanded meeting opportunities at conferences
- Increased peer-reviewed publications, successes, solutions.
- Other (please specify)

Opinions and Topical Issues

83. What do you realistically expect your stage of ELR to be in 2014 and 2015? (realistically, not what you'd hope or like to have)

Please answer as the percentage of completion towards listed milestones (0%, 1-10%, 11-50%, or >50% complete).

	2014	2015
Participation of all potential data recipients		
Participation of all potential sending partners		
Participation of specific sending partners - Local		
Participation of specific sending partners - Regional		
Participation of specific sending partners - National		
Participation of specific sending partners - Federal		
Elimination of paper reports from labs		
Receipt of data via/from HIEs		

Opinions and Topical Issues

84. What was the impact of meaningful use on ELR resources in 2013? (Select all appropriate options)

- [ ] Received a one-time increase in budget in 2013
- [ ] Projected increase in annual operating budget post-2013
- [ ] Unfunded increase in workload for ELR resources
- [ ] No change
- [ ] Can't determine at this time

Other (please specify)

Opinions and Topical Issues

85. With reference to the ARRA Meaningful Use criteria, please indicate your jurisdiction's ability to fully support public health objectives. Check each year for which the objective is/will be supported:

	2013	2014	2015	2016
Immunization Registry reporting	☐	☐	☐	☐
Syndromic surveillance reporting	☐	☐	☐	☐
Hospital reporting of laboratory data (ELR)	☐	☐	☐	☐
Cancer Registry reporting	☐	☐	☐	☐
Other registry reporting	☐	☐	☐	☐

Opinions and Topical Issues

86. Can your jurisdiction currently accurately assess the proportion of results for reportable conditions that came from each individual hospital as ELR reports (vs. paper reports or by telephone)?

- ○ Yes
- ○ No
- ○ Plan to
- ○ Tried, but unsuccessful

87. If you chose "Tried, but unsuccessful," please explain.

Opinions and Topical Issues

88. For your current or planned ELR system, please indicate the reporting requirements for the following data elements: (answer choices are: Strictly required – a record missing this value will be REJECTED, Required – specified as required but a record missing this value will not be rejected, Preferred, Optional, Unspecified - we don't specify any requirement for this element, and Don't know the answer to this question)

Patient county of residence	
Patient residence address	
Patient Gender	
Patient Race/Ethnicity	
Patient DOB	
Patient telephone	
Provider telephone	
Facility telephone	

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Opinions and Topical Issues

We are gathering a list of contacts for ELR assistance. For each ELR contact in your jurisdiction, please indicate the areas that you/your state would be willing to discuss with other jurisdictions that might need assistance.

Important Note: Any data you provide here will be posted on the CSTE website, so please don't include information that a contact doesn't want shared.

89. Contact 1:

Name

Telephone

Email

90. Contact 1:

- [ ] Lab approaches and interactions
- [ ] LIMS/LIS
- [ ] Specify which LIMS/LIS
- [ ] HL7
- [ ] LOINC
- [ ] SNOMED
- [ ] Transmission
- [ ] PHINMS
- [ ] sFTP
- [ ] Direct
- [ ] Web Services
- [ ] Messaging/Translation
- [ ] Security
- [ ] HIE
- [ ] Other (please specify)

91. Contact 2:

Name

Telephone

Email

92. Contact 2:

- ☐ Lab approaches and interactions
- ☐ LIMS/LIS
- ☐ Specify which LIMS/LIS
- ☐ HL7
- ☐ LOINC
- ☐ SNOMED
- ☐ Transmission
- ☐ PHINMS
- ☐ sFTP
- ☐ Direct
- ☐ Web Services
- ☐ Messaging/Translation
- ☐ Security
- ☐ HIE
- ☐ Other (please specify)

93. Contact 3:

Name

Telephone

Email

94. Contact 3:

- ☐ Lab approaches and interactions
- ☐ LIMS/LIS
- ☐ Specify which LIMS/LIS
- ☐ HL7
- ☐ LOINC
- ☐ SNOMED
- ☐ Transmission
- ☐ PHINMS
- ☐ sFTP
- ☐ Direct
- ☐ Web Services
- ☐ Messaging/Translation
- ☐ Security
- ☐ HIE
- ☐ Other (please specify)

95. Contact 4:

Name

Telephone

Email

96. Contact 4:

- [ ] Lab approaches and interactions
- [ ] LIMS/LIS
- [ ] Specify which LIMS/LIS
- [ ] HL7
- [ ] LOINC
- [ ] SNOMED
- [ ] Transmission
- [ ] PHINMS
- [ ] sFTP
- [ ] Direct
- [ ] Web Services
- [ ] Messaging/Translation
- [ ] Security
- [ ] HIE
- [ ] Other (please specify)

97. Contact 5:

Name

Telephone

Email

98. Contact 5:

- [ ] Lab approaches and interactions
- [ ] LIMS/LIS
- [ ] Specify which LIMS/LIS
- [ ] HL7
- [ ] LOINC
- [ ] SNOMED
- [ ] Transmission
- [ ] PHINMS
- [ ] sFTP
- [ ] Direct
- [ ] Web Services
- [ ] Messaging/Translation
- [ ] Security
- [ ] HIE
- [ ] Other (please specify)

Opinions and Topical Issues

99. Will implementation of ELR as a core meaningful use objective for eligible hospitals result in a substantial increase in ELR volume for your system?

- Yes
- No
- Not Sure

100. Is your agency making any changes to respond to the anticipated increase in ELR volume?

- Yes
- No
- Not Sure

101. Is your agency making changes to the ELR information system? (e.g., hardware, software, networking)

- Yes
- No
- Not Sure

If yes, please describe:

102. Is your agency increasing staffing related to ELR? (e.g., managers, validators, developers)

- Yes
- No
- Not Sure

If yes, please describe:

103. Is your agency making any other changes related to ELR?

- Yes
- No
- Not Sure

If yes, please describe:

104. Will the changes that your agency is making result in increased expenditure on ELR?

- Yes
- No
- Not Sure

If yes, what are the main sources of revenue for that increased expenditure?

105. Can you please add the web location where information about ELR for providers is posted (enrollment materials, guides, etc.)?

106. Can you please add the web location where information about Meaningful Use as it pertains to ELR is posted?

Opinions and Topical Issues

107. What question(s) or answer option(s) do you think SHOULD have been on the survey but was(were) not? Please specify.

Opinions and Topical Issues

108. Were there any questions that you found confusing and think should be reworded? Please specify question number(s) and topic(s):
For example, you might say something like "Question about adding questions, I didn't understand that."

2013 National ELR Assessment

Thank you!

Thank you for completing this assessment. We greatly appreciate your time and participation.

If you would like to be involved in the CSTE Subcommittee that participated in the development of this assessment, please join our calls. The Electronic Laboratory and Disease Reporting Subcommittee provides a forum for discussing issues specifically related to the implementation of ELR and disease reporting, including the National Electronic Disease Surveillance System (NEDSS). We meet on the third Wednesday of every month at 3-4 pm ET. Check CSTE Calendar for call information! http://cste.site-ym.com/?page=CSTECalendar

For more information or questions about the assessment, please contact Becky Rutledge at the CSTE National Office: rrutledge@cste.org or (770) 458-3811.