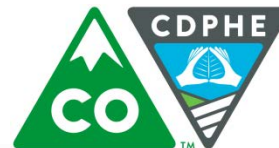


Expansion of an HIE Partnership in Colorado

90/10 Funding, Lessons Learned, & Best Practices

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CIIS Background

- June 2011 – Registry platform replaced
- Voluntary – providers and individuals
- Provider Participation (as of March 2015)
 - 1,121 clinics reporting immunization data
 - 33% are manual users
 - 67% are electronic
 - 100% participation from the Local Public Health Departments



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CIIS By The Numbers

Total # of patients:	4,551,013
• 0-18 year olds:	1,678,509 (37%)
• 19+ year olds:	2,872,504 (63%)
Total # of Vaccinations:	49,202,818
• 0-18 year olds:	31,778,985 (65%)
• 19+ year olds:	17,423,833 (35%)
Total # of Opt-Outs:	1,425
Total # of Active Users:	3,958

*Data as of March 2015



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CIIS Interoperability Success

Total # of clinics sending HL7 batch file to CIIS:	751
Total # of clinics real-time, bidirectional messaging with CIIS:	85
Total # of EHRs currently in production:	22

*Data as of February 2015



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CIIS Interoperability Challenges

- Limited resources (3.5 FTEs)
- Striking a balance between point-to-point interfaces and supporting HIE interfaces
- Increasing demands related to MU
- Implementation delays:
 - Manual interface process
 - EHR and clinic responsiveness
 - EHR configuration issues
 - Clinic workflow issues → poor data quality



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CORHIO Overview



- Who Are We?
 - Colorado Regional Health Information Organization
 - State designated HIE in Colorado
 - A nonprofit, public-private partnership
- CORHIO Vision
 - Shared health information for all individuals in every Colorado community promoting the right care, at the right time, and the right place.

Goals for 2015

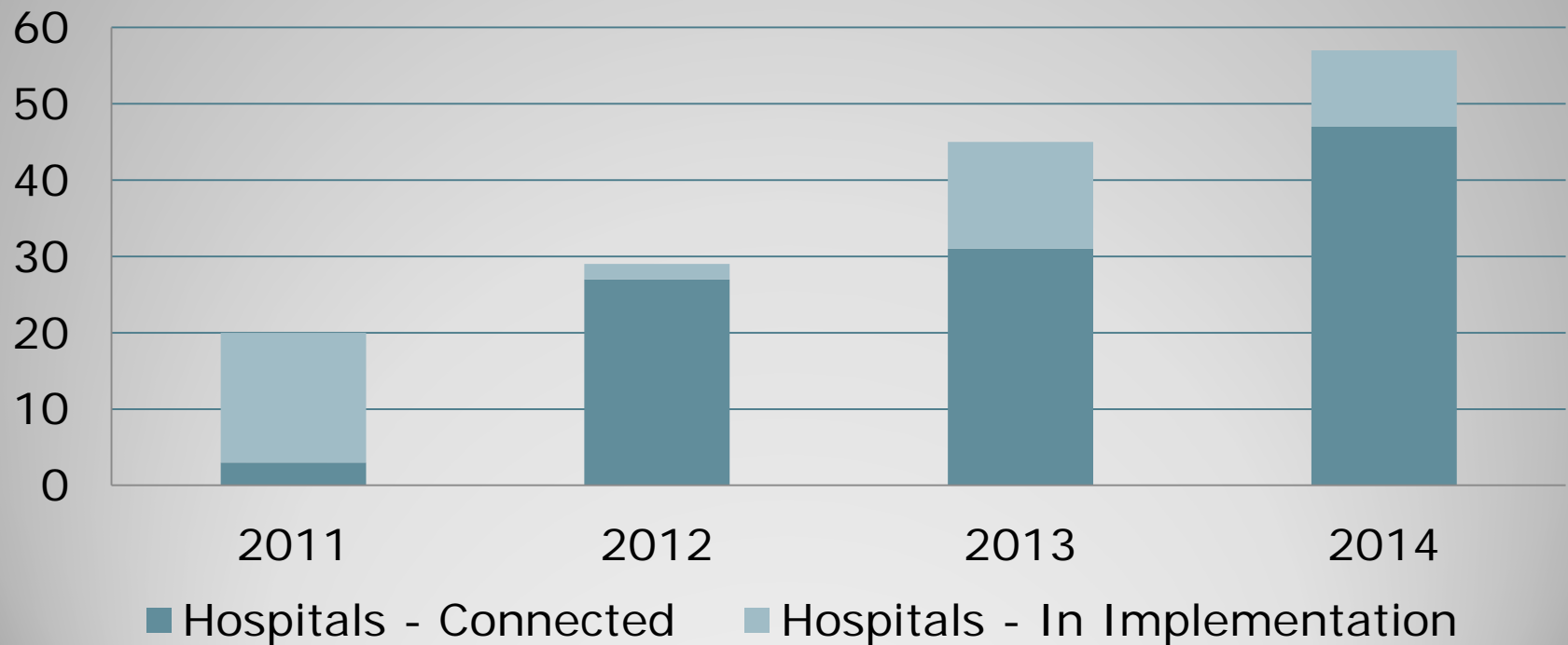
- Health information exchange deployed in every community
- 85% of providers are meaningful users of electronic health records (EHR)



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CORHIO by the Numbers

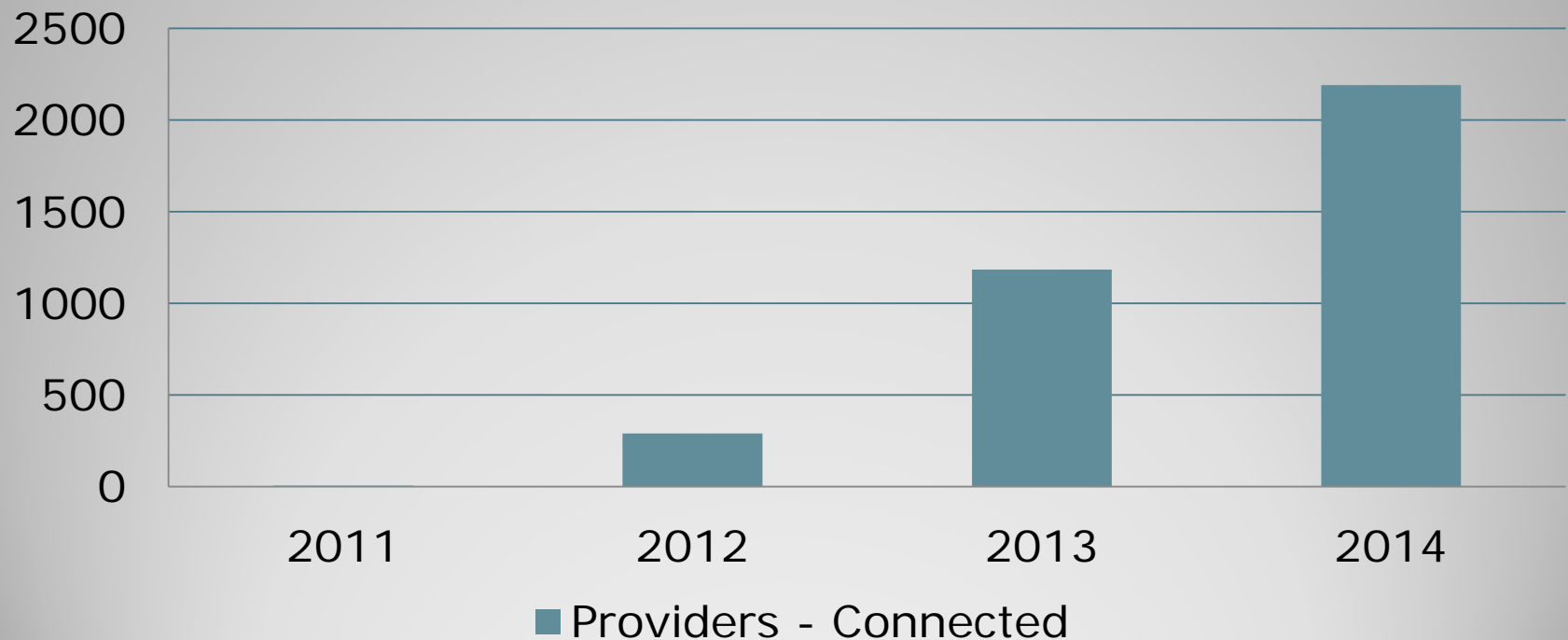
Hospital Participation Growth



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CORHIO by the Numbers

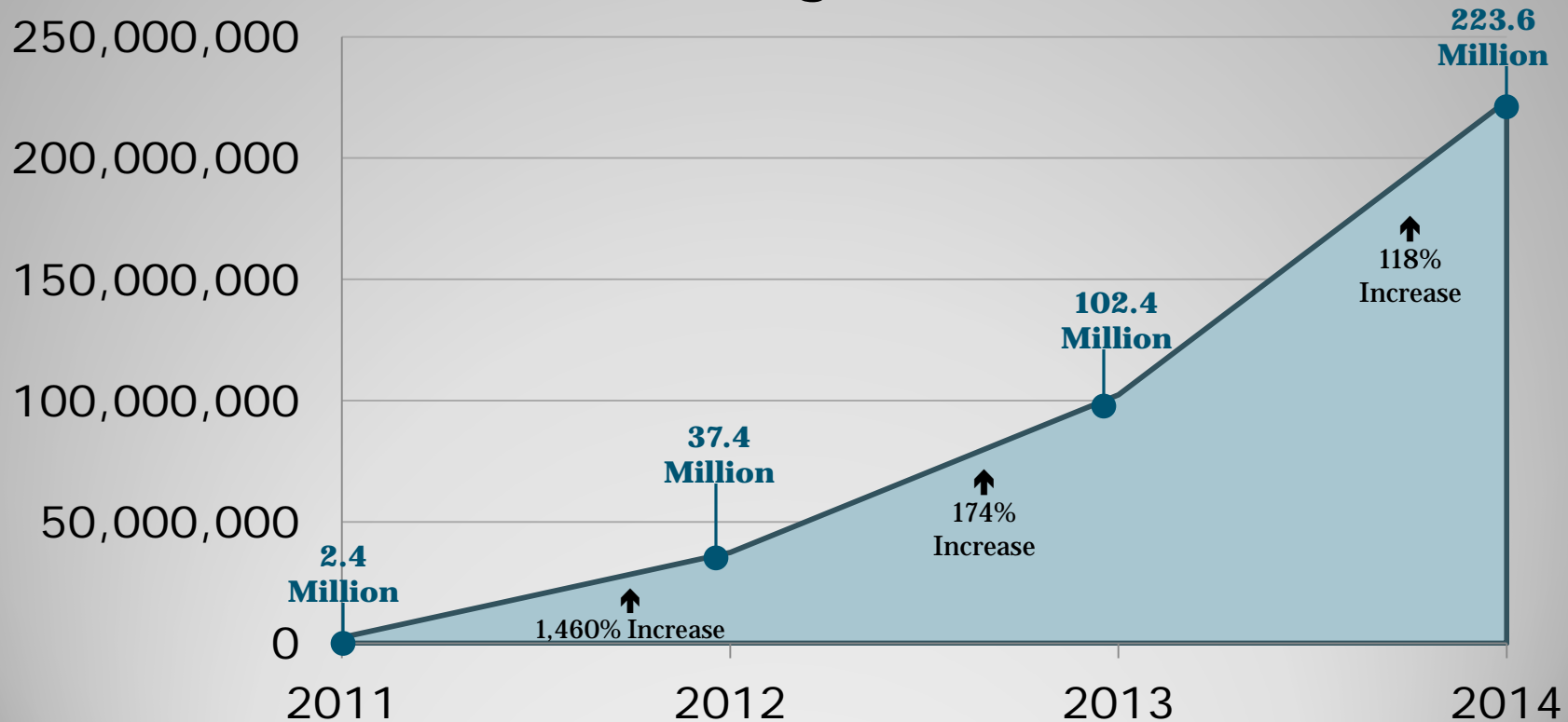
Provider Participation Growth



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CORHIO by the Numbers

Clinical Messages Available



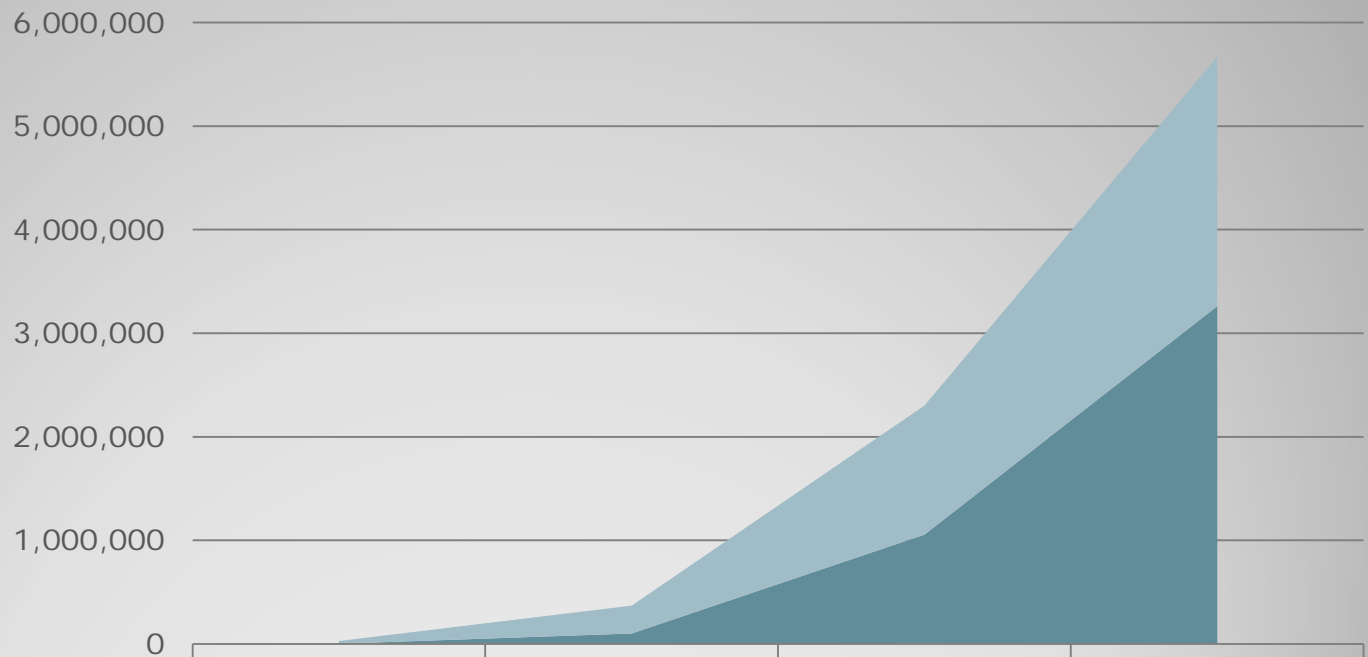
*Numbers are cumulative



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CORHIO by the Numbers

Messages Out

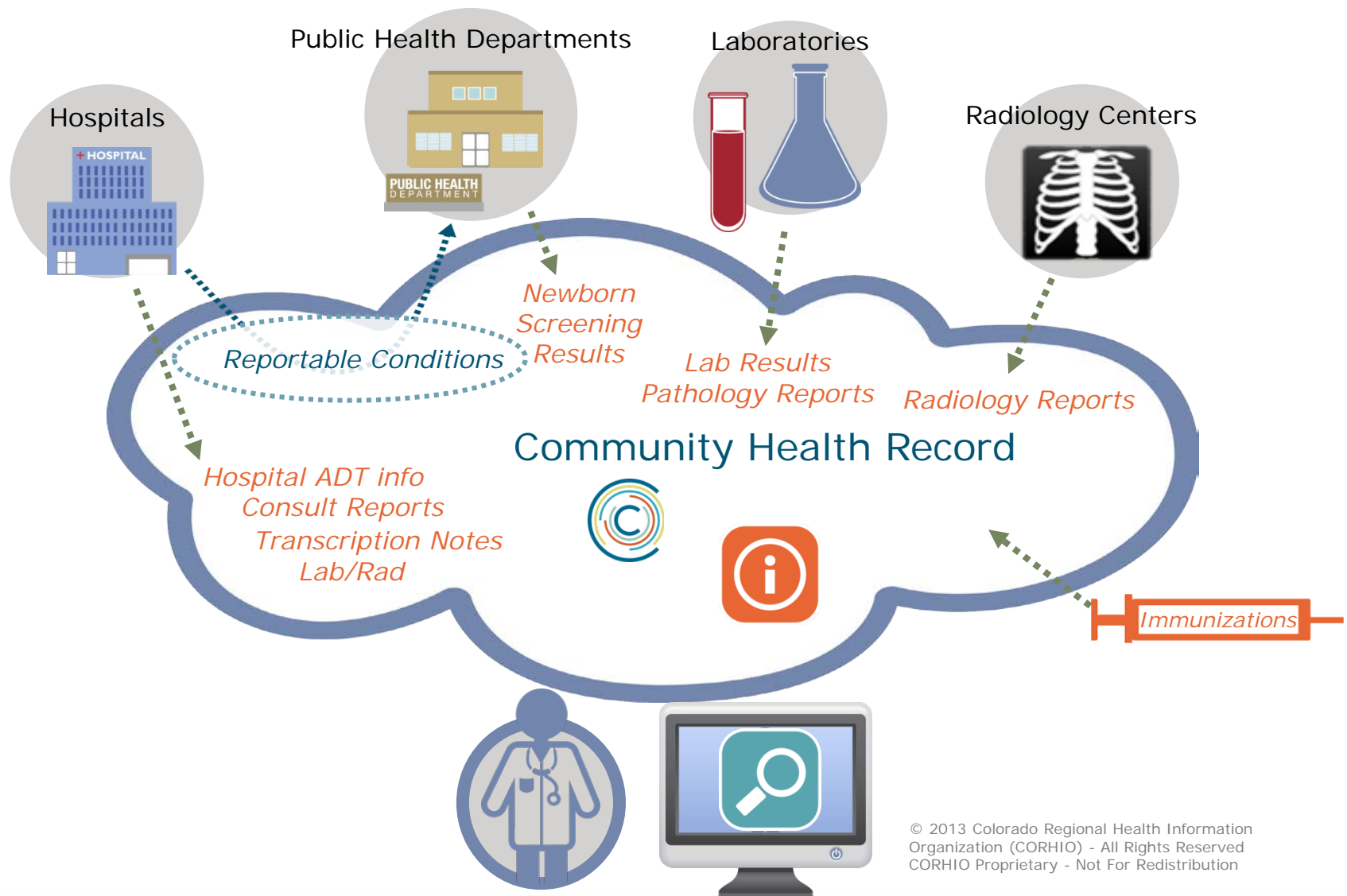


	2011	2012	2013	2014
Queries (Portal)	26,100	268,956	1,246,058	2,411,484
Messages Delivered (EHR)	1,606	100,522	1,054,960	3,260,259



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Data in CORHIO Network



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HIE Roles in Public Health

- Reduction of duplicate, point-to-point interfaces
- Enable Meaningful Use reporting
- Provide technical support for creation of interfaces
- Minimize manual data entry
- Improved data quality
- Increase bandwidth for Public Health programs



Immunization Reporting Initiative

- Submission of immunization data to CIIS from multiple data sources via CORHIO
- Initiated in 2010
- Transfer of knowledge
 - CIIS Implementation Guide
 - Data Validation Tool
- Long-term vision = bidirectional, real-time messaging



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CORHIO-CIIS In Process

	CIIS	CORHIO
Total # of interfaces in queue:	560	23
Total # of interfaces format testing:	22	5
Total # of clinics format testing:	111	19
Total # of interfaces data validation:	23	7
Total # of clinics data validation:	72	203
Total # of live interfaces:	102	12
Total # of live clinics:	628	33
Total # of Patients Sent:	1,867,710	117,138
Total # of Administered Vaccinations:	1,642,225	147,990

*Data as of February 2015



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HIE Integration–Gained Efficiency



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Financial Support – 90/10 Funding

- Funding can be requested for two purposes:
 - On-boarding
 - Design, development, and implementation of infrastructure
- Funding will allow 5 year funding contract with CORHIO
 - Assist with Public Health Reporting requirements



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Financial Support – 90/10 Funding

- How will funding be used?
 - Maintenance & support of systems
 - Enhance and monitor CORHIO Platform
 - AMCI MU Module, Maintenance & Support
 - Increase server storage/space
 - Hiring of additional staff
 - Evaluation of message format
 - Assist with Data Validation



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iSIIS Vision Implementation Project

- **IIS Outreach Management System (OMS) Module:**
 - Provider and vendor contact management
- **Immunization Data Exchange (IDx) Module:**
 - Self-serve, automated HL7 Testing tool and on-boarding support
- **Support Ticketing System (STS) Module:**
 - CIIS Help Desk tracking and documentation
- **MU Public Health Reporting Module:**
 - MU2 tracking for Public Health Reporting Obj.



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Real-Time Message Gateway

- Will replace current RT gateway
- Supports Stage 3 Meaningful Use
- New gateway will use CDC WSDL
- Change to HTTPS
 - Make onboarding process easier – no certificates required
- Support query demand
 - Need to support significant increase in query messages without sacrificing response time



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Lessons Learned & Best Practices

- EHR capabilities – not all interfaces look the same
- Defined communication/process plan
 - Defined staff roles
 - Defined Implementation Guide
 - Regular meetings to communicate progress
- Transfer of Knowledge
 - Implementation Guide
 - Shared CIIS/CDPHE tools



Questions?

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