

2009 National Electronic Laboratory Reporting (ELR) Snapshot Survey

Summary of Results

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Interpretation




Survey questions are listed in numerical order, each followed by data presentation. In some instances, the survey questions are abbreviated or slightly changed for readability in this summary context. The author has appended notes to some of the tables and graphs to enhance interpretation of data. Historic trends are included for some items.

The 2009 survey consists of data gathered from:

- 49 states in the United States
- Puerto Rico
- Five US Metropolitan Areas (alphabetically, by state): Los Angeles, CA; Denver, CO; Chicago, IL; Indianapolis, IN; New York City, NY.

The final pages of this report acknowledge the valuable contributions of the 19 members of the 2009 ELR Survey Editorial Board and the Regional Coordinator volunteers.

Historic Participation in the Annual ELR National Snapshot Survey, 2004-2009

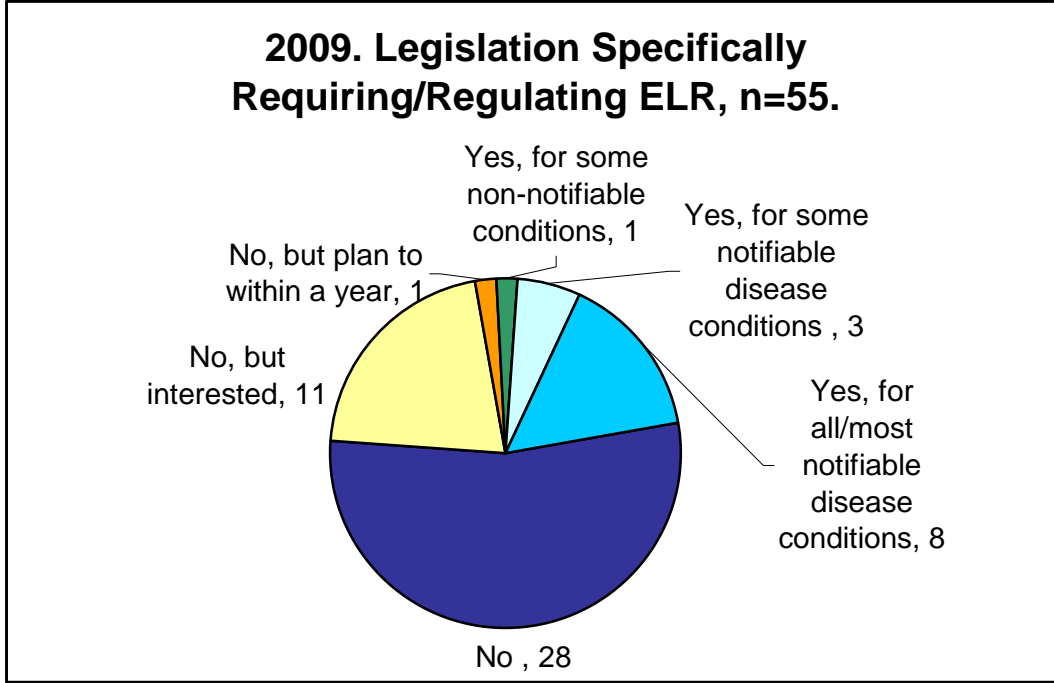
Legend	Not Included	
	Invited - No Response	
	Responded	

	2004	2005	2006	2007	2008	2009
Chicago						
Denver						
FSM						
Indianapolis						
Los Angeles						
New York City						
Puerto Rico						
Washington DC						
Alabama						
Alaska						
Arizona						
Arkansas						
California						
Colorado						
Connecticut						
Delaware						
Florida						
Georgia						
Hawaii						
Idaho						
Illinois						
Indiana						
Iowa						
Kansas						
Kentucky						
Louisiana						
Maine						
Maryland						
Massachusetts						

	2004	2005	2006	2007	2008	2009
Michigan						
Minnesota						
Mississippi						
Missouri						
Montana						
Nebraska						
Nevada						
New Hampshire						
New Jersey						
New Mexico						
New York						
North Carolina						
North Dakota						
Ohio						
Oklahoma						
Oregon						
Pennsylvania						
Rhode Island						
South Carolina						
South Dakota						
Tennessee						
Texas						
Utah						
Vermont						
Virginia						
Washington						
West Virginia						
Wisconsin						
Wyoming						

SECTION: State and Scope of ELR

Q2. Does your state/jurisdiction have legislation specifically requiring/regulating electronic lab reporting?



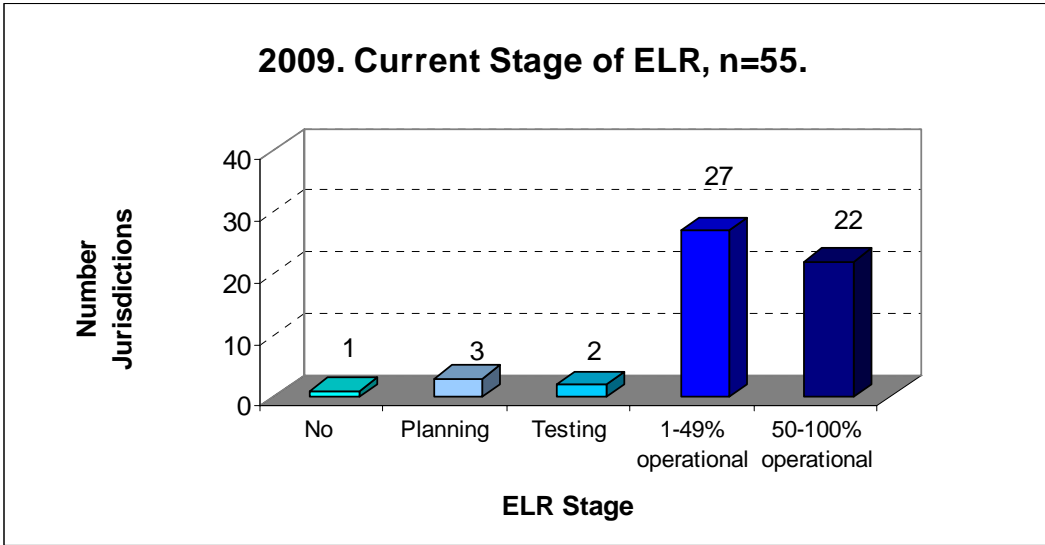
Q3. If legislative information is posted on a website or otherwise available for review, please list the URL or other access information.

URLs/Access information provided by participants*
http://apps.leg.wa.gov/WAC/default.aspx?cite=246-101-201
http://dhs.wi.gov/communicable/diseasereporting/index.htm
http://health.state.tn.us/Ceds/notifiable.htm
http://lexisnexis.com/njoal
http://msdh.ms.gov/msdhsite/_static/14,0,194.html
http://regulations.delaware.gov/AdminCode/title16/4000/4200/4202.shtml
http://www.azdhs.gov/phs/oids/dis_rpt.htm
http://www.cdph.ca.gov/programs/CLPPB/Documents/CLPPB-LeadCare.7-09.pdf
http://www.dhhs.ne.gov/reg/t173.htm
http://www.doh.state.fl.us/Disease_ctrl/epi/Acute/reporting.html
http://www.health.state.ny.us/professionals/reportable_diseases/eclrs/index.htm
http://www.in.gov/isdh/files/comm_dis_rule.pdf
http://www.kdheks.gov/epi/kids_reporting_tools.htm
http://www.nyc.gov/html/doh/downloads/pdf/public/13-01-notice.pdf
http://www.ok.gov/health/documents/Chapter%20515%20Final%20Rules%202008%20Distribution%20Copy_Final.pdf
http://www.sos.mo.gov/adrules/csr/current/19csr/19csr.asp#19-10

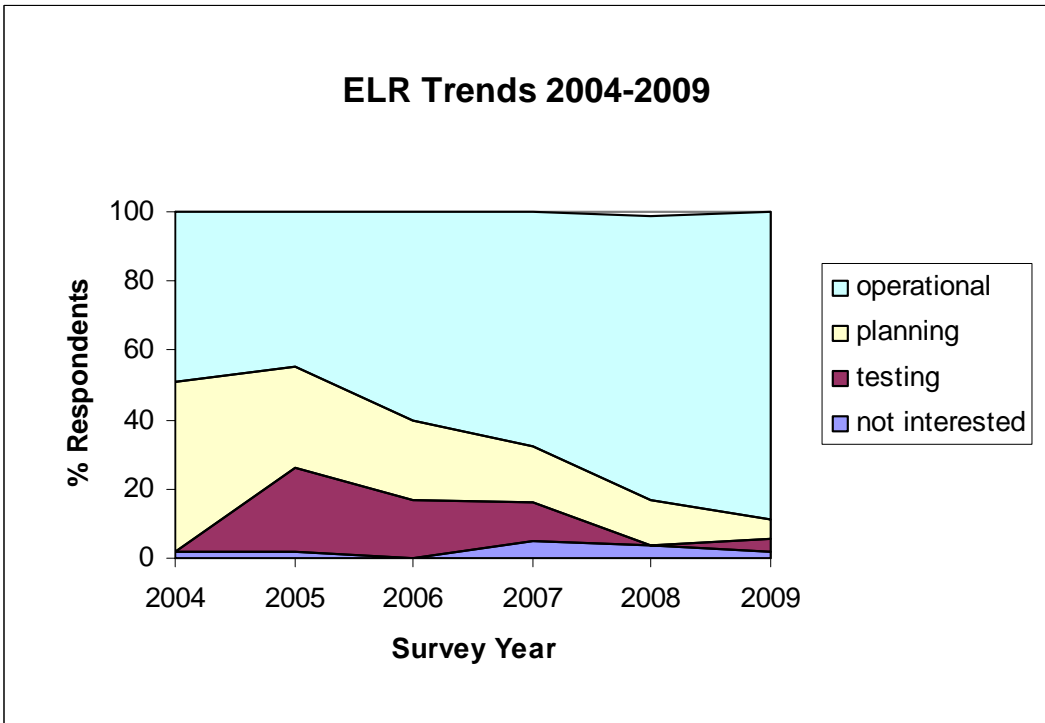
* Interpretive note: URLs are listed as they were provided; the author has not personally verified URL accuracy.

Q4. What is the current stage of ELR for your jurisdiction? Available answer choices were:

- a. Not currently in production, testing, or planning for ELR.
- b. Operational ELR system, with 50-100% of notifiable condition reports to your jurisdiction being received electronically
- c. Operational ELR system, with 1-49% of notifiable condition reports to your jurisdiction being received electronically
- d. Testing - ELR system is in Testing stage but not yet in production
- e. Planning - ELR system is in Planning stage, prior to moving to Testing



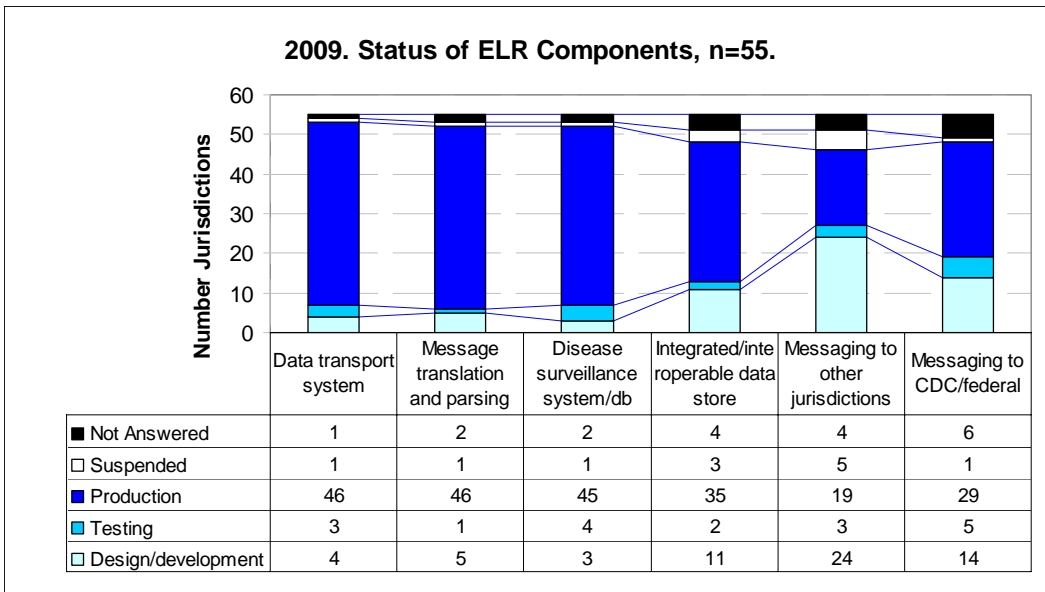
Historic Analysis: Representation of ELR Stages from Surveys 2004-2009.



Q5. Specifically, what is the status of the individual components of ELR in your jurisdiction?

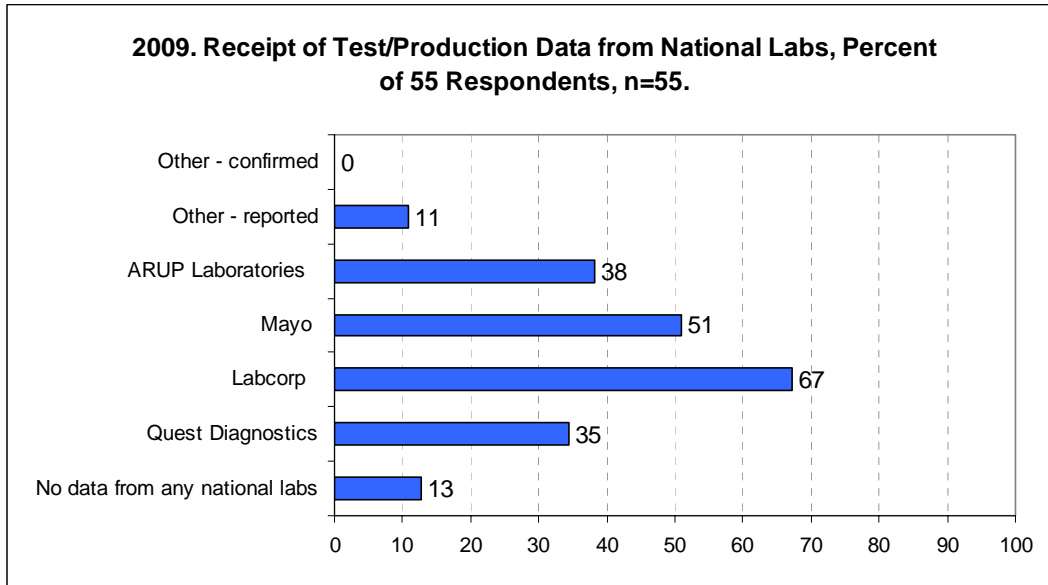
ELR COMPONENTS

- Data transport system
- Message translation and parsing
- Principal disease surveillance system/database that receives ELR data
- ELR repository - integrated/interoperable data store
- Messaging/routing to other jurisdictions
- Messaging to CDC or other federal entities



SECTION: ELR Data Sources

Q6. Laboratory reportable condition data are being received electronically in TEST or PRODUCTION from which of these national labs (check all that apply). Also please indicate the format of these lab data in the drop-down boxes:

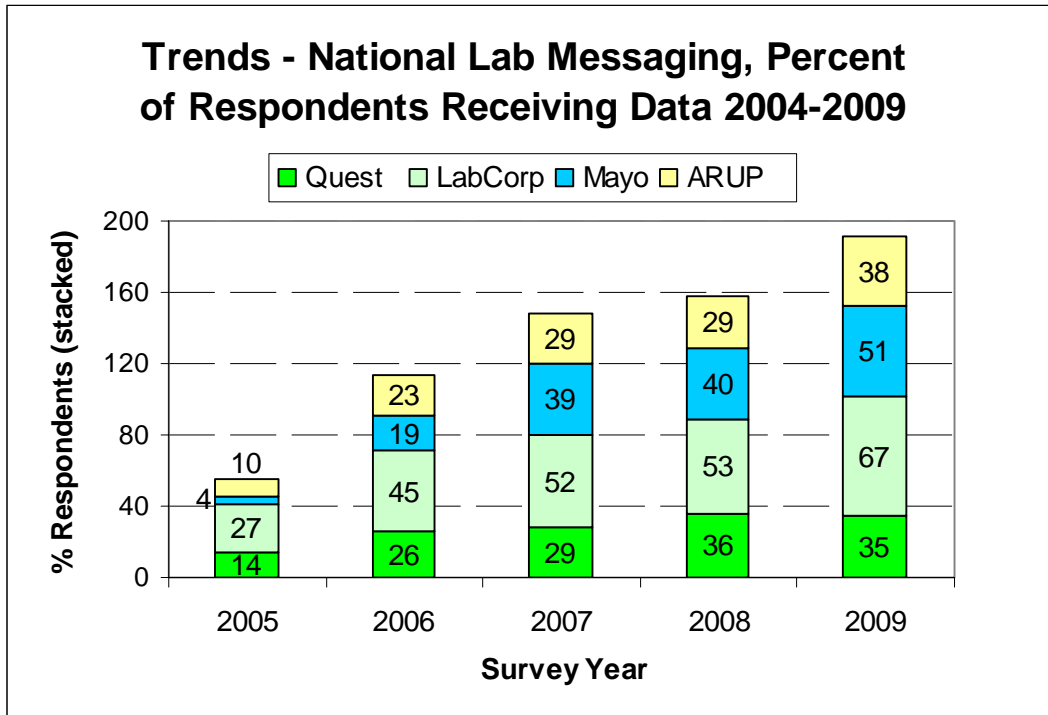


Interpretive Note - Other-reported vs. Other-confirmed: Although 11 jurisdictions listed some other laboratories as national labs, upon verification the other laboratories were determined to be regional labs, not national. Therefore, there were no confirmed national labs other than those specified in the question.

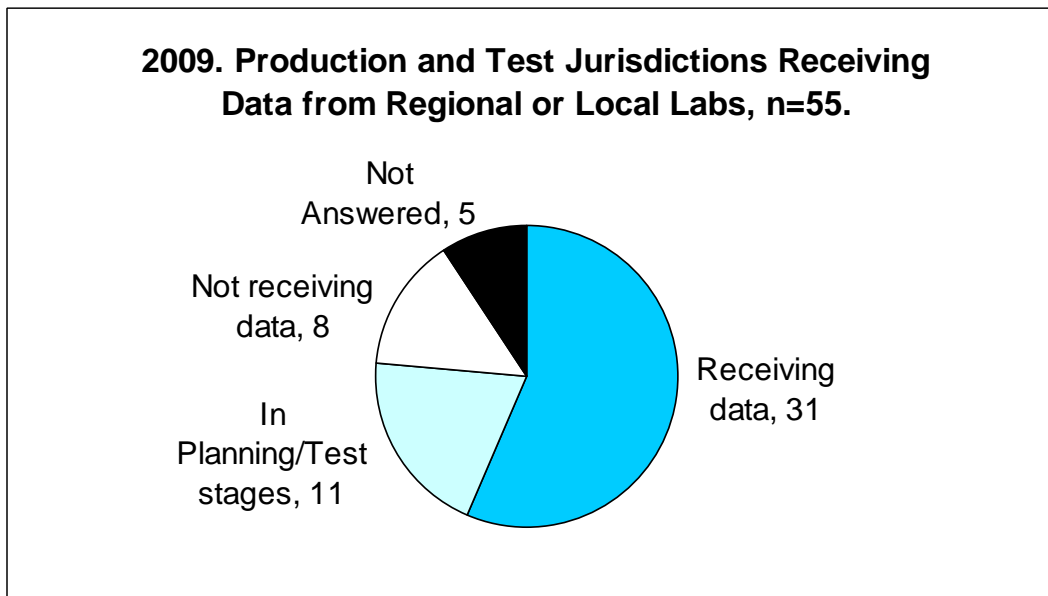
National Laboratories - Data Format				
Format	Quest	LabCorp	Mayo	ARUP
HL7 version 2.3.z	11	11	0	0
HL7 version 2.3.1	9	27	27	12
HL7 version 2.4.x	0	0	0	0
HL7 version 2.5.x	0	0	0	0
Non-HL7 (ex. dBASE)	1	0	0	10
Web Data Entry	0	0	1	0
Not Answered	34	17	27	33

National Laboratories - Data Coding				
Format	Quest	LabCorp	Mayo	ARUP
LOINC only	8	5	3	10
SNOMED only	0	1	0	0
Both LOINC and SNOMED	4	27	22	2
No LOINC or SNOMED received	6	2	2	8
Not Applicable - Web data entry	0	0	0	0
Not Answered	37	20	28	35

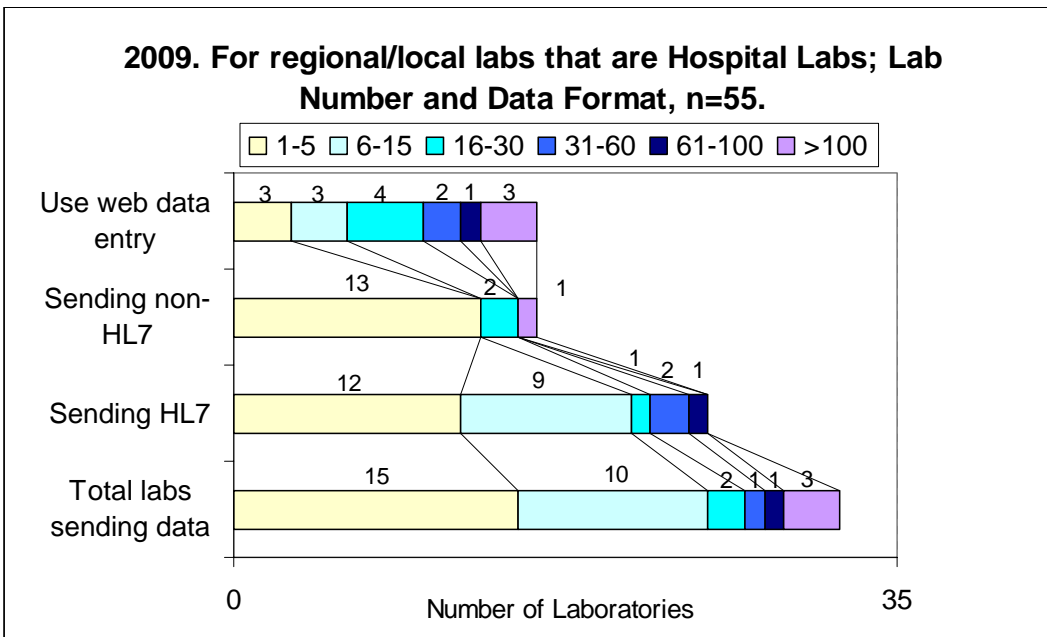
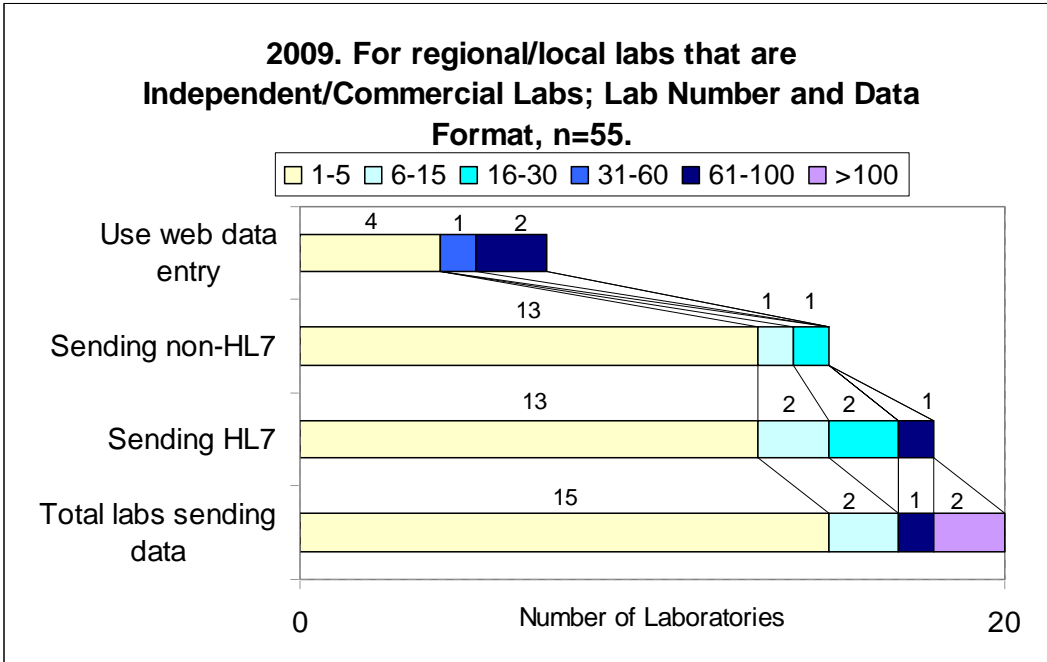
Historic Analysis: Messaging from National Laboratories



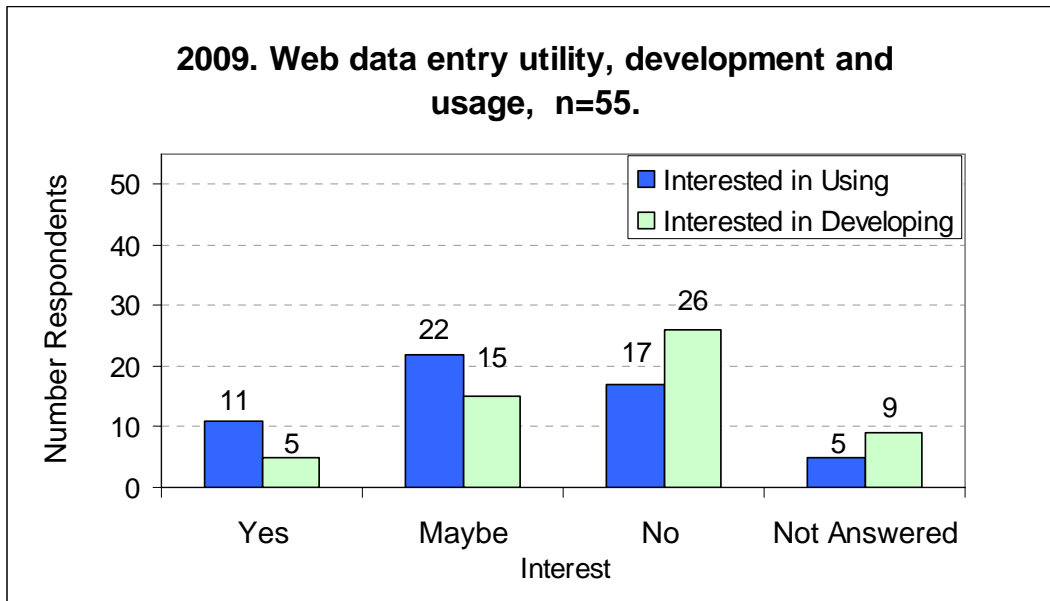
Q7. Are laboratory-reportable condition data being received electronically from REGIONAL (ex., SE United States) or LOCAL commercial/hospital labs? This question is intended for both Test and Production sites.



- If you chose "Yes", please answer the following questions:
- a) specify how many regional/local labs send you data:
 - b) how many of those labs send you data in HL7 format?
 - c) how many of those labs send you data in NON-HL7 format?
 - d) how many enter data through a web data entry screen?



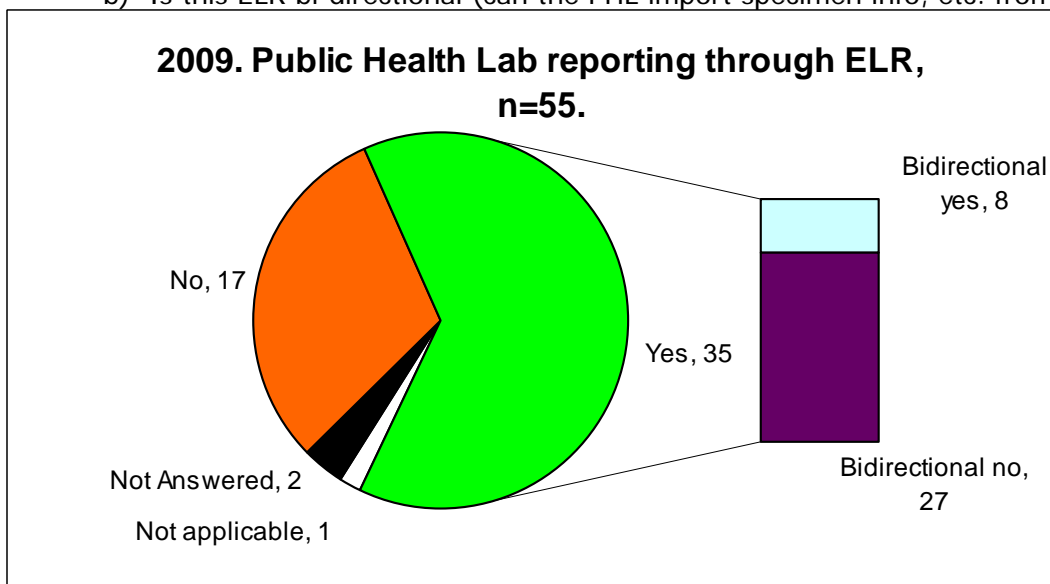
Q8. Some states have developed useful web data-entry utilities which allow labs to enter their data into a web interface, and the utility provides these data to the state system in the form of an HL7 message. We are interested in creating a nationally-available web data-entry application, based on an existing state utility (generously offered for sharing by that state).



Q9. Is your state public health lab(s) is/are reporting through ELR (if multiple labs, select answers that apply to the majority of the labs).

If answer is yes,

- a) What LIS/LIMS is your PHL using to produce the reports it is sending your jurisdiction?
- b) Is this ELR bi-directional (can the PHL import specimen info, etc. from ELR)?



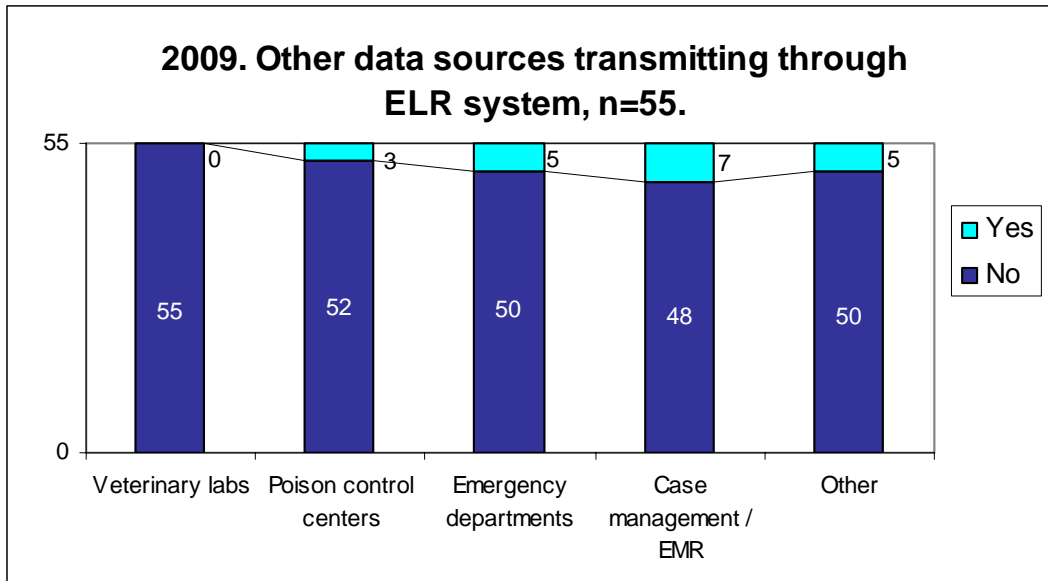
LIS/LIMS used by PHL to produce ELR*	
# Respondents	Name of System
9	StarLims
4	Developed by State IT
4	LITS+/PHIL
3	LabWare
2	Chemware's Horizon
2	EPIC
2	Orchard
2	Sunquest
1	Apollo LIMS
1	CERNER
1	Cohort- Epic systems
1	EPIC and Starlims
1	Horizon 10 from Chemware
1	MLAB-EE
1	Orion Rhapsody
1	PowerLab
1	Psyche
1	Sunrise/StarLIMS

* Interpretive note: This was a free text field; entries are listed as they were provided. Some entries may not be valid LIMS/LIS - the author has not verified or corrected these entries.

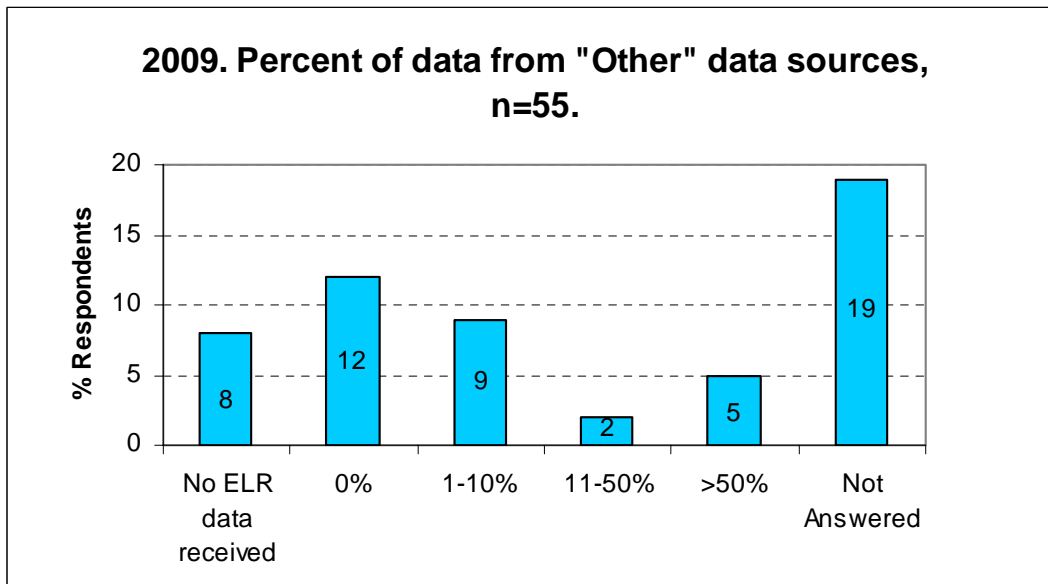
Q10. If you chose "NO" to the previous question, then please check the reasons your PHL is NOT reporting through ELR (may choose multiple options):

If PHL not participating in ELR, why not:	
LIMS not capable of producing HL7 message	4
Messaging transport not set up	6
No one has completed programming to be able to send HL7	8
Test and/or result coding is not completed or is problematic	6
Other	5

Q11. What other data sources are transmitting data through your ELR system?

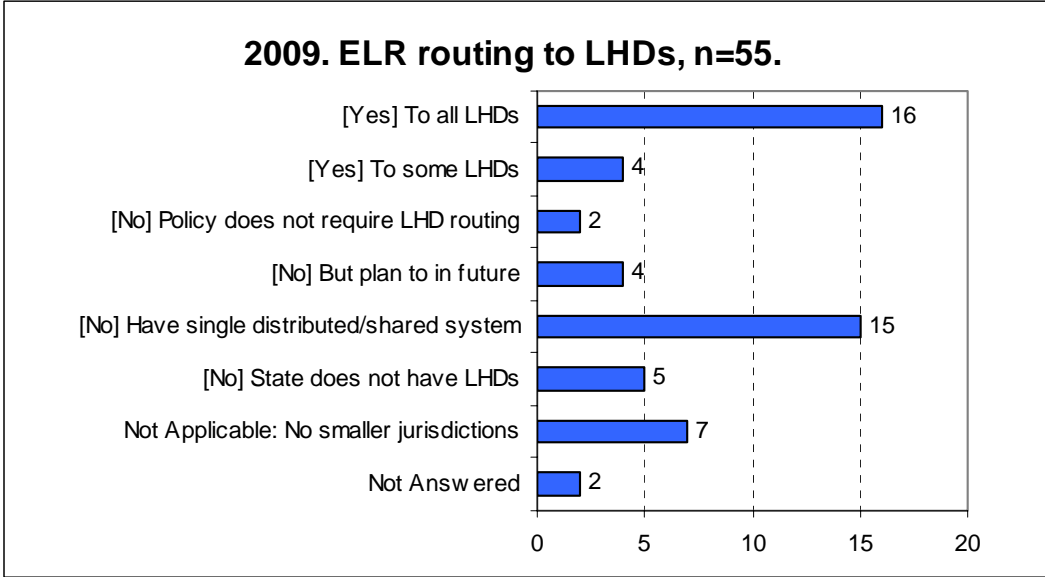


Q12. What is the overall percentage of the total data passing through your ELR system that is attributable to the data sources in the previous question?



SECTION: Use of ELR Data

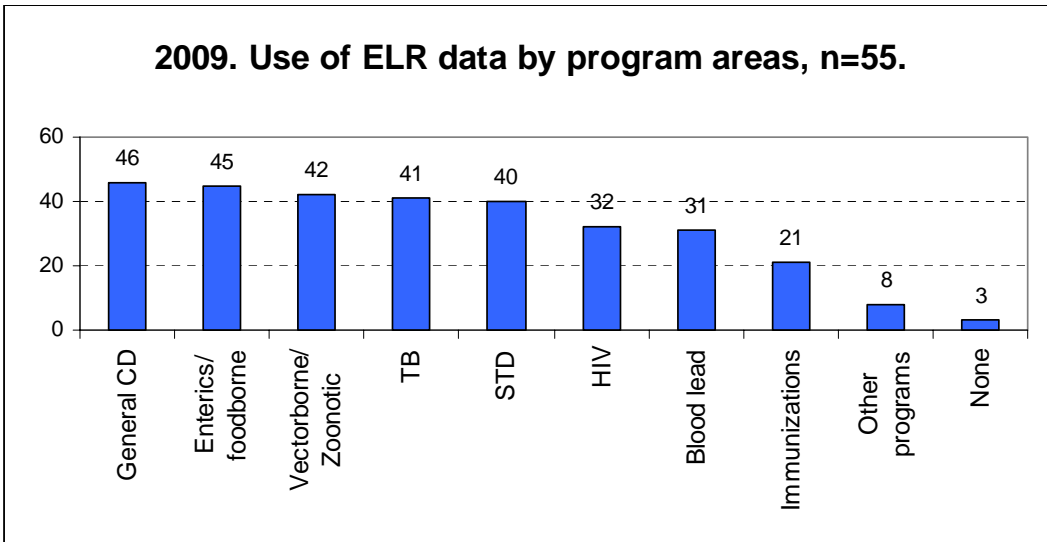
Q13. Does your ELR system route lab data to appropriate county/local public health organizations (LHDs=Local Health Departments)?



Q14. Which of the following state/jurisdictional public health personnel/programs use ELR data? (may check multiple options)

Available Options

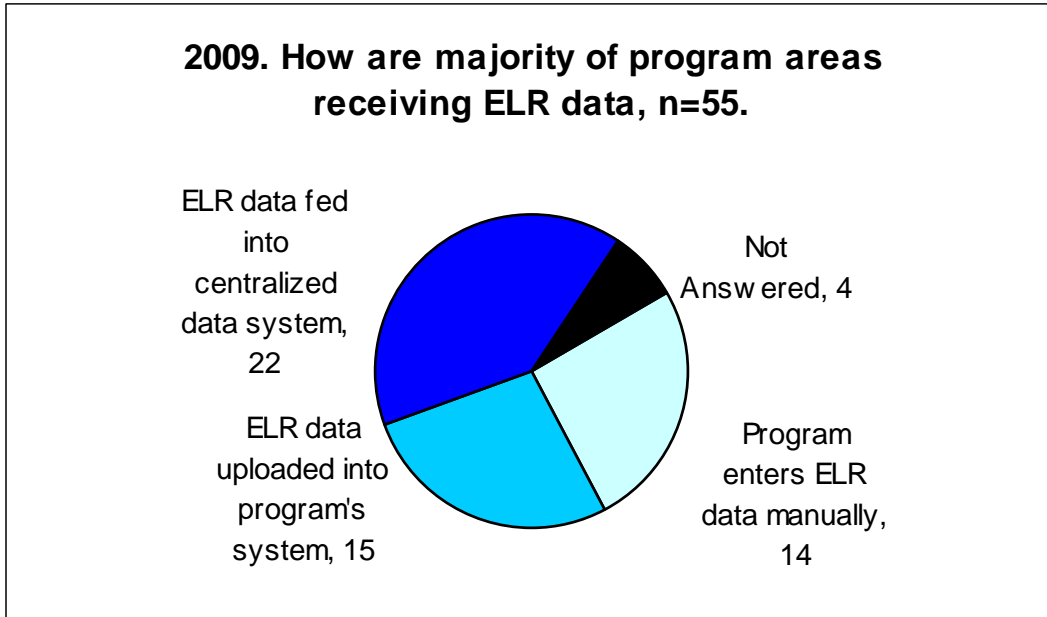
- None - no state/jurisdictional programs receiving ELR data
- General communicable diseases
- Blood lead
- HIV
- Immunizations
- STD
- TB
- Enterics/foodborne
- Vectorborne/Zoonotic
- Other programs



"Other programs" specified in answer to question item 14.

Q14. Specified "Other programs"	
# Respondents	Program
5	Cancer
1	Congenital Malformations
1	Heavy Metals
1	Hemoglobin A1C

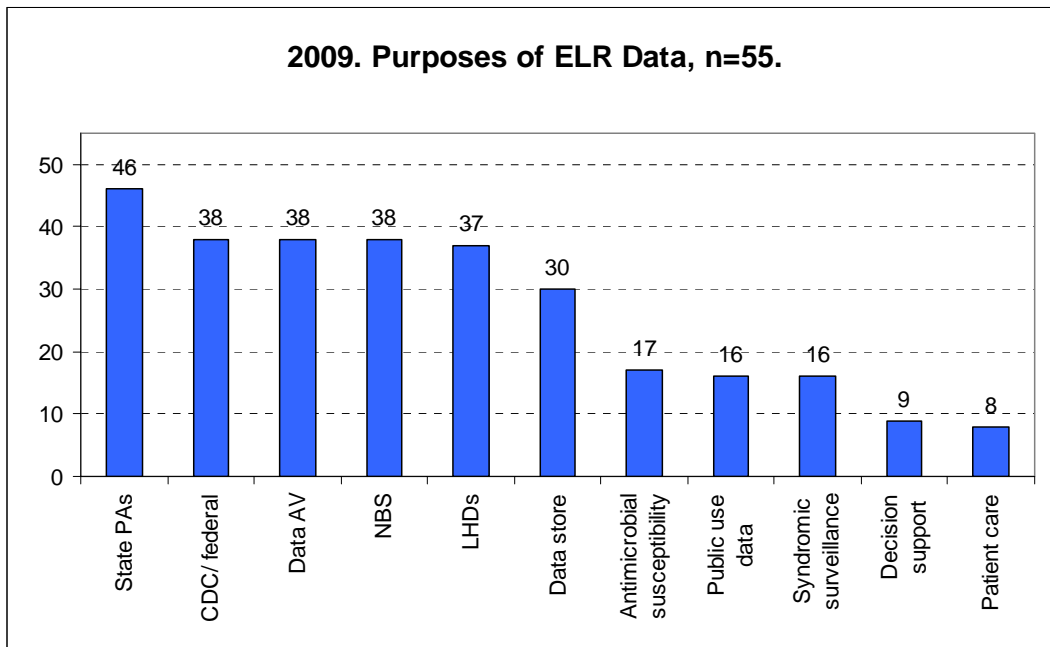
For the programs above, how are the majority receiving ELR data?



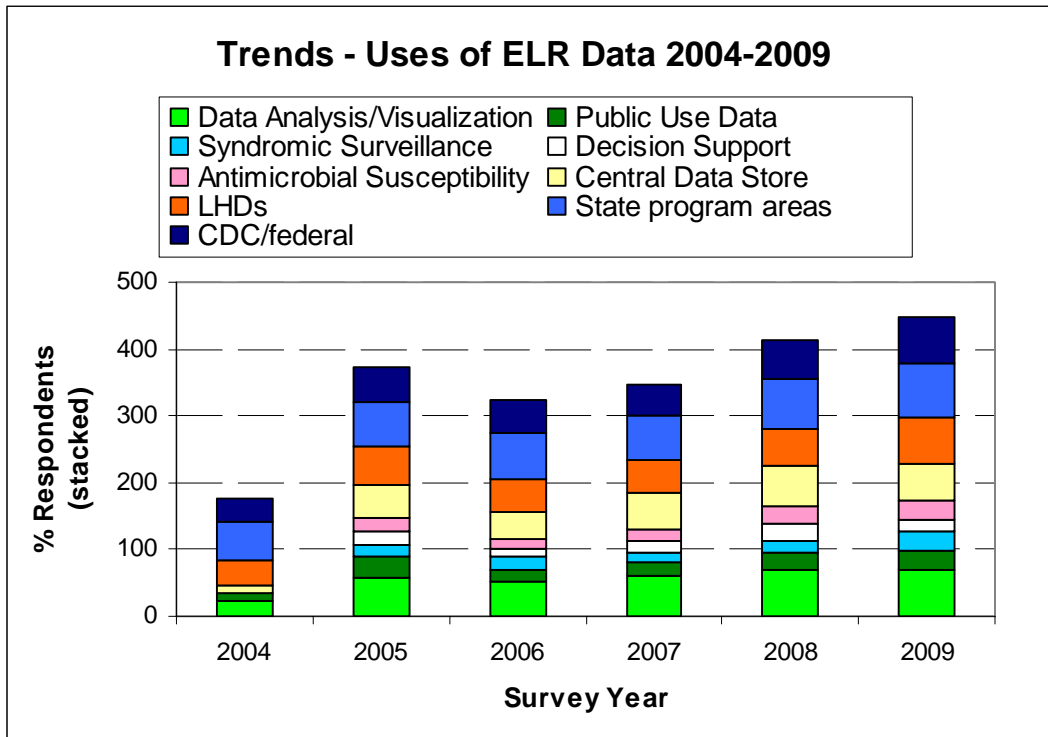
Q15. For which purposes are data received via your ELR system currently used? (may select multiple options)

Available Options

- Provide data to LHDs
- 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

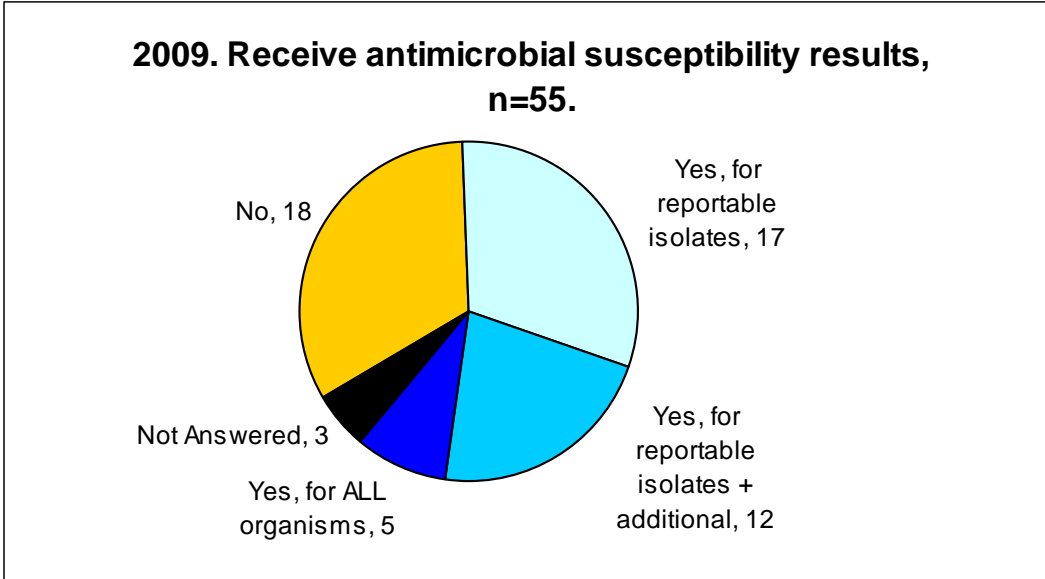


Historic Analysis: Use/Purposes of ELR Data

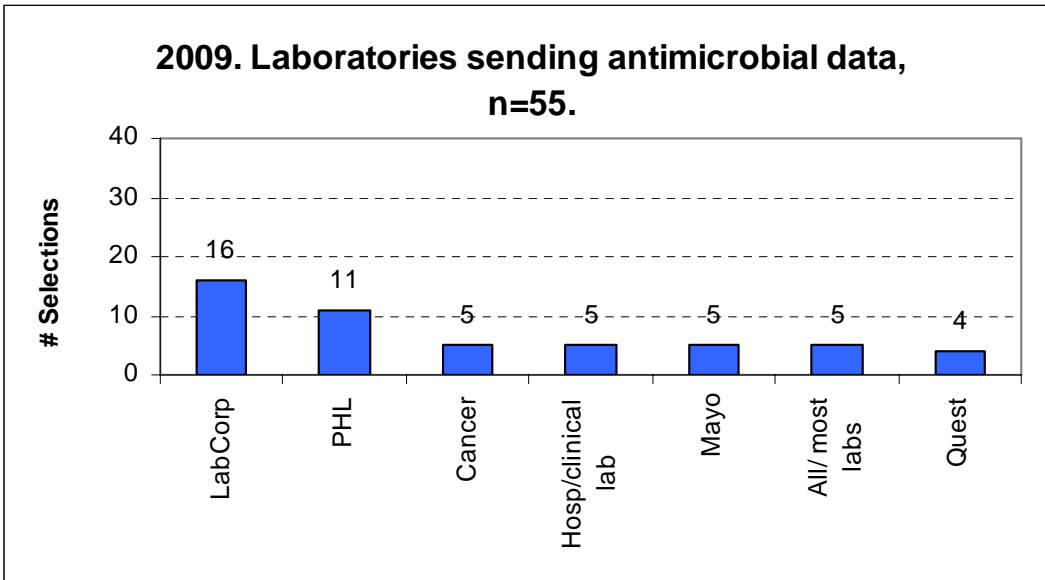


Interpretive Note: The available options for this question changed slightly over the years. This chart represents only those options which were available for all years, with the exception of syndromic surveillance and decision support which were not included on the 2004 survey. The chart indicates that most of the uses held fairly steady, with noted increases in LHD, CDC/federal, and syndromic surveillance.

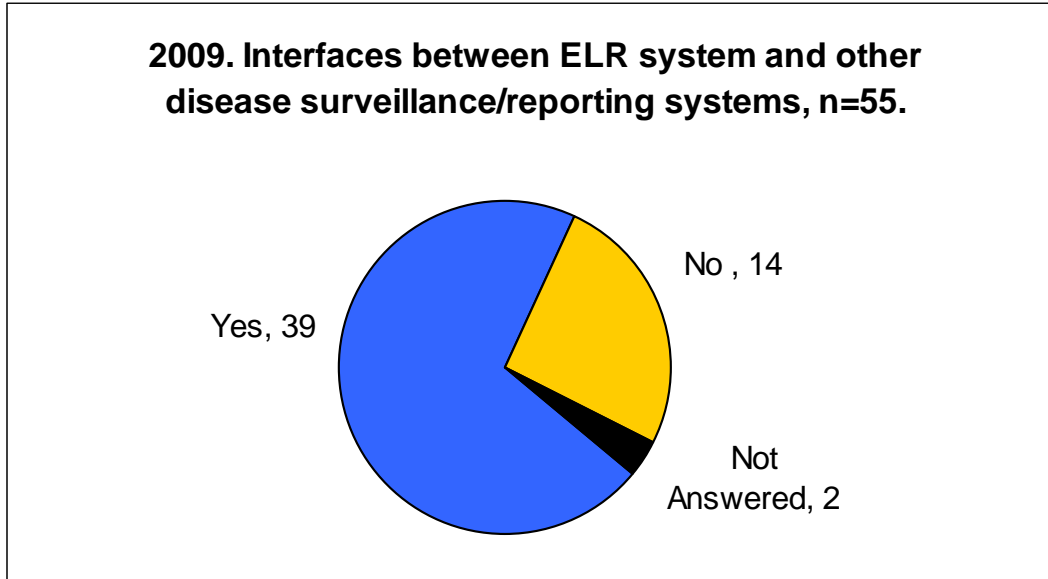
Q16. Does your jurisdiction receive antimicrobial susceptibility results via ELR?



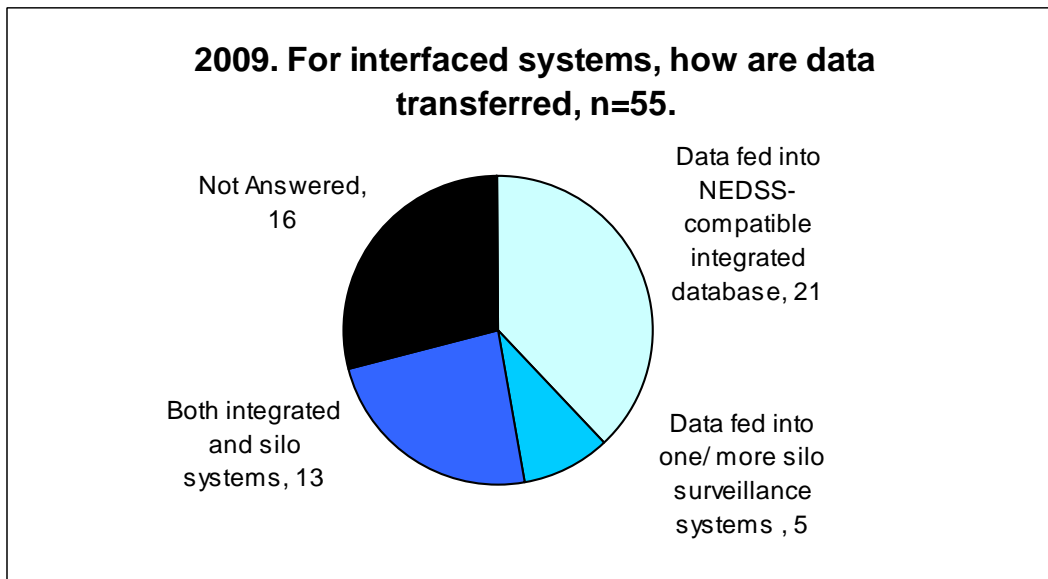
Q17. If you answered "Yes" to the antimicrobial susceptibility question above, what lab(s) is(are) sending you these data?



Q18. Do you have any interfaces between your ELR system and other disease surveillance/reporting systems?



Q19. If you answered "Yes" to the interface question above, then indicate how data are transferred.



Q20. If you indicated a stand-alone system above, then please specify system names (e.g. HARS, STD*MIS, etc.) and system formats (e.g. ASCII, CSV, XLS, HL7v?)

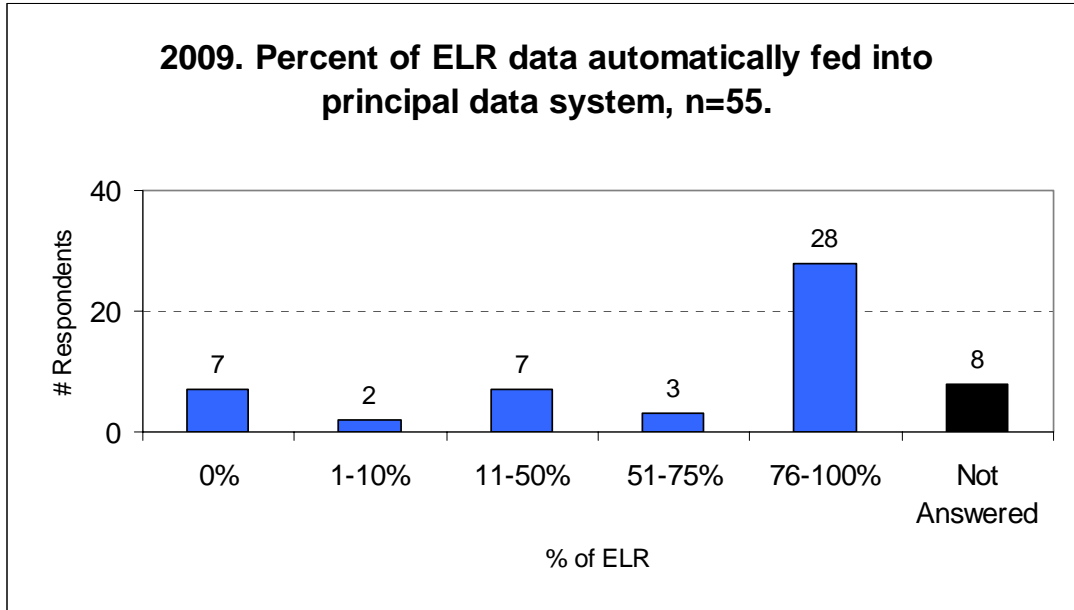
2009. System Names and Formats for Stand-Alone Systems*	
System Name	System Format
Atlas Public Health	HL7v2.3
blood lead	
Casewatch-STD	
CEDRS, Prism, TBDB	XLS
Ehars	CSV
eHARs & Lead	HL7V2.3.1 & ASCII Flat File
eHARS, STELLAR	Various
HARS	CSV
HARS	ASCII after SQL extract
HD-ELR	HL7 v2.3.1
Lead	Local ad hoc.
MAVEN	HL7
Merlin, Prism (STD), TIMS, HARS	XML, DB, CSV, HL7
NEDSS	HL7v3.2.1
NeoMetrics, STD*MIS	ASCII, ASCII
PHLIS	CSV
STD*MIS	CSV
STD*MIS	HL7 v2.3.1
STD*MIS	CSV
STD*MIS (current), Prism (future)	CSV
STD*MIS, CDSS	ASCII, XML
STD*MIS, HARS	ASCII

* Interpretive Note: These fields were free text; data are provided as they were received, without compression/condensation.

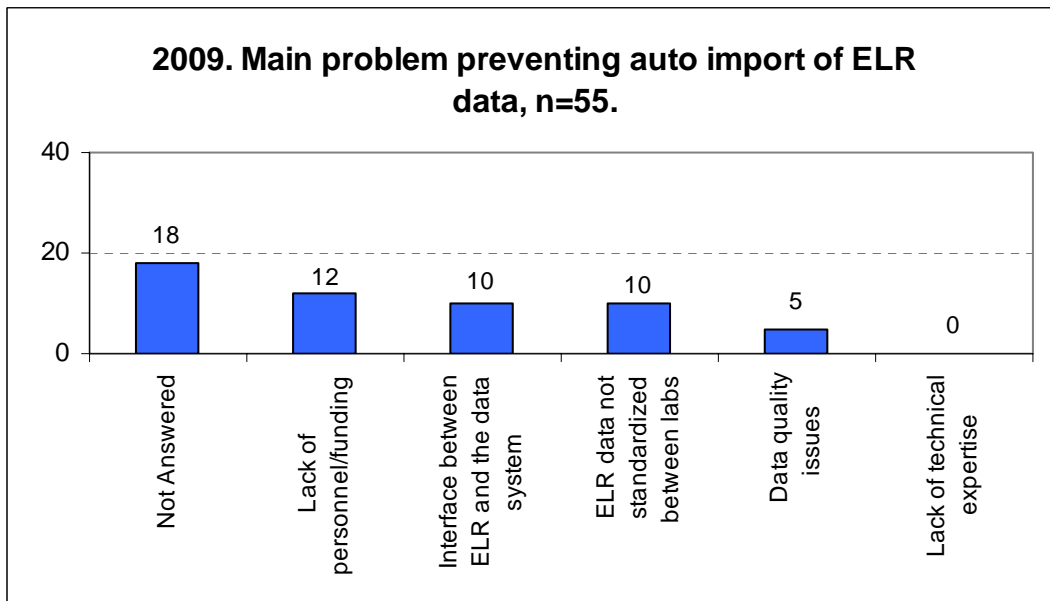
Q21. What do you think are the biggest challenges in creating such interfaces? (may select multiple options)

Biggest challenges in creating interfaces.	
Data variables not comparable	22
Difficulty parsing values out of free text blocks or blobs	23
Inability to modify commercial data systems/applications	20
Lack of person-hours available to work on interfaces	39
Lack of skills available to work on interfaces	17
Other	16
Other	Commercial LIS's do not always follow rules for HL7
	Coordination
	Cost
	Currently having outdated data systems reducing interface capabilities.
	Data systems not compatible
	Funding to hire dedicated state staff (all accomplished with higher cost, temporary contract staff so far)
	Funds to pay contractor to modify proprietary COTS and GOTS
	Lack of a single National Initiative to direct ELR Standards
	Lack of funding
	Lack of funding for Interface projects (specifically with hospitals)
	Lack of funding; Lack of partner cooperation
	Lack of internal initiative & awareness of benefit
	Non-standard implementation of standards
	To avoid costs of vendor customization we sometimes have to design derivation of additional data to embed as additional code values in the ELR before import to the integrated disease surveillance application, in order to drive rules within the integrated disease surveillance application.
	transforming/mapping messages so that other systems, eg eHars, can consume the data
vocabulary management	
We are currently implementing system to interface with	

Q22. 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.

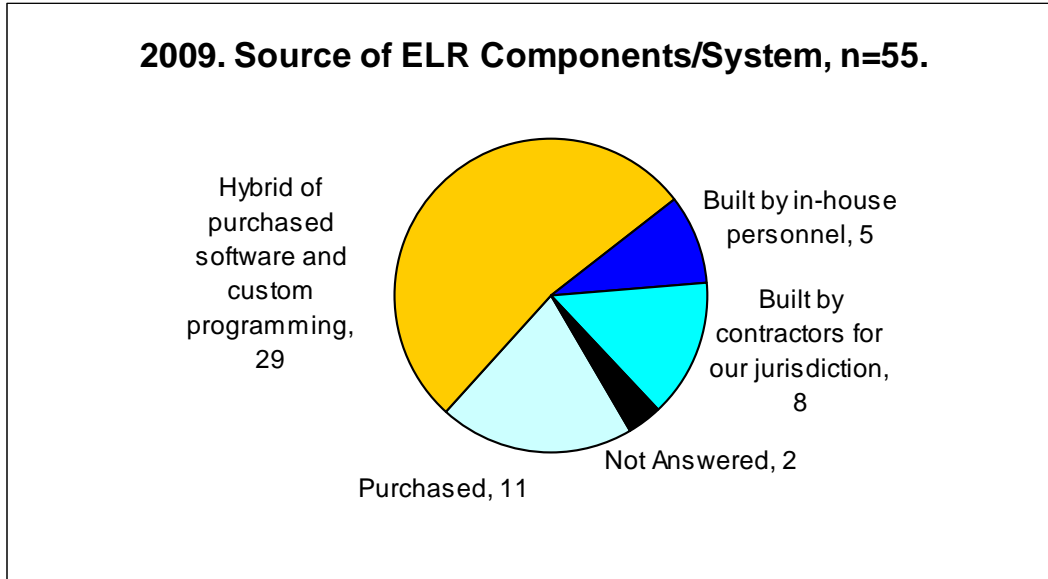


Q23. For the previous question, what is the main problem preventing you from automatically importing more of your ELR data into your surveillance/data system?

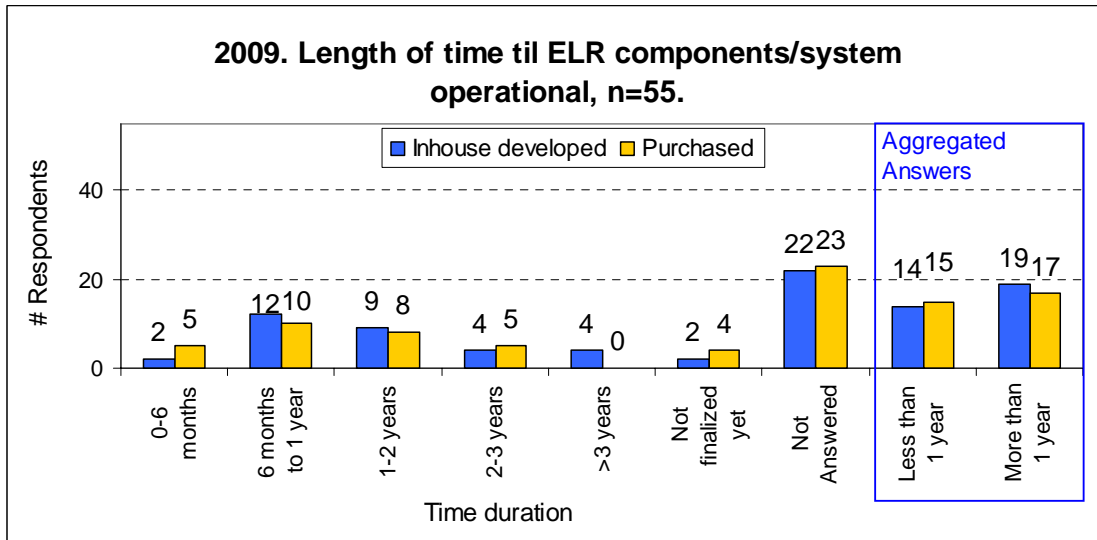


SECTION: ELR System Info

Q24. Did you build your own ELR components/system?



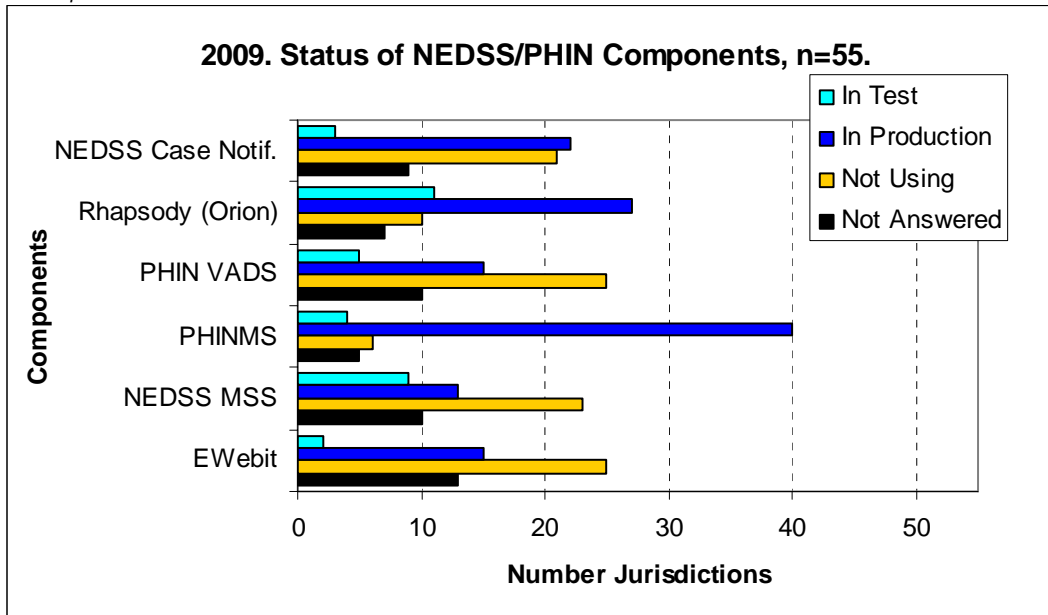
If you are utilizing in-house developed system/components, estimate how long it took to develop an operational system?
 If purchased, how long did it take to become operational after purchase was complete?



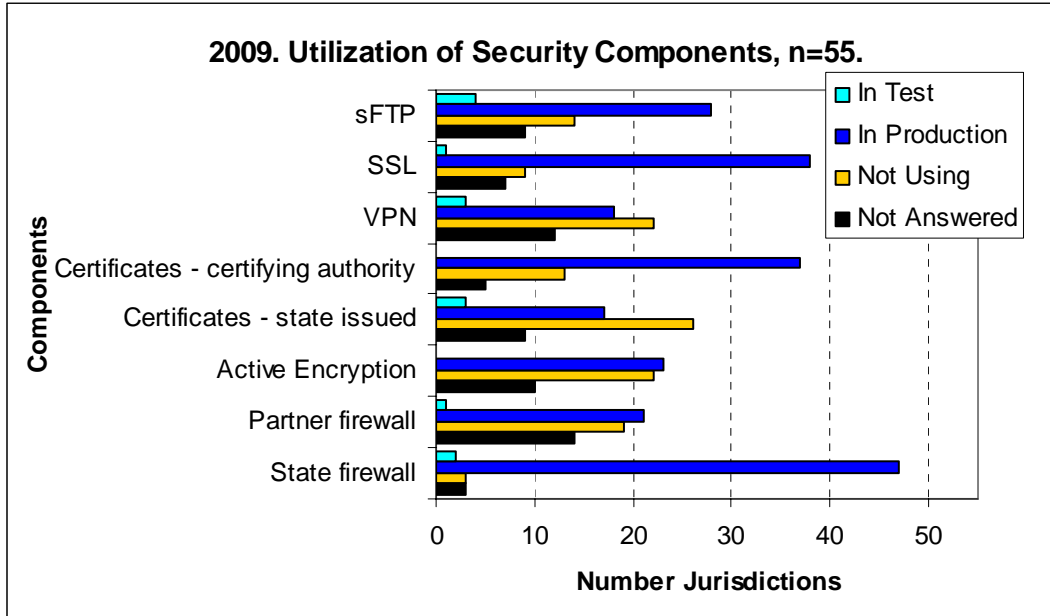
Q25. If you purchased your ELR components/system, indicate the vendor and system below. If the vendor is not included in the list, select 'Other' for both vendor and system. If the vendor is included but you purchased a different system, select the vendor and choose 'Other' under system. Note: If you are working with more than one vendor and system (for example, both Orion Rhapsody and IBM WebSphere), utilize the "secondary" system option. If you are working with >2, then just choose the top 2.

2009. Vendor and System of ELR Components/System(s).					
Vendor	System		Primary	System	
	Primary	Secondary		Primary	Secondary
Atlas	2	0	BizTalk	2	1
CDC	10	4	Cloverleaf	1	0
Consilience	2	3	ECMap, ECGateway	1	0
Collaborative Software Initiative	1	0	eLink	2	1
DiagnosisONE	1	0	LabWorks	0	0
Eclipsys	2	1	Maven	2	3
IBM	1	2	NBS/PHIN MS/MSS	11	4
Information Technology International	0	0	NeoIntegrate	0	0
Microsoft	1	1	PHS3	0	0
NeoTools	0	0	Rhapsody	15	11
Orion	14	12	WebSphere IIS DataStage Enterprise	1	1
Quovadx	1	0	Other	7	4
STC	1	0			
Sybase	1	0			
Other	7	5			

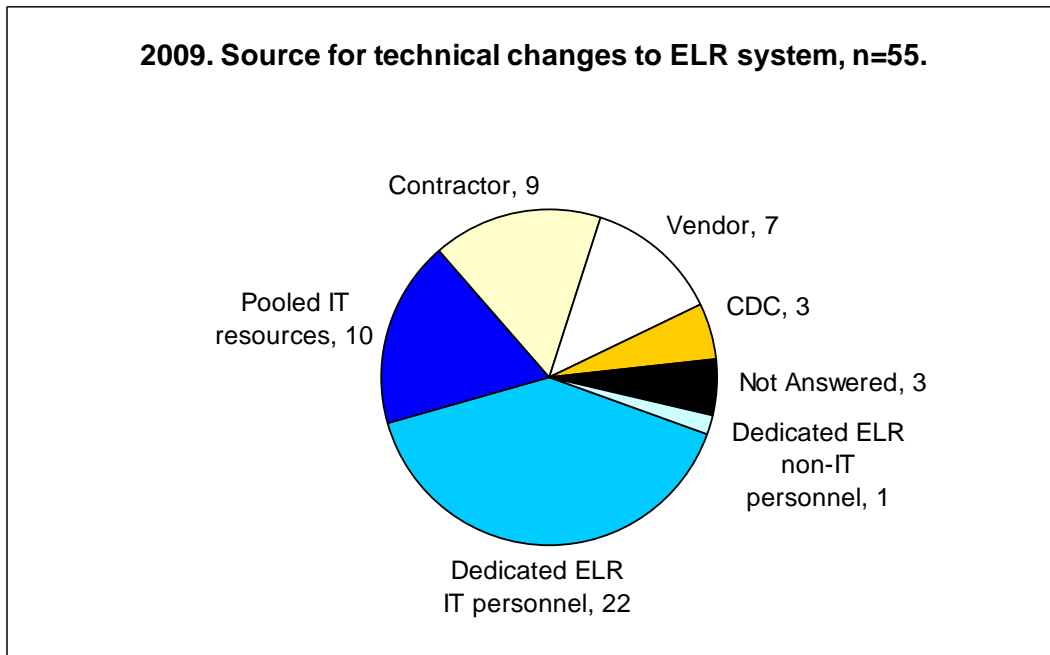
Q26. Which NEDSS/PHIN components are you currently utilizing in your ELR system? For each, indicate Production or Test status.



Q27. Which of these security components are you currently utilizing in your ELR system? For each, indicate Production or Test status.



Q28. For both Production and Test systems: In general, if you require technical changes made to your ELR system, from whom do you request this?



SECTION: ELR Formats

Q29. 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 it up)

Available Options

Versions

- 2.2
- 2.3.z
- 2.3.1
- 2.4
- 2.5
- 2.5.1

Message Types

- ORU
- OUL
- ADT
- ORM

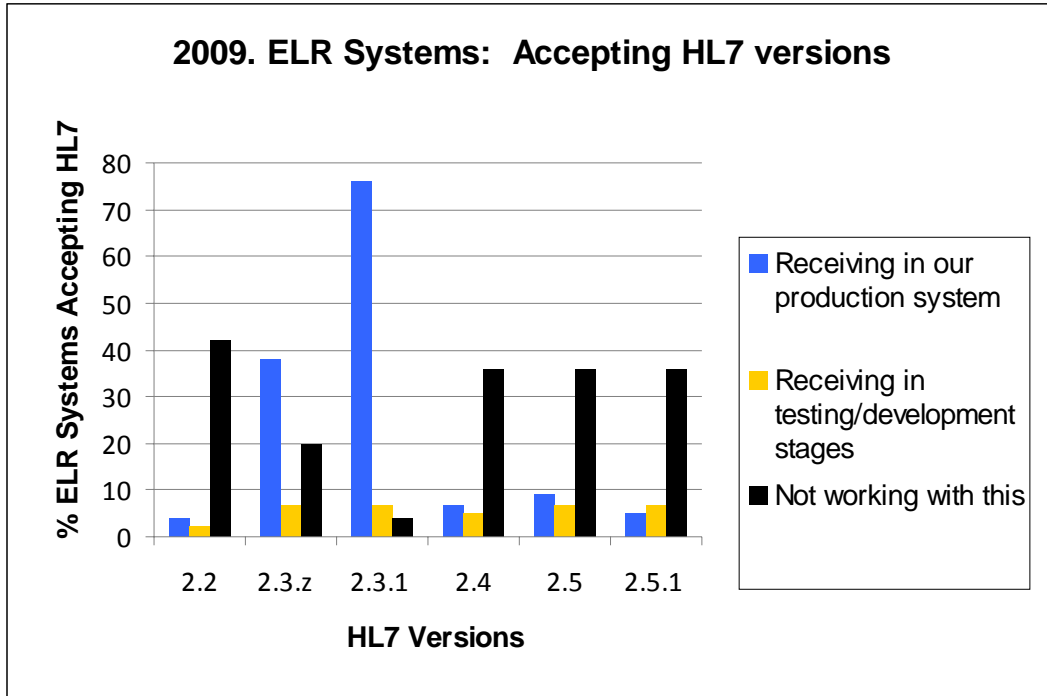
Documents

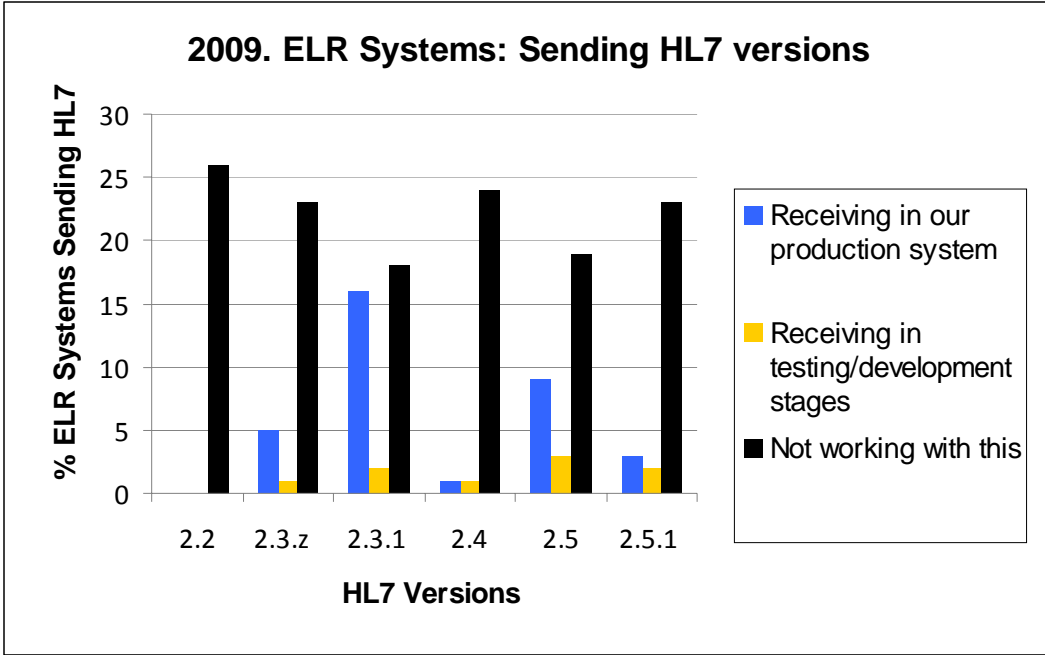
- CDA R1
- CDA R2

Note: Lisa Ferland (CSTE) assisted in the data analysis for questions 29 and 30, her contribution is gratefully acknowledged.

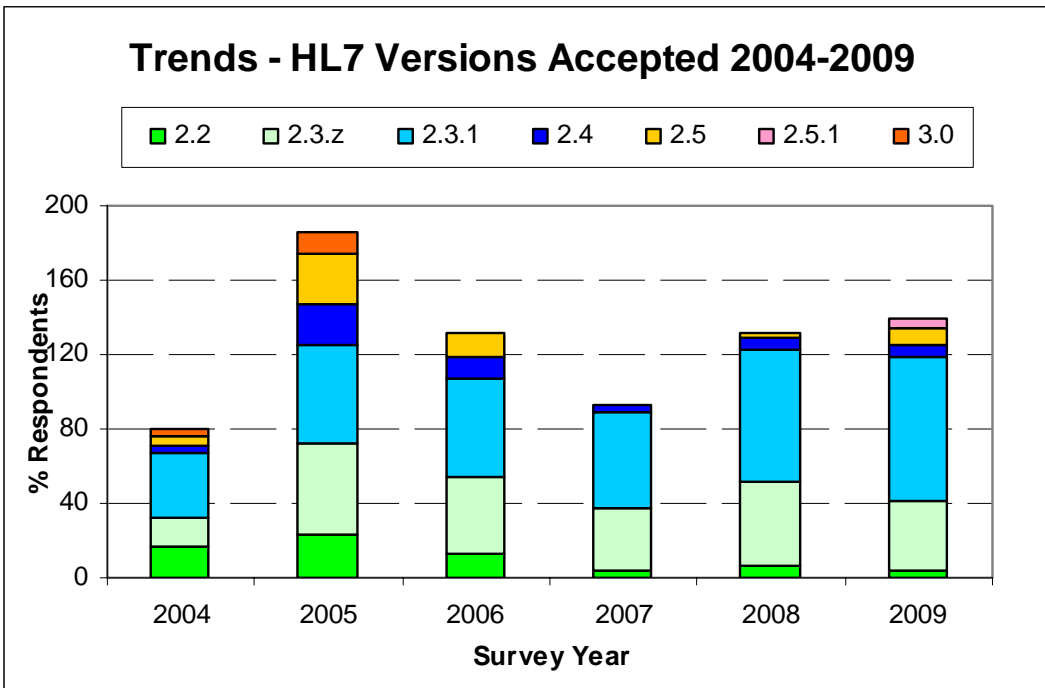
2009. HL7 Versions	Accept					
	2.2 No. (%)	2.3.z No. (%)	2.3.1 No. (%)	2.4 No. (%)	2.5 No. (%)	2.5.1 No. (%)
Receiving in our production system	2 (4)	21 (38)	42 (76)	4 (7)	5 (9)	3 (5)
Receiving in testing/development stages	1 (2)	4 (7)	4 (7)	3 (5)	4 (7)	4 (7)
Not working with this	23 (42)	11 (20)	2 (4)	20 (36)	20 (36)	20 (36)
<i>Not answered</i>	29 (53)	19 (35)	7 (13)	28 (51)	26 (47)	28 (51)
Message Types						
	ORU No. (%)	OUL No. (%)	ADT No. (%)	ORM No. (%)	CDA R1 No. (%)	CDA R2 No. (%)
Receiving in our production system	41 (75)	2 (4)	9 (16)	6 (11)	0	0
Receiving in testing/development stages	4 (7)	2 (4)	2 (4)	2 (4)	2 (4)	1 (2)
Not working with this	2 (4)	22 (40)	19 (35)	20 (36)	25 (45)	25 (45)
<i>Not answered</i>	7 (13)	28 (51)	25 (45)	27 (49)	28 (51)	29 (53)

2009. HL7 Versions		Send					
		2.2 No. (%)	2.3.z No. (%)	2.3.1 No. (%)	2.4 No. (%)	2.5 No. (%)	2.5.1 No. (%)
Receiving in our production system		0	5 (9)	16 (29)	1 (2)	9 (16)	3 (5)
Receiving in testing/development stages		0	1 (2)	2 (4)	1 (2)	3 (5)	2 (4)
Not working with this		26 (47)	23 (42)	18 (33)	24 (44)	19 (35)	23 (42)
<i>Not answered</i>		<i>29 (53)</i>	<i>26 (47)</i>	<i>19 (35)</i>	<i>29 (53)</i>	<i>24 (44)</i>	<i>27 (49)</i>
Message Types							
		ORU No. (%)	OUL No. (%)	ADT No. (%)	ORM No. (%)	CDA R1 No. (%)	CDA R2 No. (%)
Receiving in our production system		22 (40)	3 (5)	4 (7)	3 (5)	0	0
Receiving in testing/development stages		3 (5)	3 (5)	1 (2)	0	1 (2)	1 (2)
Not working with this		14 (25)	22 (40)	22 (40)	23 (42)	25 (45)	25 (45)
<i>Not answered</i>		<i>16 (29)</i>	<i>27 (49)</i>	<i>28 (51)</i>	<i>29 (53)</i>	<i>29 (53)</i>	<i>29 (53)</i>

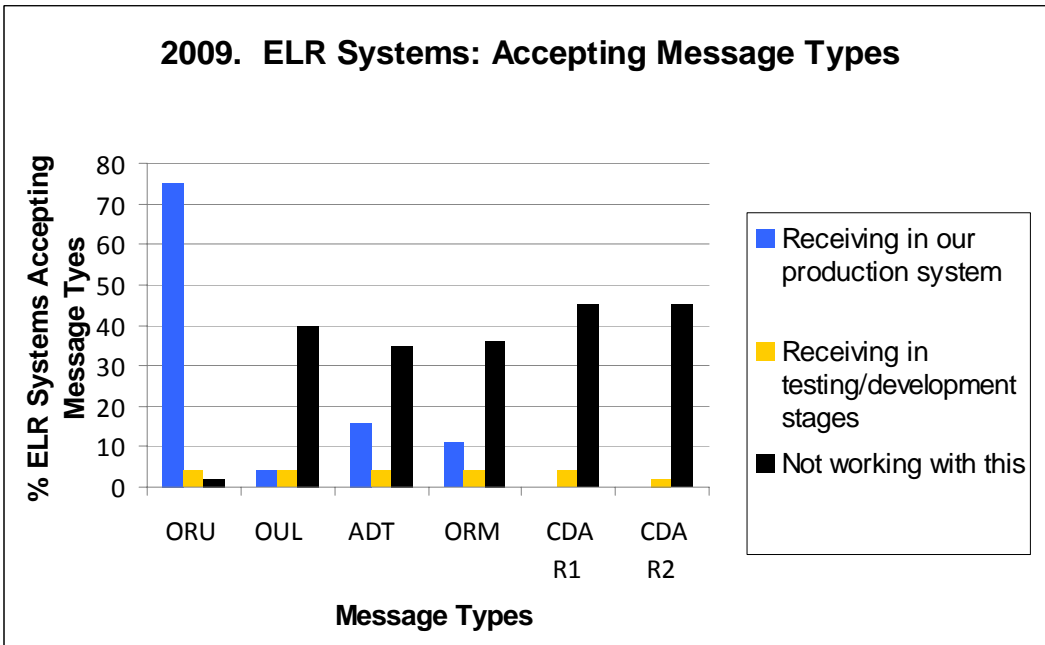
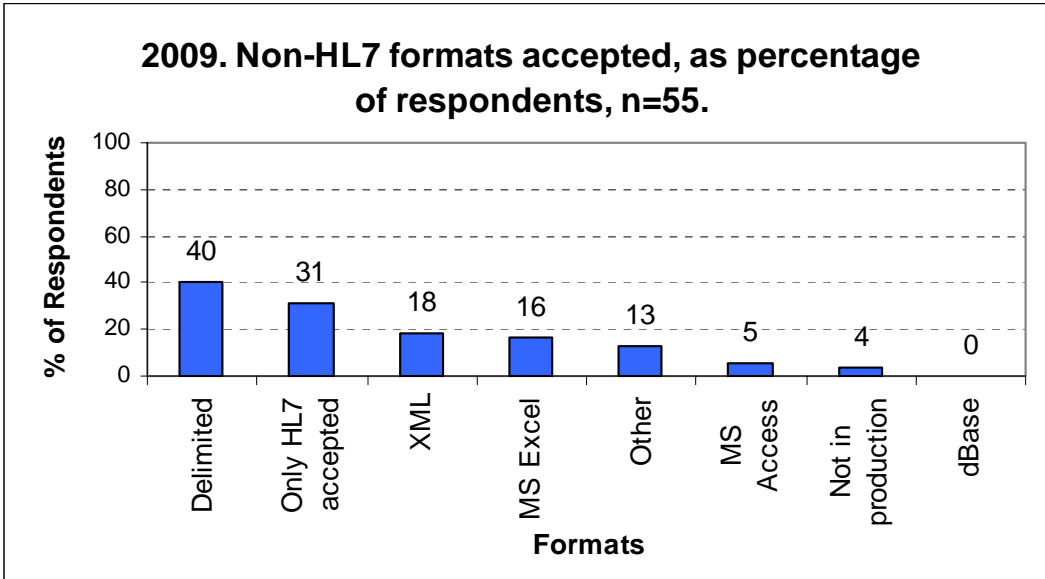


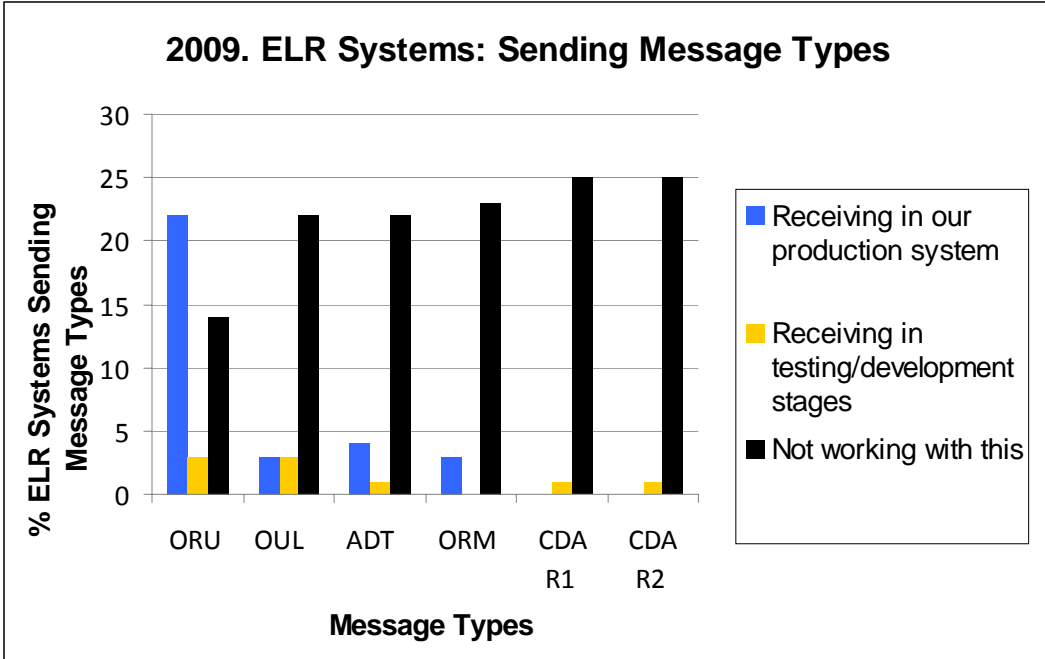


Historic Analysis: HL7 Versions Accepted

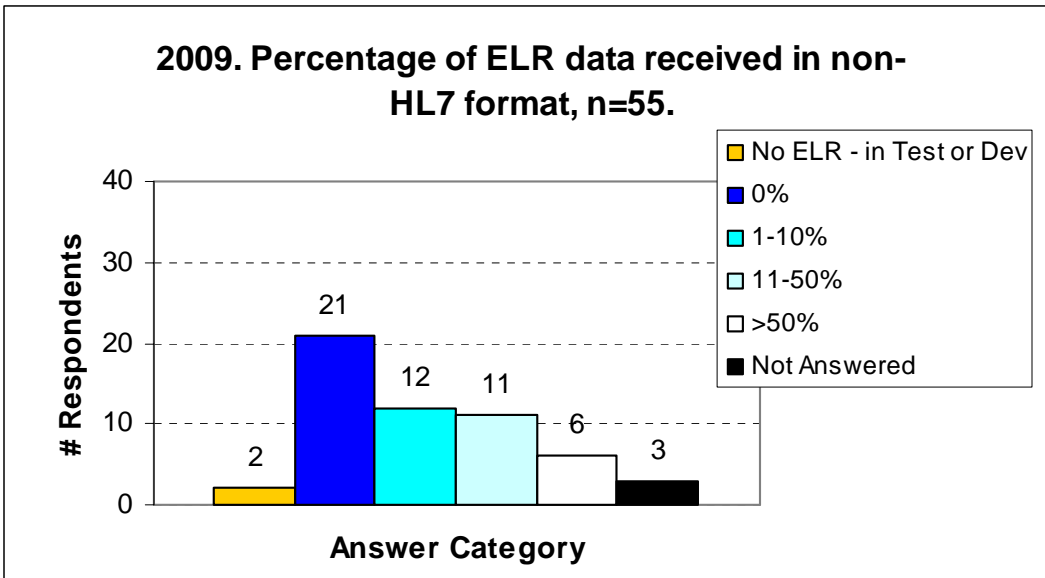


Q30. Which of the following non-HL7 formats does your ELR system currently accept? (Only indicate those currently accepted, not formats that you COULD accept if you were to spend some time setting it up)

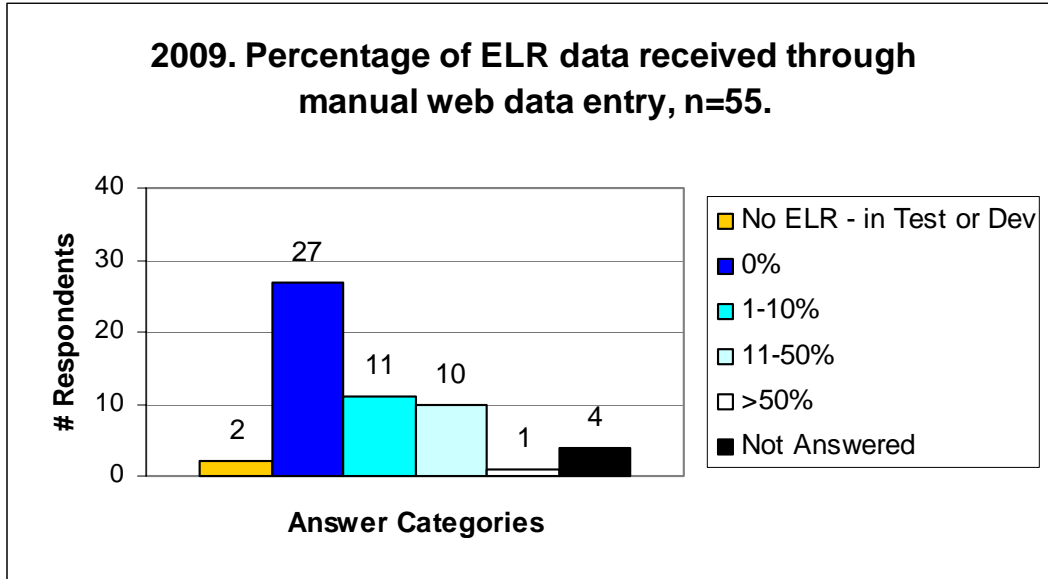




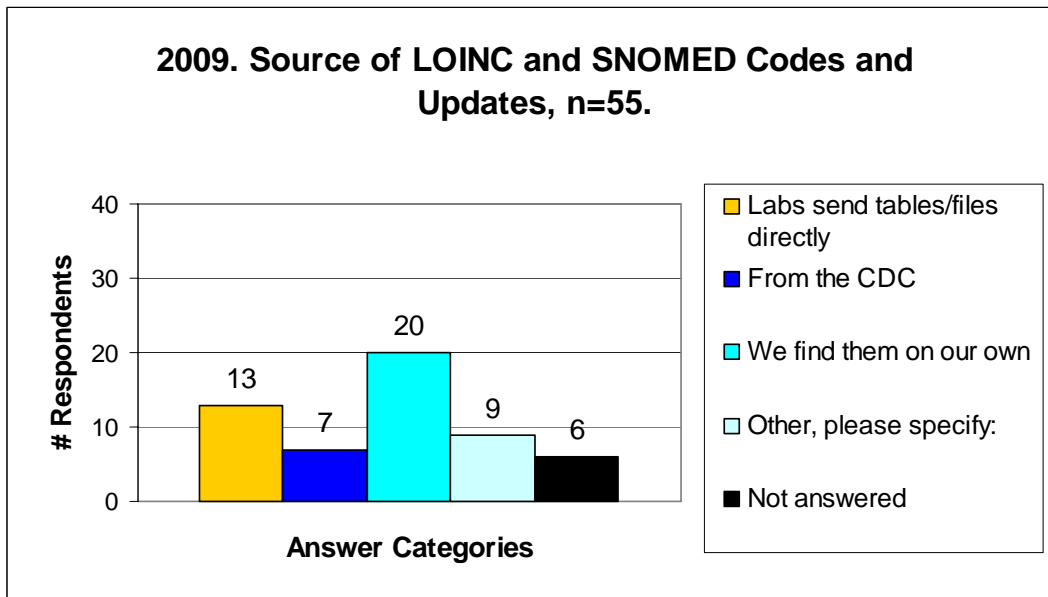
Q31. What percentage of the lab reports you currently receive are non-HL7 format?



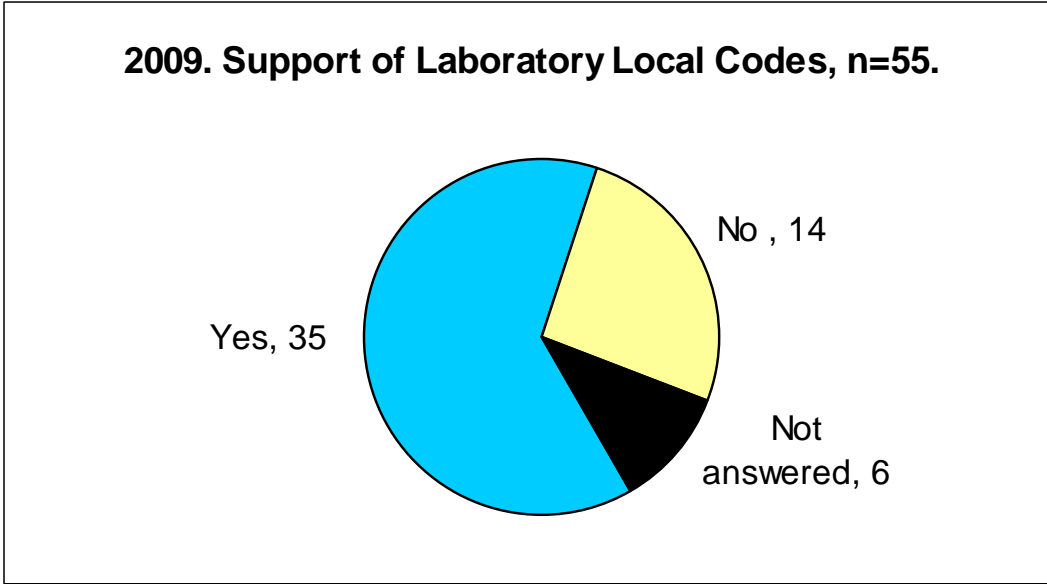
Q32. What percentage of the lab reports you currently receive are transmitted to you through manual Web data entry?



Q33. How do you receive your LOINC and SNOMED codes/information and updates?

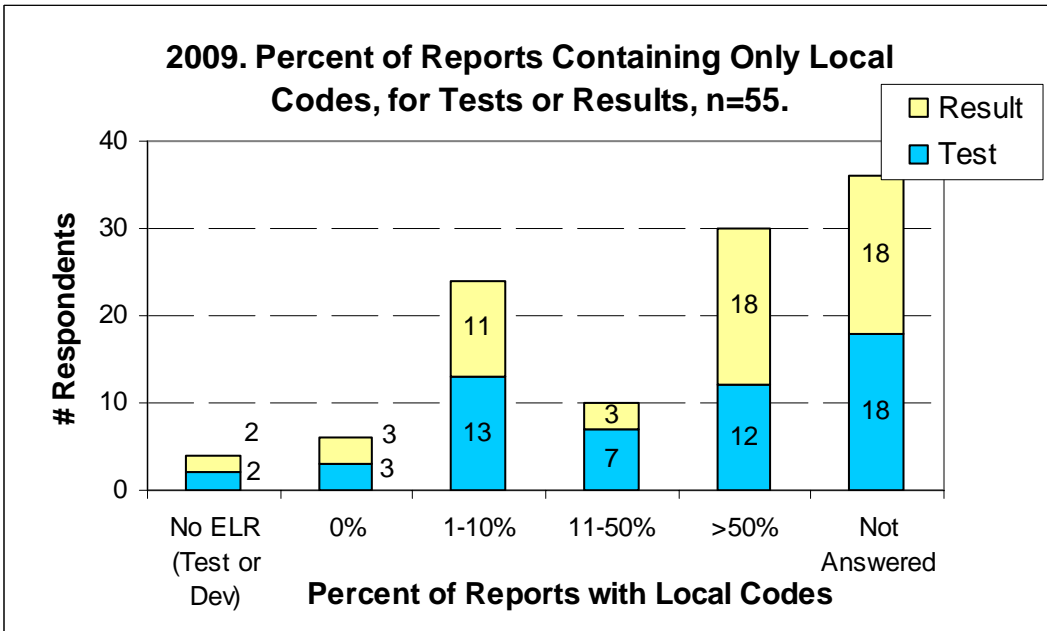


Q34. Do you support lab local codes (i.e., not LN or SNM)?



If yes, what percent of your reports contain ONLY local codes for:

- a) Tests
- b) Results



SECTION: LIS/LIMS

Q35. Which of these major 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.

2009. Systems Indicated as Sending Reportable Diseases to ELR, Format of Data.		
System	HL7	Non-HL7
Cerner Corp: Cerner Millennium PathNet	10	0
Cerner Corp: Cerner PathNet HNA Classic	7	0
CPSI: CPSI System	1	1
Epic: EpicLab LIS	6	2
GE Healthcare: Centricity Laboratory	1	0
Labware: Labware LIMS	5	0
LITS+ or derivative/enhancement	4	1
McKesson: Horizon Lab	3	2
Medical Information Technology (Meditech): Meditech LIS - client/server	3	2
Medical Information Technology (Meditech): Meditech LIS - 6.0	2	2
Medical Information Technology (Meditech): Meditech LIS - Magic LIS	5	2
Sunquest Healthcare Systems: Sunquest Commercial Laboratory	12	0
Multidata Computer Systems: MultiTech LIS	1	2
Orchard Software: Orchard Harvest LIS	3	0
Psyche Systems Corp: LabWeb	1	2
QuadraMed: Affinity Laboratory	2	0
SCC Soft Computer: SoftLab	7	2
Schuyler House: SchuyLab	1	0
Siemens Medical Solution: Novius Lab	2	2
M/Mgmt: M/Lab	3	1
Starlims Corp: Starlims	16	3
Sunquest Healthcare Systems: Sunquest Laboratory	13	0

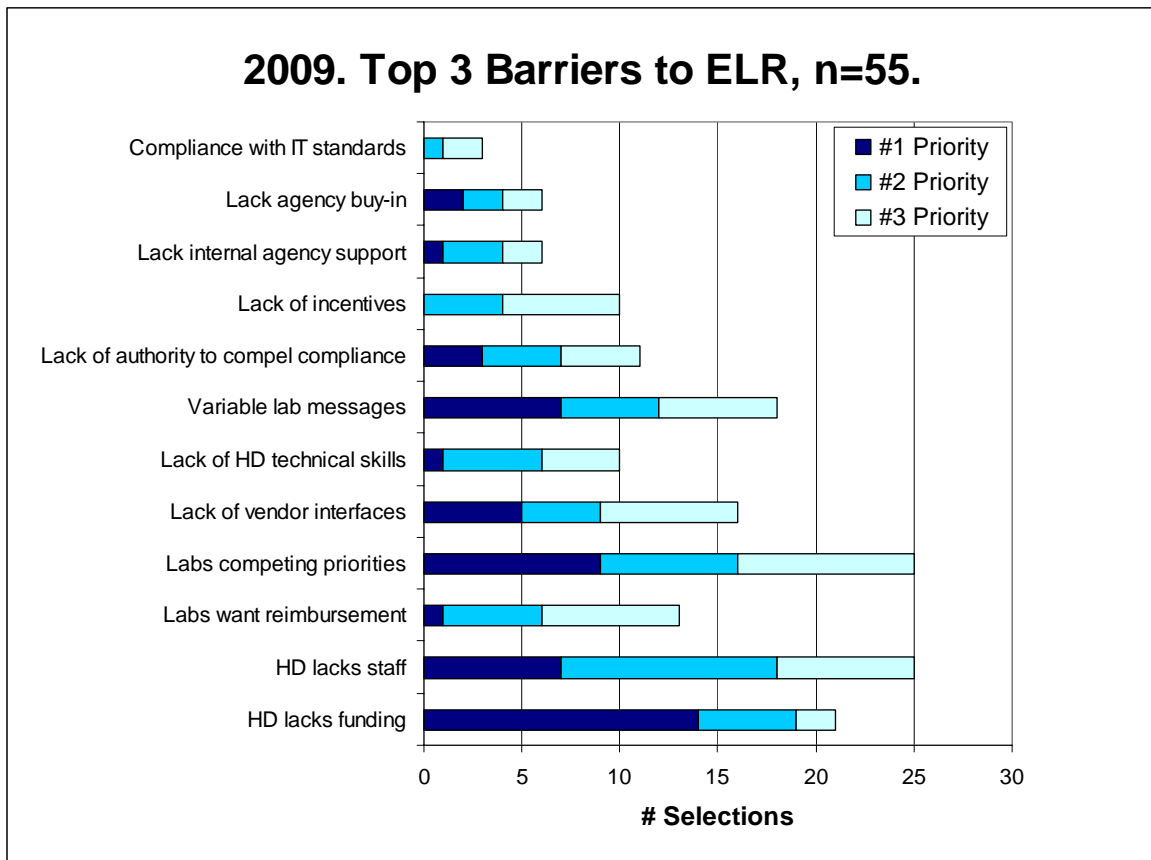
2009. Systems Not Indicated as Sending Reportable Diseases to ELR.		
System	HL7	Non-HL7
Antek: LabDag	0	0
Aspyra: CyberLab	0	0
Clinical Information Systems: CisLab	0	0
Clinical Software Solutions: CSS Win	0	0
ClinLab: ClinLab LIS	0	0
Comp Pro Med: Polytech LIS	0	0
Computer Service & Support: CLS-2000	0	0
Custom Software Systems: StarLab	0	0
eTeleNext: eTeleNext LIS	0	0
Fletcher-Flora Health Care Systems: Fflex eSuite LIS	0	0
Fletcher-Flora Health Care Systems: LabPak	0	0
Healthvision: TDSynergy	0	0
Hex Laboratory Systems: Lab/Hex	0	0
Impac Medical Systems: IntelliLab	0	0
LabSoft: LabNet	0	0
Medcom Information Systems: Medcom Lab Manager	0	0
MediSolution: MediLab	0	0
NetLims: AutoLims	0	0
Omnitech: OmniLab	0	0
Opus Healthcare Solutions: OpusLab	0	0
Quality Software Systems: LabHealth	0	0
Seacoast Laboratory Data Systems: SurroundLab Plus	0	0

SECTION: Opinions

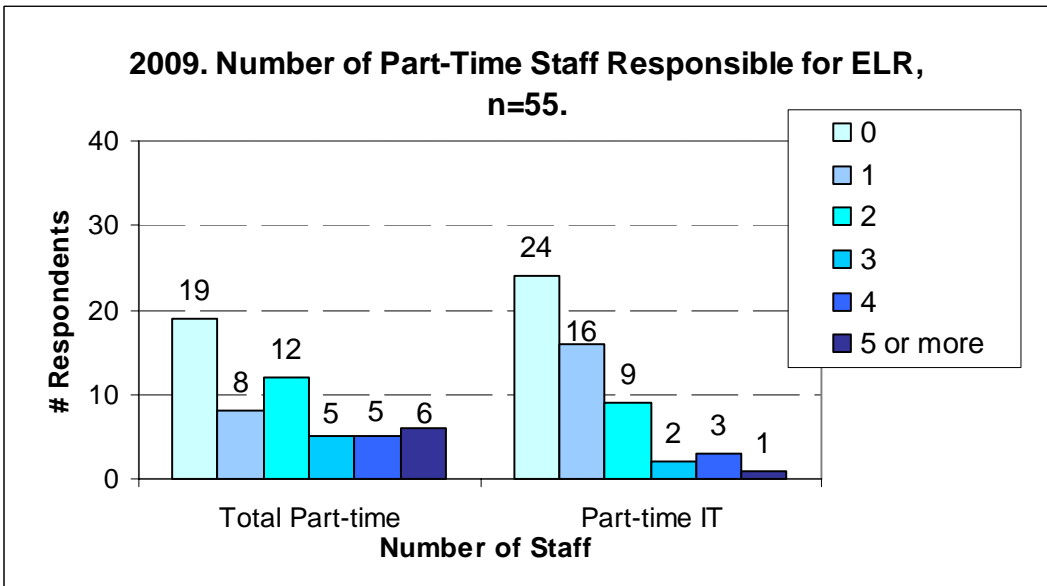
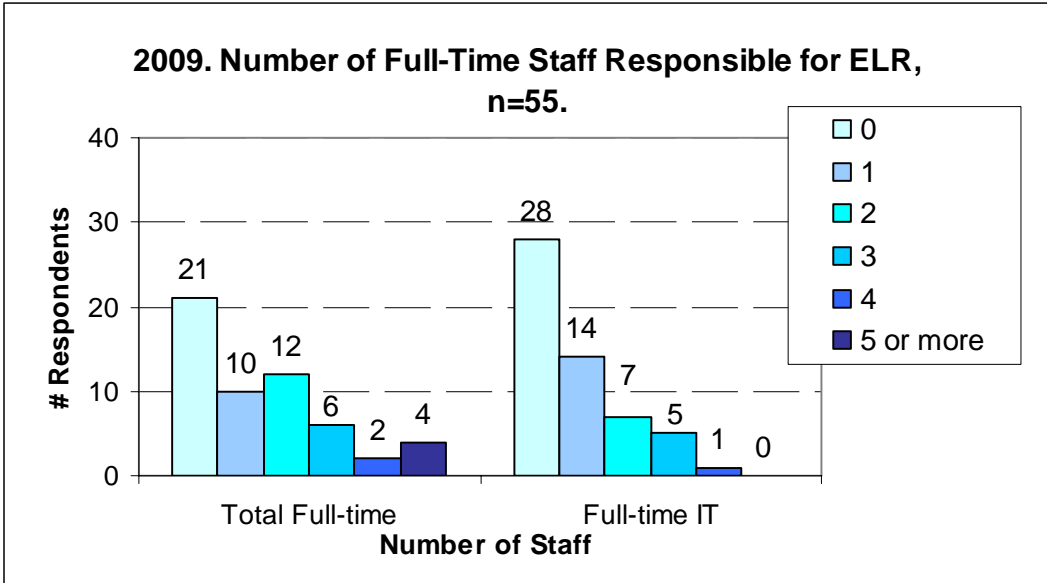
Q36. What are the three most important barriers to full implementation of ELR in your jurisdiction? Please rank three options from 1 (most important) to 3 (less important).

Available Options

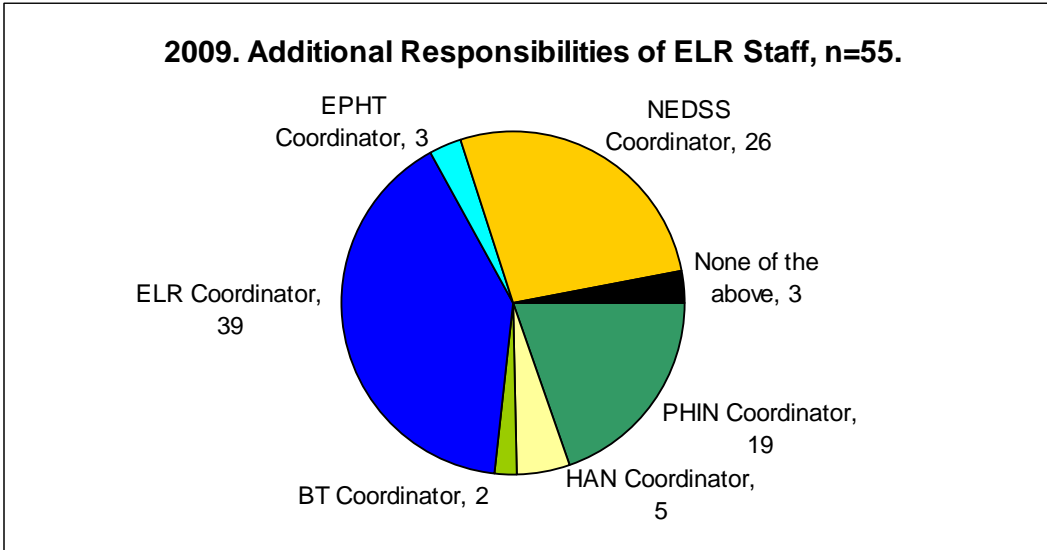
- Not enough money at health department
- Not enough staff at health department
- Hospitals and other Labs want reimbursement for their start-up costs
- Laboratories have other/competing IT implementation priorities
- Laboratory Information System vendors have not developed appropriate interface modules
- 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, please specify.



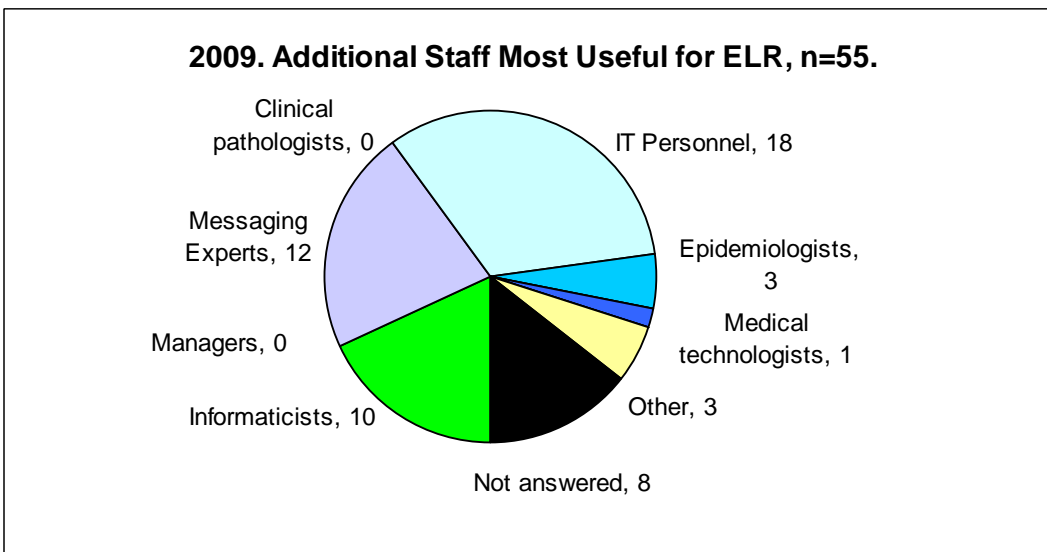
Q37. How many staff (government or contractors) are responsible for ELR in your jurisdiction?



Q38. Do any of the staff from the previous question also have any of the following responsibilities? (may check multiple options)



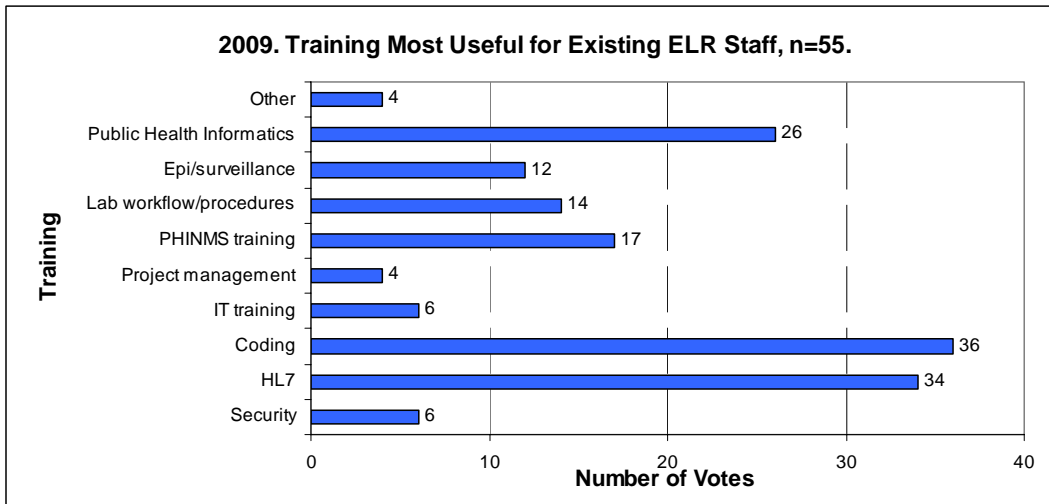
Q39. Addition of what type of staff would be most useful for your state in implementing or maintaining ELR?



Q40. What kind of training for existing staff would be most helpful in implementing or maintaining ELR? (may choose multiple options)

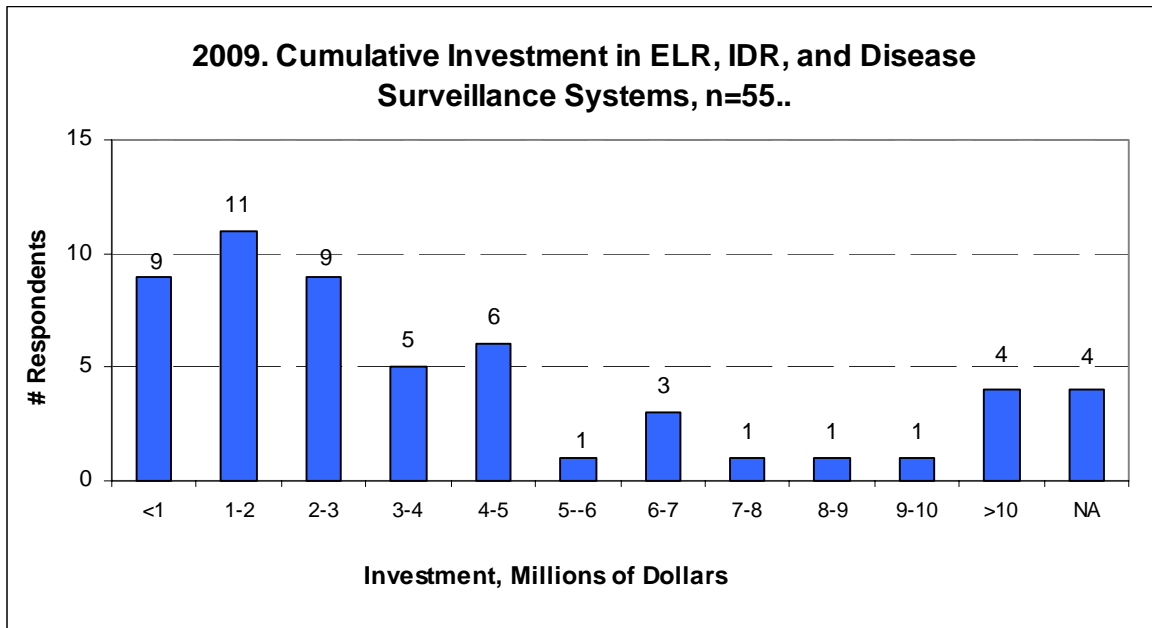
Available Options

- Security
- HL7
- Coding (as in LOINC or SNOMED)
- General IT training
- Project management
- PHINMS training
- Laboratory workflow/procedures
- Cross-training in epi/surveillance
- Public Health Informatics
- Other, please specify

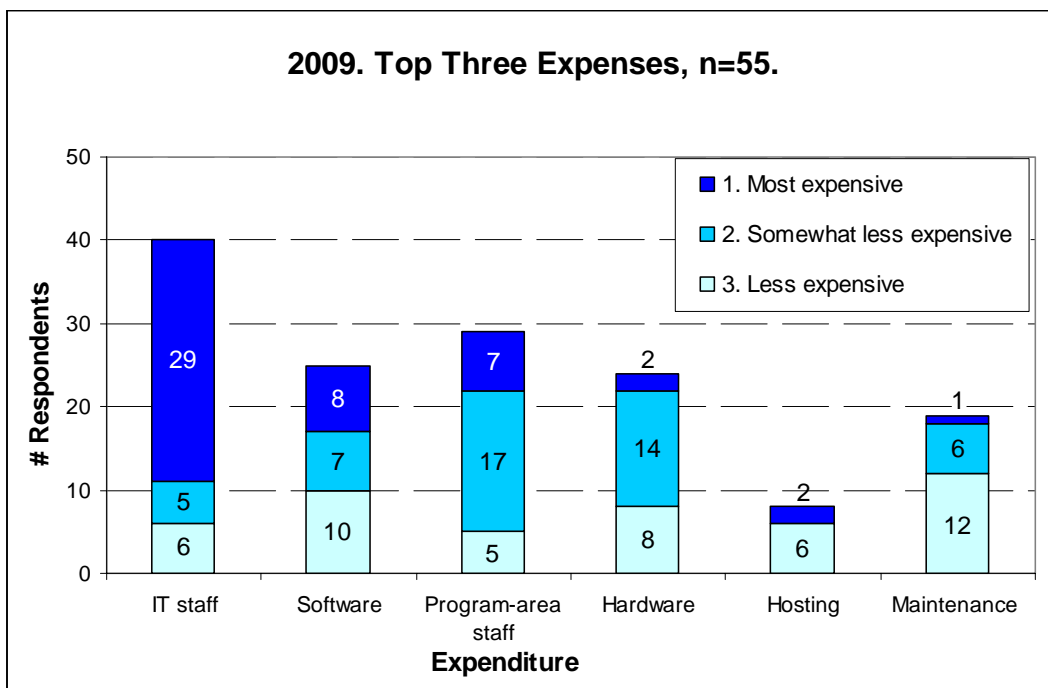


Q41. What is the approximate cumulative amount your state has invested 2000-present in meeting state and federal requirements/standards for ELR, IDR, and web-based disease surveillance systems*? Inclusive of both program-area and IT staffing, hardware, software, maintenance, hosting, etc.

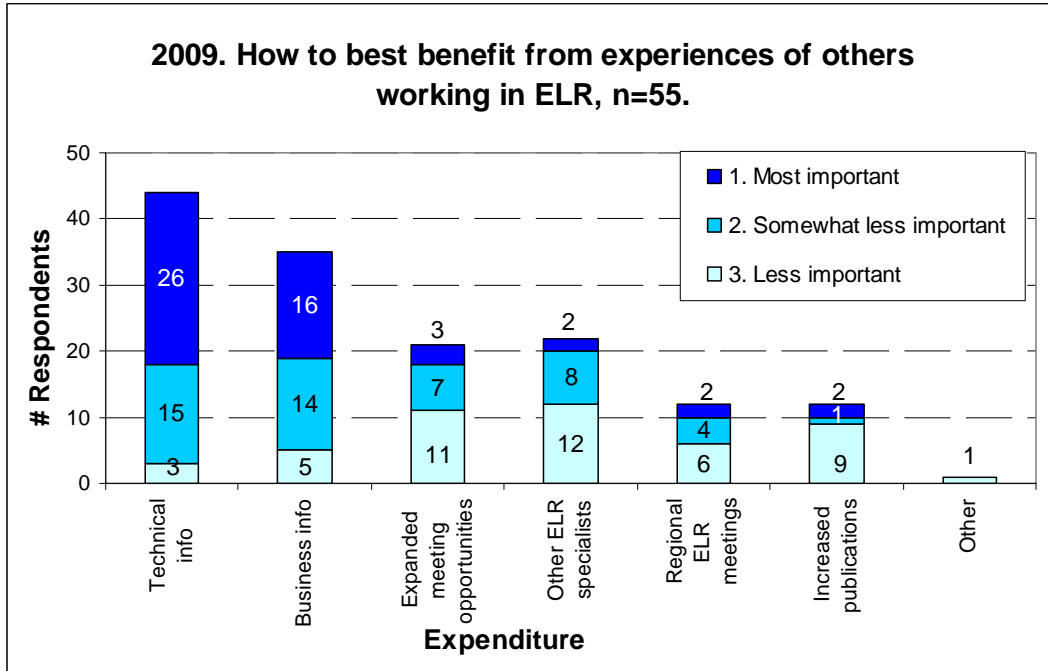
* Include Blood Lead, STD, TB, HIV where appropriate



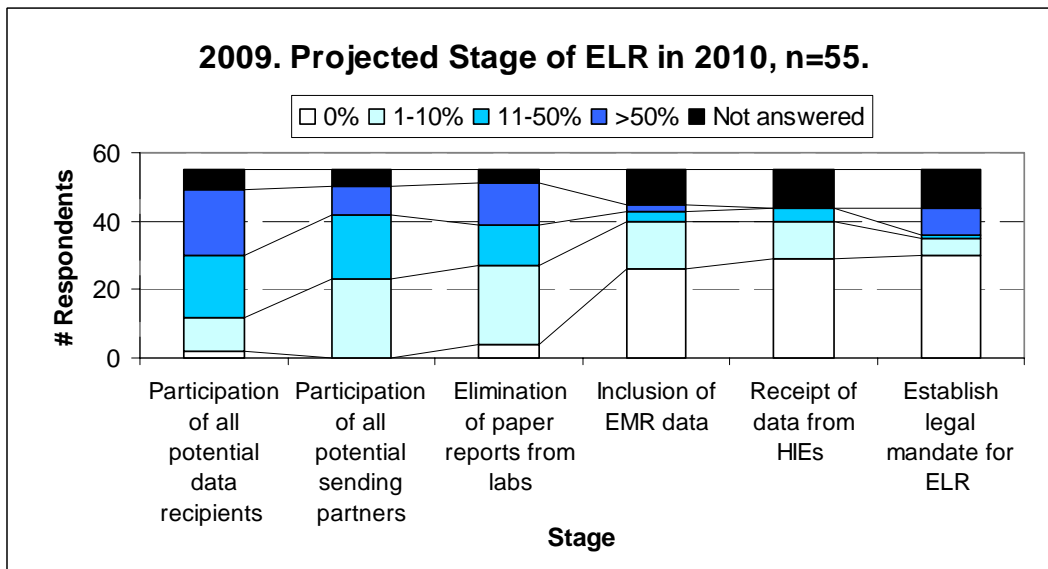
Q42. Of the amount identified in the previous question, which three of the following do you feel constitute the majority of expenditures?

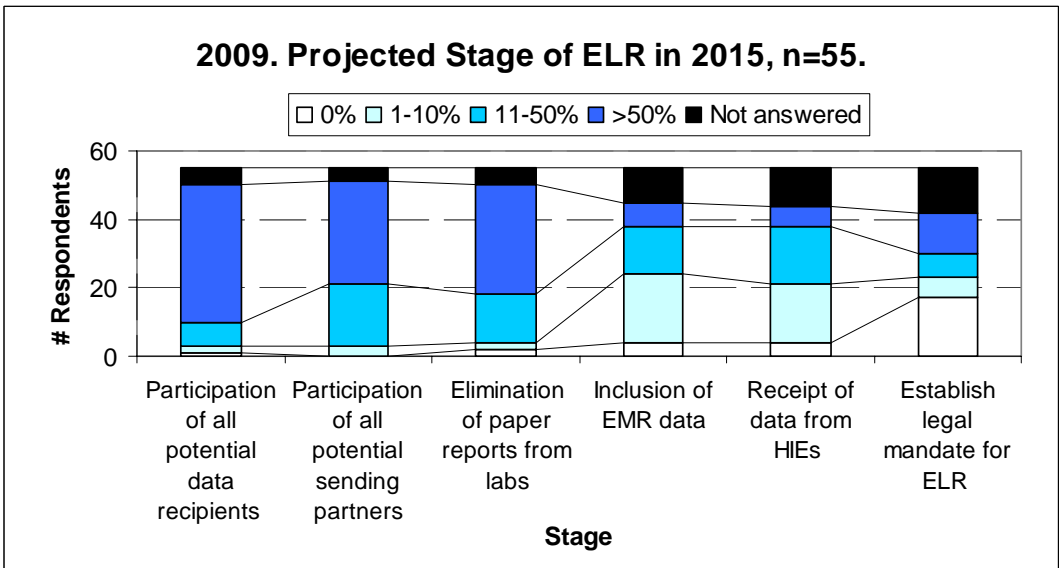
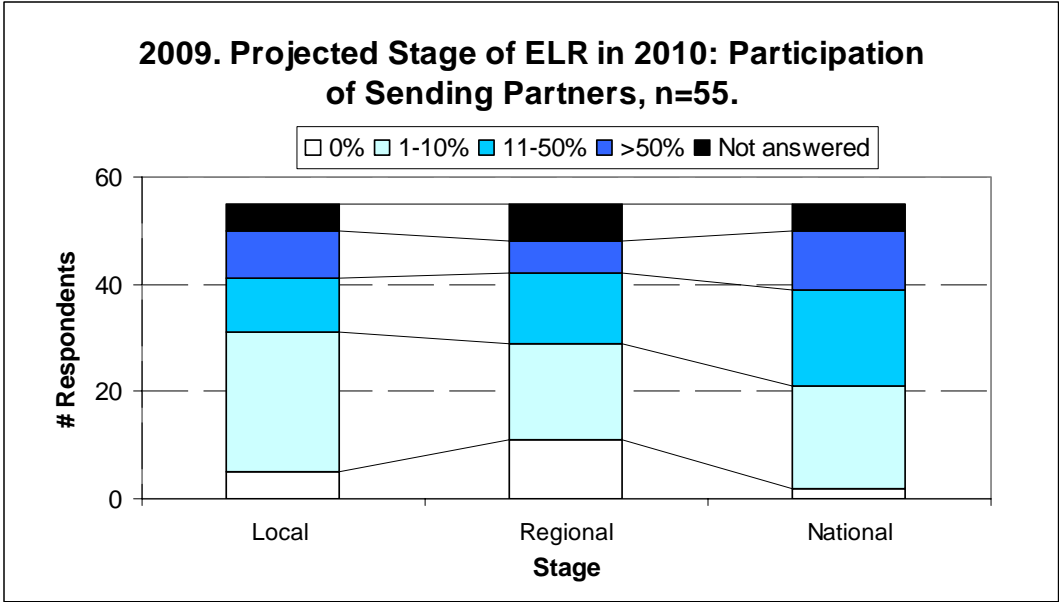


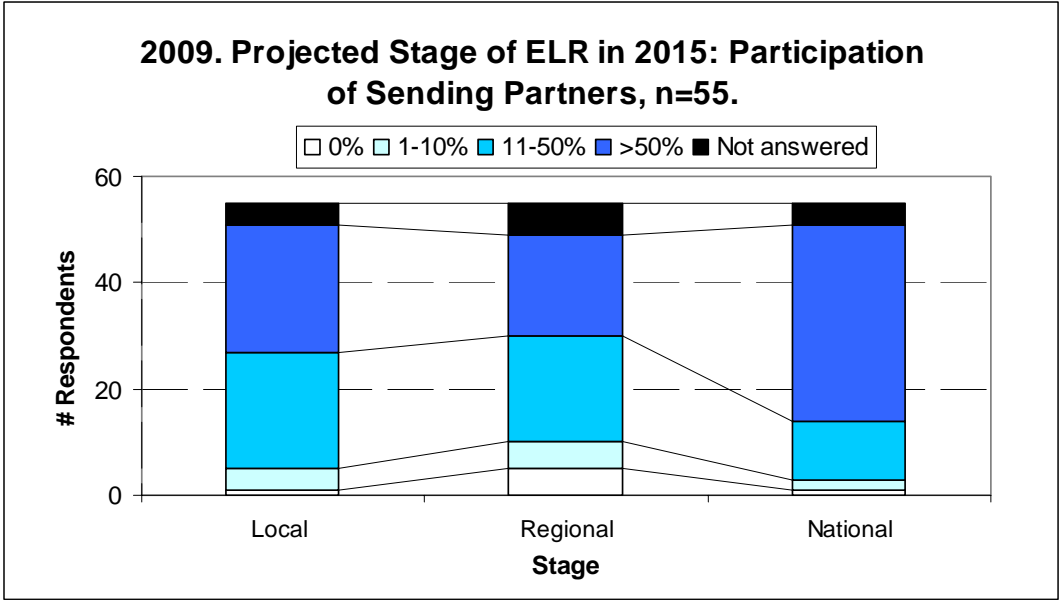
Q43. How could you best benefit from the experiences of those already working in ELR?



Q44. What do you realistically expect your stage of ELR to be in 2010 and 2015. (realistically, not what you'd hope or like to have)

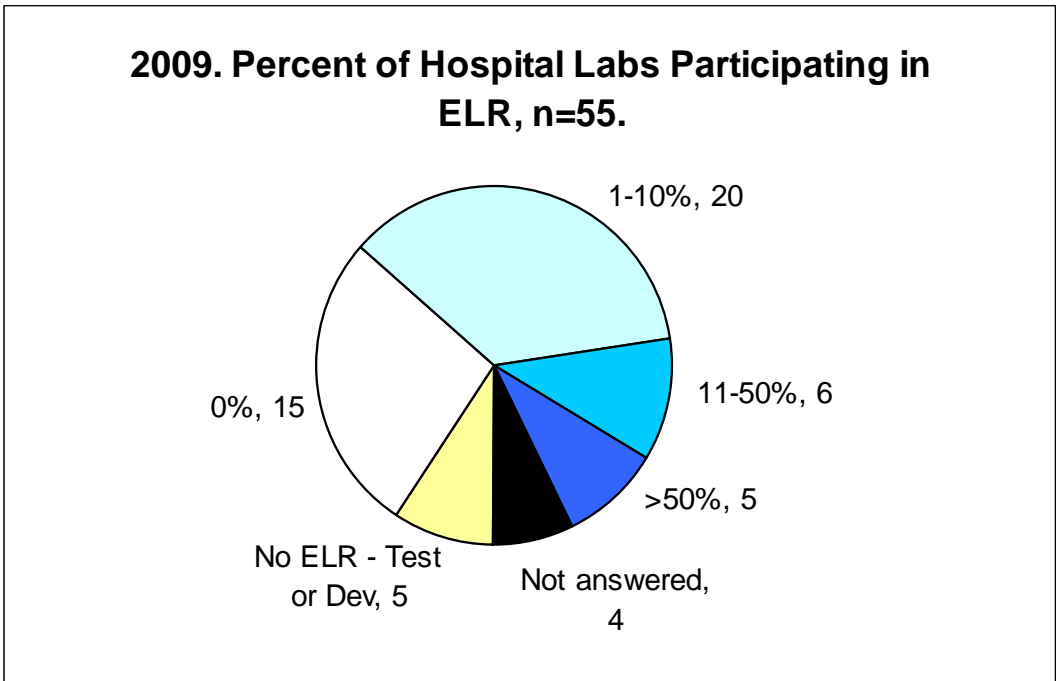




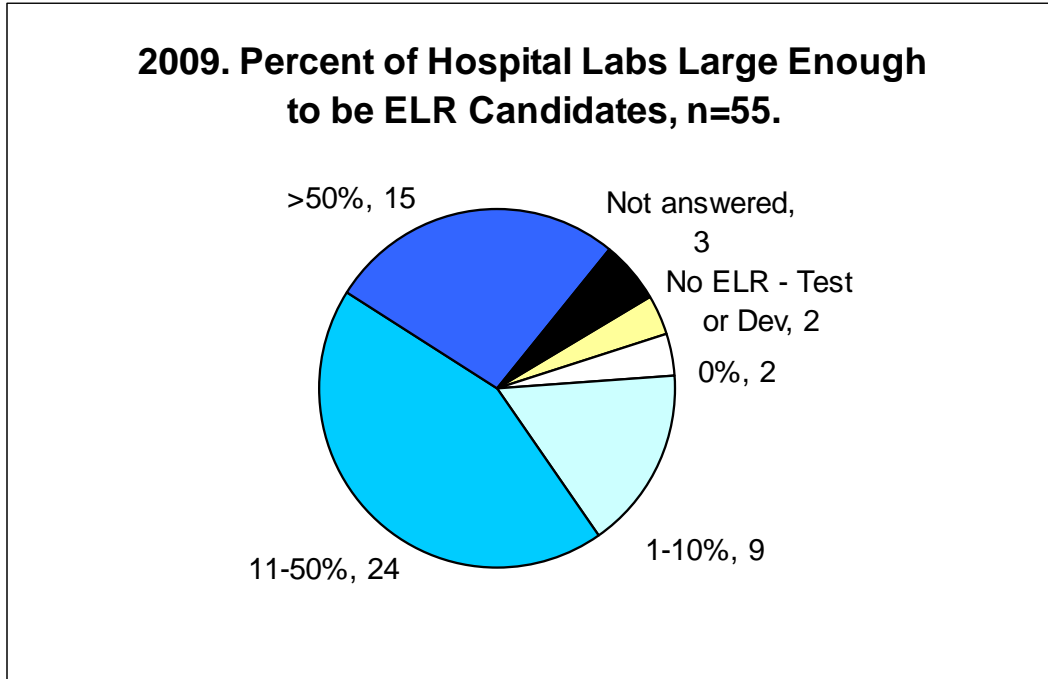


The questions below address issues of hospitals and hospital data.

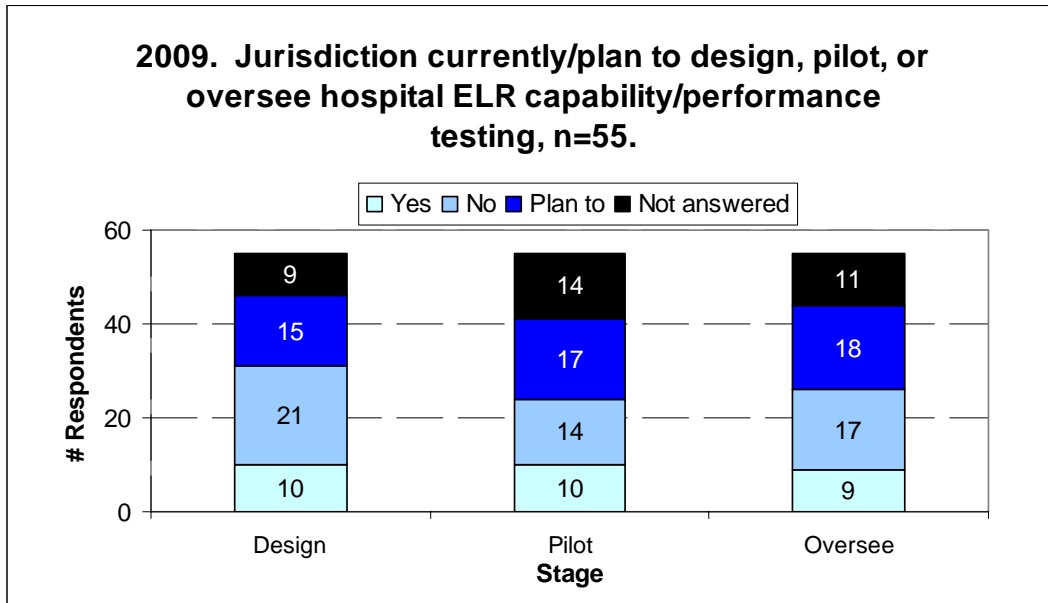
Q46. What percentage of hospital labs in your jurisdiction participate in ELR?



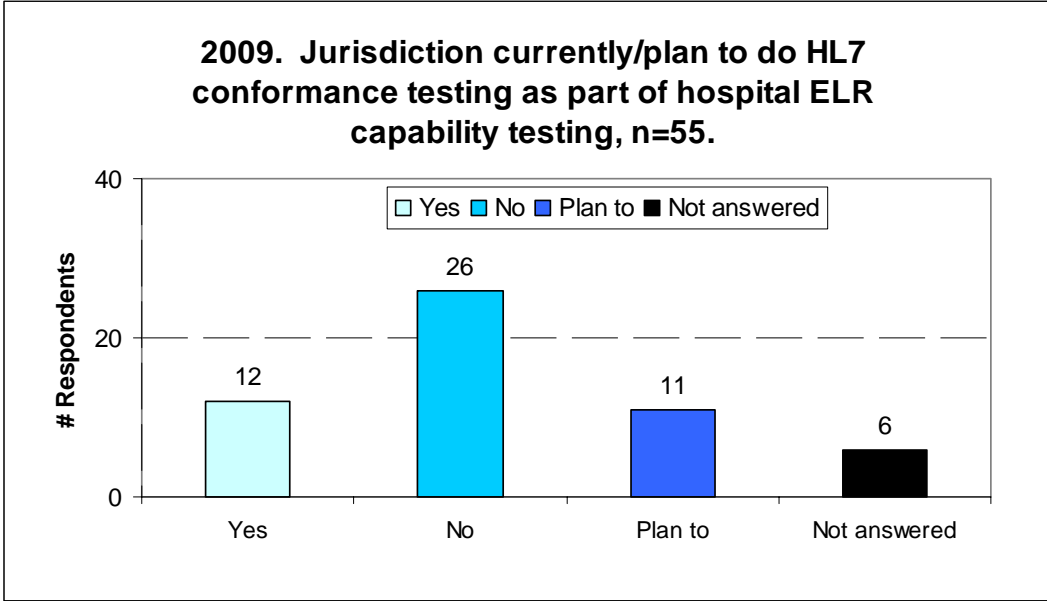
Q47. What percentage of hospital labs in your jurisdiction are large enough to reasonably be considered candidates for ELR?



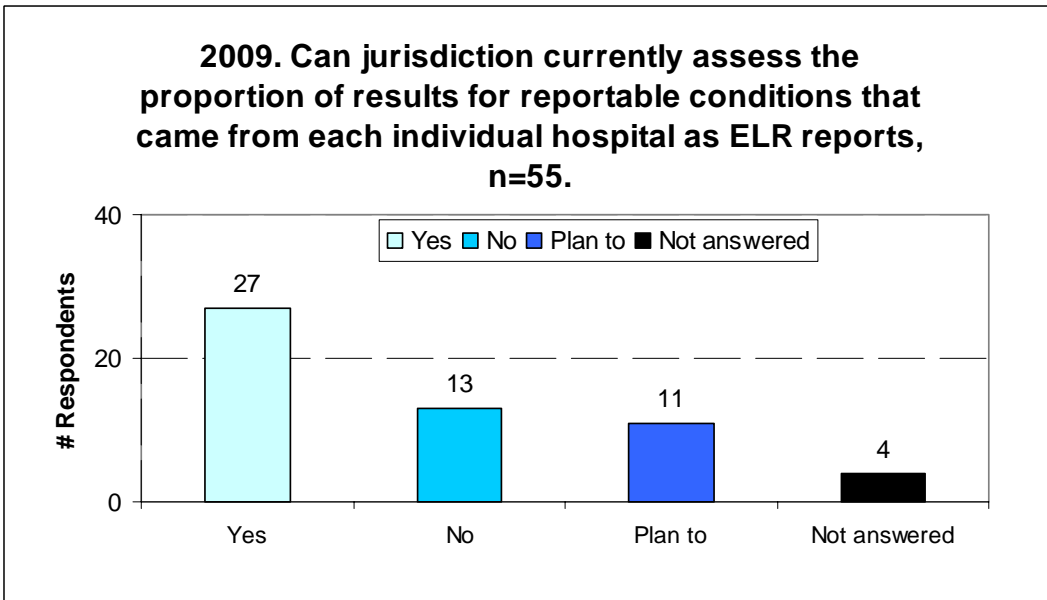
Q48. Does your jurisdiction currently/plan to design, pilot, or oversee hospital ELR capability or performance testing?



Q49. Does your jurisdiction currently/plan to do HL7 conformance testing as part of hospital ELR capability testing?



Q50. Can your jurisdiction currently assess the proportion of results for reportable conditions that came from each individual hospital as ELR reports (vs. paper reports or by telephone)?



2009 ELR Survey Editorial Board

The author gratefully acknowledges the contributions of the 2009 survey editorial board. The 19 board members are listed below (alphabetically, by last name):

2009 Editorial Board, National ELR Snapshot Survey (ordered by last name)	
Name	Affiliation
Ray Aller	LAC
Rita Altamore*	WA
Hwa-Gan Chang	NY
Mike Davisson	WA
Lisa Ferland*	CSTE
Gillian Haney	MA
Nancy Heidman	ARUP
Shelley Hood	WY
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Patricia Swartz	MD
Eileen Troutman	NJ
Kathy Turner	ID
Micah Williams	IN

* Rita Altamore, Lisa Ferland, and Walter Kemper (NC DOH – not a member of the Editorial Board) also provided valuable editorial and proof-reading assistance to the final summary document.

2009 Regional Coordinators

In 2009 we experimented with the idea of Regional Coordinators (RCs). These generous individuals volunteered to help with survey followup among four geographic regions (the author followed up with the fifth region and with any remaining strays). The RCs were of tremendous assistance in shepherding the survey participants, and are gratefully acknowledged here.

2009 Regional Coordinators, National ELR Snapshot Survey		
Region	Coordinator	Jurisdictions in Region
North East	Danielle Kahn (CDC)	VT, NH, ME, MA, RI, CT, NJ, NY, NYC, PA
South East	Ray Sullivan (FL)	DE, MD, OH, WV, VA, NC, SC, GA, AL, FL, PR
North Central	Tom Safranek (NE), John Hall (NE)	ND, MN, WI, MI, CH, IN, IS, IL, IA, NE, SD
South Central	John Roberts (TN)	DN, KS, MO, KY, TN, MS, AR, LA, OK, TX, NM
Remaining Locations	JA Magnuson (OR)	MT, WA, OR, ID, WY, CO, UT, AZ, NV, CA, LA, AK, HI, FSM

Glossary

ADT: Admission, Discharge and Transfer
CDA R1: Clinical Document Architecture, Release One
CDA R2: Clinical Document Architecture, Release Two
CLIA: Clinical Laboratory Improvement Amendments
ELR: Electronic Laboratory Reporting
HL7: Health Level Seven
ICD: International Classification of Diseases
IG: Implementation Guide
LHD: Local Health Department
LIMS: Laboratory Information Management System
LIS: Laboratory Information System
LOINC: Logical Observation Identifiers Names and Codes
NBS: NEDSS Base System
NEDSS: National Electronic Disease Surveillance System
ORM: General Order message
ORU: Unsolicited Transmission of an Observation
OUL: Unsolicited Specimen Oriented Observation Message
PHIN: Public Health Information Network
PHINMS: PHIN Messaging System
PHL: Public Health Laboratory
URL: Uniform Resource Locator