



Arizona Health Information Exchange (HIE) Program Evaluation Plan (2013 Update)

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Evaluation Framework Template

Arizona's evaluation framework describes the assessment of approaches and strategies that Arizona is using to facilitate and expand health information exchange in the program priority areas and in its own strategic priority areas. It provides the structure within which the program will be evaluated including key evaluation questions, expected processes and outcomes to assess, and the evaluation methods to be used.

The specific evaluation criteria and questions related to each program priority area are described within each program's "Description of Evaluation" section. For each program priority, the evaluation will address specific criteria for each of the evaluation framework template sections listed below.

Goal(s)

- Statement of program goals

Arizona Approaches and Strategies

- Approaches and strategies identified in Arizona's current Strategic and Operational Plan

Quantitative Criteria

- Specific measurable objectives for the subject program area

Target Population

- Population used in the evaluation

Required Data

- Data sources to use to determine level of achievement of goal

Source(s) and Approach

- Specific sources of data to use in the evaluation

Analysis Method

- Description of how the data will be analyzed/evaluated

Program Performance Analysis

- Approach used to determine level of performance of the program

Qualitative Criteria

- Non-quantitative outcomes expected in each of the areas

Assessment of Key Approaches and Strategies

- Key questions to address to determine the success of Arizona's approaches and strategies in attaining the desired outcomes

Conditions Supporting or Hindering Implementation of Strategies



Arizona's State HIE Collaborative Agree Program as a whole will be evaluated to identify the conditions (or context) which may have contributed to supporting or hindering the success of the strategies. These conditions may include such things as: political environment, economic environment, stakeholder relationships, status of laws, level of exchange at baseline, HIE governance, HIE technical environment, unexpected events such as natural disaster, and others as identified.

Study Design

The goal of the evaluation is to understand areas where progress in adopting HIE has been made and to identify the approaches and strategies that are working as well as those that need improvement.

This evaluation is formative in that we anticipate using the results to inform future efforts.

We will follow the study design approach described in the table below for each of the key National and Arizona priorities.

Component	Description
Study Design	<p>We will use a combination of industry data, surveys, and interviews groups to measure our progress in achieving state and national goals.</p> <p>Quantitative analysis: We will use quantifiable data to measure our progress on achieving connection outcomes. Each priority area discussed in the next section contains information on the type of quantitative data that will be used in the evaluation.</p> <p>Qualitative Analysis: Review of progress and modifications to plan during program year. Where appropriate, a combination of surveys and interviews will be used to probe and better understand the reasons for the levels of success of our strategies.</p>
Study Population	<p>Users of each of the services being evaluated will be identified and targeted based upon recommendation from key stakeholders and stakeholder groups.</p>
Data Sources	<p>Quantitative analysis: For the quantitative portion of the evaluation, we will use the data sources identified in the plan for the respective program priority.</p> <p>Qualitative Analysis: For the qualitative portion of the evaluation, where appropriate, we will identify representatives from the key target groups to include in the surveys/interviews.</p>
Data Analysis	<p>Quantitative analysis: Analysis will completed by using the reporting mechanisms which are included in the descriptions of evaluation for each of the program priorities. For the quantitative evaluations, we will use the sample size that is included in the data provided. We will conduct a trending analysis on the data.</p> <p>Qualitative Analysis: When appropriate, we will select a non-random group of stakeholder representatives from key health care segments for interviews and a deeper probing of the reasons and perspectives underlying our level of success. The interviewees will include those who are participating in HIE. Where surveys are used, we will</p>

	attempt to contact all members of the cohort via electronic means.
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National Program Priorities: Description of Evaluation

E-prescribing

Over the last decade, the State of Arizona has experienced considerable growth in almost every statistical area and adoption of e-prescribing is no exception. The State's overall growth can be attributed to the fact that it is a relatively new state with many services and providers having just recently established themselves within the state. Arizona's e-prescribing rate is above the national average. This high percentage can be partially attributed to the high number of chain pharmacies (875) compared to independent ones (142).

Goal(s)

- e-Prescribing is fully adopted in Arizona. All strategies and outcomes will be updated by Q4 2013.

Arizona e-prescribing Approaches and Strategies

- Assess pharmacies not currently participating in e-prescribing and develop approaches to increase adoption.
- ASET funded E-prescribing Outreach and Technical Assistance Initiative thru Arizona Health-e Connection to coordinate an education and technical assistance campaign focused on Arizona health care providers and pharmacies to assist in achieving the State of Arizona's e-prescribing goals. AzHeC will utilize the following key tactics to reach the e-prescribing goals in Arizona:
 - Provide umbrella coordination organization (Steering Committee) with key stakeholders.
 - Provide information and statistics to providers and pharmacies in easy-to-access format.
 - Recognize top e-prescribers and pharmacies in Arizona.
 - Coordinate and publish Arizona case studies to educate the community.
 - Identify and provide incentives for independent pharmacies to participate in e-prescribing.
 - Encourage patient involvement in the e-prescribing process.

Please refer to the PIN 002 –Project Management Plan -2013 Final Submission for Arizona to get a full description of project activity, milestones and outcomes measures that support e-Prescribing.

- Leverage the HIE technology solution and its core messaging system to allow participating entities to utilize HINAZ's relationship with Surescripts.
- Implement provider directory which may be leveraged by providers to route prescriptions to appropriate destinations.
- Leverage existing entities to provide technical assistance to pharmacies and providers as needed.
 - Collaborate with AzHeC (REC) to help providers understand MU.
 - Leverage the e-prescribing Committee and the Consumer Advisory Group.



- ASET will work with State Medicaid provider (AHCCCS) to assess the Medicaid providers with high volumes of prescriptions. ASET will consider measures to help increase e-prescribing adoption and use.
- AHCCCS has created an in-house e-RX steering committee to be able to better understand how it can support strategies that improve providers' adoption and use of e-Rx plus those that can contribute to improving the state of Arizona's ranking in the SureScripts Safe-RX Ranking.

Quantitative Criteria

The success of e-prescribing will be measured in the following areas: capability to e-prescribe, actual use of e-prescribing, and the total volume of e-prescriptions for the State of Arizona

Target Population	Milestones and/or Performance Measurements	Target YE2012	Target YE2013	Target Program End
Pharmacies	100% of pharmacies e-prescribing <u>capable</u>	98%	99%	100%
Pharmacies	100% of pharmacies e-prescribing <u>participating</u>	98%	99%	100%
Providers	Achieve 60% of Arizona prescribers routing prescriptions electronically.	57.02%	60%	60%
Providers	Exceed 40% of all Arizona prescriptions electronically routed to pharmacies	Goal met 60.08%	40%	70%

Target Population

- Pharmacies
- Providers

Required Data

- Pharmacy e-prescribing status
- Percentage of Providers e-prescribing
- Percentage of prescriptions that are e-prescriptions

Sources and Approach to Obtain the Required Data

ONC has provided a subscription to the Surescripts database. Reports are available on a monthly basis reflecting the data for providers and pharmacies. An additional report is available from ONC on an annual basis that contains the percent of physicians actively e-prescribing via the Surescripts network and the percent of new and renewal prescriptions e-prescribed. These reports satisfy our data gathering requirements.

ASET will continue to work with the State Medicaid provider (AHCCCS) to assess the Medicaid providers with high volumes of prescriptions. Beginning 7/1/2012, AHCCCS will have access to data for pharmacy claims submitted and whether or not they were e-prescribed. AHCCCS has plans to try and gather the data on providers who adopt e-RX thru its data warehouse.

Analysis Method

Arizona is a leader in e-prescribing. ASET will no longer look at just the percentages of pharmacies that are capable of and participating in e-prescribing. We are now using the reports



to identify the specific remaining pharmacies that are either not capable of e-prescribing or not actively using the system.

We will also use the available data to identify providers that produce a high volume of prescriptions.

Program Performance Analysis

- Identify baseline level of exchange of ePrescribing
- Assess the rate of growth in exchange of ePrescribing using the data sources described above

Qualitative Criteria (Outcomes)

- Understand reasons pharmacies do not participate in ePrescribing
- Provide ease of connection to ePrescribing capabilities
- Provide easy look-up for providers searching for appropriate pharmacy
- Utilize resources already available to assist pharmacies and providers to adopt ePrescribing
- Identify Medicaid providers who could benefit from additional measures to accelerate their adoption of ePrescribing.

Assessment of Key Approaches and Strategies

- To what extent were these strategies able to enhance the rate of ePrescribing in Arizona?
- To what extent did the use of existing entities to provide service enhance the ability to provide services?
- What lessons were learned?

Laboratories

Arizona's objective is to ensure that providers and hospitals can electronically receive and display clinical laboratory test results in a structured standard format. **All tables and strategies will be updated by the end of Q4 2013.**

Goal(s)

- Electronic lab orders and structured results delivery is fully adopted in Arizona. **This will be fully updated by the end of Q4 in 2013.**

Arizona Laboratory Approaches and Strategies

- Leverage Core Services infrastructure vendor's relationship with Sonora Quest and LabCorp.
- Leverage Direct as a potential strategy to route lab results to the ordering provider.
- Leverage existing entities to provide technical assistance to providers and independent labs.

Quantitative Criteria

Target Population	Milestones and/or Performance Measurements	Target YE2012	Target YE2013	Target Program End
Laboratories	Percentage of laboratories sending structured lab results to providers	35%	45%	46%
Laboratories	Percentage of laboratories sending structured lab results to providers electronically using LOINC	25%	35%	36%
Laboratories	Percentage of outpatient and inpatient lab results accessible by an HIE infrastructure	60%	60%	60%

Target Population

- Laboratories

Required Data

- Labs: Total number of labs in Arizona
- Lab status: Status of each lab sending structured labs and LOINC to providers
- Lab results accessible from the HIE: Status of labs participating in the HIE
- Labs with Direct accounts: Number of labs with a Direct account

Sources and Approach to Obtain the Required Data

- Labs: CLIA reports
- Lab status: ASET administered Lab survey
- Lab results accessible from the HIE: HINAz utilization report
- Labs with Direct accounts: AzHeC HIE Marketplace reports

Analysis Method

- Review reports quarterly for status and trending.

Program Performance Analysis

- Identify baseline level of exchange of structured labs
- Assess the rate of growth in exchange of structured labs using the data sources described above

Qualitative Criteria (Outcomes)



- Expedite the access to structured labs from major providers.
- Provide a simple method for providers to receive structured labs
- Utilize resources already available to assist providers and labs to implement electronic exchange of structured labs

Assessment of Key Approaches and Strategies

- To what extent did the leveraging of the Core services infrastructure impact the ability to exchange structured labs?
- Evaluate the method by which labs are being exchanged and the trends.
- Why did providers choose one method over the other? What lessons were learned?
- To what extent did the use of existing entities to provide service enhance the ability to provide services? What lessons were learned?



Care Summaries

ASET is placing emphasis on establishing an infrastructure and policy framework that enables the exchange of clinical summaries to support stage 1 Meaningful Use objectives. Our strategies will support options ranging from Direct to a bi-directional functional HIE.

Since the 2012 SOP update, ASET worked with Arizona Health-e Connection (AzHeC) to establish the Arizona Health Information Exchange (HIE) Marketplace. The purpose of the HIE marketplace is to be a trusted source where health care providers can review viable health information exchange options. Health information service providers (HISPs) will be invited to submit an application to be a participant in the marketplace and will be evaluated and selected based on established criteria. This will create a single point where consumers and stakeholders can go for neutral information regarding HIE options. The contract with AzHeC is to both develop and maintain the HIE marketplace as well as for AzHec to be the public-facing entity for the marketplace.

A lot of progress was made on our HIE Marketplace project efforts in 2012 and early 2013. There are currently 3 approved Health Information Service Providers (HISPs) participating in our HIE marketplace. The approved HISP vendors participating in the marketplace are:

- GSI Health
- Inpriva
- Care 360

In October 2012, ASET reached its ONC-mandated milestone of 587 active direct accounts in Arizona. This was a significant milestone and was completed in less than 6 months of marketing efforts statewide. Arizona provided “free” incentive direct accounts to the first 1000 interested users statewide which are believed to have assisted us toward that goal.

This marketplace strategy for DIRECT accounts and Robust HIE was enacted to support the development of Meaningful Use objectives and for the electronic exchange of care summaries. ASET also launched two different rounds of grant funding to support health information exchange between unaffiliated organizations and those organizations that were creating, developing or maturing their HIE environment . As part of the grant requirements, each grantee had to select at least one ONC priority to address as part of their grant activity and by the end of Q4 2013, ASET can provide more information about how many selected “transition of care summaries” and any outcomes information that could be a part of those grants.

Goal(s)

- Electronic exchange of care summaries is fully adopted in Arizona. This section will be more fully updated by the end of Q4 2013.

Arizona Care Summary Approaches and Strategies

- Develop core infrastructure and messaging services through an HIE vendor to enable eligible providers and hospitals to exchange patient care summaries
- Evaluate and create a strategy to leverage Direct in white space areas as a viable option to exchange clinical summaries

- Leverage existing entities to provide technical assistance to providers around the various options of exchange

Quantitative Criteria

Target Population	Milestones and/or Performance Measurements	Target YE2012	Target YE2013	Target Program End
Hospitals	Percentage of hospitals sharing electronic care summaries with unaffiliated hospitals and unaffiliated providers	35%	45%	46%
Providers	Percentage of ambulatory provider sharing electronic care summaries with other providers	40%	50%	51%
Providers	Register health care providers with a Direct address	2Q 2012 - 250 3Q 2012 - 450 4Q 2012 - 587	750	750
Providers	Outreach to providers who have not adopted certified EHRs and inform them of their options	60%		

Target Population

- Hospitals
- Providers

Required Data – Will be provided to ONC by Q4 of 2013.

- Data provided by ONC on hospitals currently sharing care summaries with unaffiliated hospitals and providers
- Data provided by ONC on ambulatory providers sharing care summaries with other providers
- Total number of providers in Arizona
- Number of providers without certified EMRs
- Number of providers with a Direct address

Sources and Approach to Obtain the Required Data

Through contracts with the NAMCS and AHA, ONC is providing the data for hospitals and providers that are sharing care summaries with unaffiliated entities. The total number of providers in the state and EMR access will come from the Arizona State University survey. AzHeC will provide the data for the number of providers with a Direct address. HINAZ will provide the data for the number of robust HIE participants

Analysis Method

- Review the reports as available
- Identify trending for the level of exchange of care summaries.

Program Performance Analysis

- Identify baseline level of exchange of care summaries
- Assess the rate of growth in exchange of care summaries using the data sources described above



Qualitative Criteria (Outcomes)

- Satisfaction with the purchase/licensing of the capabilities through the market.
- Provide a viable alternative for connection for those providers opting not to use robust HIE.
- Utilize resources already available to assist providers to implement care summary exchange

Assessment of Key Approaches and Strategies

- What were the benefits realized of contracting with a core services vendor for this service as opposed to it being directly managed by the state? What was successful? What needs improvement?
- How successful was the implementation of Direct in the targeted areas? What were the lessons learned?
- To what extent did the use of existing entities to provide service enhance the ability to provide services? What lessons were learned?



Arizona Program Priorities: Description of Evaluation

State Level Provider Directory is Operational

At its core, the provider directory will provide a mechanism for the exchange of data between two unaffiliated providers/organizations. It will contain all relevant information for all registered clinicians within Arizona. “Clinician” is broadly defined to include all certified and licensed clinicians (e.g., physicians, nurse practitioners, nurses, certified nursing assistants, medical assistants).

ASET awarded its “Health Information Exchange Core Services” RFP to the Health Information Network of Arizona (HINAz). This was a partner bid with their technology vendor Optum/Axolotl and HINAz will be providing three pieces of work under the contract to ASET. HINAz brings ASET the leading hospitals and health plans in Arizona already committed to supporting and paying for the exchange of health information.

A high-level summary of the primary requirements is listed below:

- **Governance Entity:** The Health Information Network of Arizona (HINAz) Board currently represents hospitals, community health centers, commercial, and Medicaid health plans, health care providers, the largest laboratory provider, and other stakeholders, who serve underserved, rural, and urban parts of Arizona. This HIO currently represents over 60% of the covered lives in Arizona and 60% of all of the acute hospital beds. This Board grew out of the Medicaid Transformation grant work that was done by AHCCCS from 2007 – 2009 and represents the merger in 2010 of two different HIOs to form a statewide entity.
- **Directory Services (Provider Directory):** HINAz shall design, develop, and implement Entity and Provider Level Directory Services with a technical architecture that is flexible and scalable enough to provide a variety of exchange services, which is capable of uniquely identifying a provider and/or entity, match data from multiple sources to that provider/entity and resolve duplicates or mismatches. HINAz’s technical infrastructure also will support the movement of information to support key Meaningful Use requirements, such as the exchange of laboratory results and care summaries as well as public health reporting and e-prescribing.
- **Master Patient Index (MPI) and Record Locator Services (RLS):** HINAz shall provide a Record Locator Service (RLS) and Master Patient Index (MPI), whereby the RLS receives incoming queries from authorized users, formats the contents of the message, and makes a query to the MPI. The MPI matching algorithm then determines which records in the database match the requested patient’s demographics. These records will then be retrieved from the source by the RLS and presented in an aggregated view to the requesting user. The RLS and MPI infrastructure will be capable of supporting the movement of information to support key Meaningful Use requirements, such as the exchange of laboratory results and care summaries as well as public health reporting and e-prescribing as applicable.

Goal(s) This section will be fully updated by Q4 2013.

- There is an operational state level HIE entity level provider directory (ELPD) and individual level provider directory (ILPD) with at least 8500 providers in the ILPD.

Arizona Approaches and Strategies

- Provide assistance to the selected vendor with the onboarding of providers into the provider directory.
- Established provider directory will contain all relevant information for all registered clinicians in Arizona.
- (New) Use the technology vendor's resources to populate the provider directory.
 - (Prior Strategy - Replaced by "New" above) Leverage other organizations such as the Arizona Medical Board as data sources into the provider directory.

Quantitative Criteria

- The number of providers in the ILPD
- Rate of growth in number of providers in the ILPD

Target Population

- Providers

Required Data

- Number of providers in the ILPD

Source(s) and Approach

- HINAZ report of ILPD contents

Analysis method

- Review reports from HINAZ quarterly for status and trends.

Program Performance Analysis

- Identify baseline number of providers in the directory
- Assess the rate of growth in exchange using the data sources described above
- Assess the completeness and accuracy of the information in the provider directory.

Assessment of Key Approaches and Strategies

- How well did providing assistance to the core services vendor assist in making the provider directory operational?
- What lessons were learned?



Public Health is Fully Participating in Electronic Health Information Exchange

Arizona Department of Health Services (ADHS) has developed various ways to collect information necessary to monitor public and behavioral health and to trigger public health action. This evaluation focuses on three projects that will enhance the ability of Arizona Public Health to support current and future Meaningful Use requirements:

1. Enhance Syndromic Surveillance Capabilities in Support of Meaningful Use
2. Implementing Direct for Immunizations at ADHS
3. Arizona State Laboratory Interoperability Project at ADHS

All project outcomes and deliverables will be updated by the end of Q4 2013

Project 1: Enhance Syndromic Surveillance Capabilities in Support of Meaningful Use

Goal(s)

- Increase the number of hospitals participating with Biosense 2.0
- A production connection between ADHS and Biosense 2.0 will be used by ADHS
- Identify ways to utilize Biosense in other programmatic areas such as environmental health, injury, and chronic diseases.

Arizona Approaches and Strategies

- Invest in state agency infrastructure to facilitate health information exchange
- Take incremental approach to build state level HIE capabilities

Since the 2012 SOP update, ASET launched and is in the process of completing a project with the Arizona Department of Health Services (ADHS) to enhance its capabilities to support the anticipated public health requirements for Stage 2 Meaningful Use.

To enable health care facilities to attest to the Meaningful Use syndromic surveillance requirement, ADHS needs additional support to onboard facilities, attest Meaningful Use requirements, and utilize syndromic surveillance data. ADHS will use the BioSense 2.0 application to meet these objectives. BioSense 2.0, hosted by the Association of State and Territorial Health Officers (ASTHO) without fees, will afford ADHS and local health departments the capability to obtain situational awareness for health related events as well as syndromic surveillance of infectious and chronic disease, injury, environmental incidents, and other health hazards.

ADHS will investigate how best to utilize the system in programmatic areas across the agency including environmental health, injury, and infectious and chronic diseases. As a new implementation, BioSense 2.0 will require new user training and user administration coordinated at the state level to optimize its use and availability. Additionally, ADHS will leverage interest in attesting to syndromic surveillance data provisioning under Meaningful Use, to add facilities reporting to BioSense 2.0 and increase statewide representation. At this time, there is no staff



within the agency to: work across functional areas, evaluate the utility of BioSense 2.0 for multiple programs, facilitate adding data from new facilities, or provide training to state and local users.

2013 Status Update:

The Syndromic Surveillance project kicked off on 7/18/2012 and has achieved their goals as far as setting up BioSense 2.0 workgroups by the county health departments and providing outreach to hospitals in the way of education and training, working through data use agreements, policy manuals, a data dictionary and an Arizona specific implementation guide.

Each county health department has identified a liaison that acts as point person for onboarding hospitals, and training of the data users. Monthly conference calls have been facilitated through the lead epidemiologist to work through the data dictionary elements, and I have been on a few of these calls also as an observer.

Although the goal was to be ready to accept data from the hospitals by end of March 2013, this was not met due to issues on the BioSense side with sending the wrong HL7 messages resulting in poor quality data. These issues have been worked through and the project should be on track to receive data October 1, 2013, possibly sooner.

Quantitative Criteria

Anticipated Date of Completion	Deliverable
August 31, 2012	Hire (2) epidemiologists and (1) project specialist
October 2012	User agreement and policy manual for public health
December 2012	Data dictionary for public health
December 2012	Implementation guide for facilities
March 2013	Database for technology specifications
July 2013	Public health user manual and training manual
October 2013	Protocol for routine use of BioSense 2.0 at ADHS
November 2013	BioSense 2.0 evaluation report
December 2013	(10) new hospitals, including (2) rural or critical access hospitals

Table 1: Enhance Syndromic Surveillance Capabilities in Support of Meaningful Use Project Performance Metrics

Target Population

- Hospitals
- ADHS

Required Data

- See Table1: Enhance Syndromic Surveillance Capabilities in Support of Meaningful Use Project Performance Metrics

Source(s) and Approach

- Data will be obtained through scheduled project updates with and reports from Arizona Department of Health Services (ADHS)



Analysis Method

- ASET will review the ADHS reports and assess progress in meeting performance metrics

Program Performance Analysis

- Identify baseline level of Syndromic Surveillance Capabilities
- Assess the rate of growth in Syndromic Surveillance Capabilities

Qualitative Criteria (Outcomes)

- Enhance the ability of public health to provide syndromic surveillance capabilities necessary for providers to meet current MU requirements
- Ensure that Public Health staff is able to use and support new capabilities available in BioSense 2.0
- Level of satisfaction with user manuals created

Assessment of Key Approaches and Strategies

- How effective was investing in public health infrastructure to help improve their ability to help providers meet MU requirements?
- What lessons were learned?



Project 2: Implement Direct for Immunizations at ADHS

Since the 2012 SOP update, ASET created the Direct Immunization Pilot Project with Arizona Department of Health Services.

This project was to demonstrate – on a pilot basis – the feasibility of using a Direct-based interface into the Arizona State Immunization Information System (ASIIS). This system, if successful, could provide an additional path for a provider or staff to submit immunizations to Arizona Department of Health Services (ADHS). More information can be found about the project here: <http://azdirectimpilot.wikispaces.com/Charter>

2013 Status Update:

Project completed and lessons learned documented. This project has been moved to production project efforts.

Project outcomes will be provided by Q4 2013.

Goal(s)

- Direct Exchange is a recognized viable option for providers to send immunization records to ADHS
- Improve Public Health capability to support current Meaningful Use requirements.

Arizona Approaches and Strategies

- Invest in state agency infrastructure to facilitate health information exchange
- Leverage existing entities to provide technical assistance to providers around various options of exchange.
- Take incremental approach to build state level HIE capabilities

Quantitative Criteria

The Direct Gateway is responsible for receiving and sending messages from HISPs. A Direct Gateway will be developed and hosted at the ADHS data center. The Gateway implements all the required security and audit log features based on the Direct Project specifications.

Immunization messages received will be published to ASIIS via web services. The web services will be accessible only via the Direct Gateway and will have a trusted connection to ASIIS.

Target Population

- Providers
- ADHS

Required Data

- ADHS Gateway utilization for immunization data

Source(s) and Approach

- ADHS report of immunization data submission routes



Analysis Method

- Review ADHS Direct Gateway usage reports quarterly for status and trends.

Program Performance Analysis

- Identify baseline level of use of the Direct Gateway for immunization information
- Assess the rate of growth in the use of Direct Gateway for immunization information using the data sources described above

Qualitative Criteria

- Enhance the ability of public health to provide Direct Gateway capability for immunization information.
- Level that Public Health staff is able to use and support Direct gateway.
- Level of user satisfaction with the Direct gateway

Assessment of Key Approaches and Strategies

- How effective was investing in public health infrastructure to help improve their ability to help providers meet current MU requirements? What lessons were learned?

Project 3: Arizona State Laboratory Interoperability Project at ADHS

Goal(s)

- ADHS lab system accepts orders and sends acknowledgement
- ADHS lab system sends reports in HL7 format in production mode

Arizona Approaches and Strategies

- Invest in state agency infrastructure to facilitate health information exchange
- [ASET will] Leverage existing entities to provide technical assistance to providers and independent labs. Coordinate efforts with HIE (HINAz), REC (AzHeC) and the Arizona Department of Health Services (CLIA contact for AZ)
- Take incremental approach to build state level HIE capabilities

Since the last SOP update in 2012, ASET launched a project with the Arizona Department of Health Services, called the State Laboratory Interoperability Project. At the time, the Arizona State Laboratory Information Management System (STARLIMS) needed to be enhanced to accept electronic laboratory orders from hospital laboratories using the HL7 standard message formats.

The goal of this project was to enhance the system to accept the orders, generate an acknowledgement back to the ordering system, and generate a final laboratory test result message in standard HL7 formats. The activities listed below are part of the pilot aimed at filling the gaps in current laboratory order exchange requirements.

Several hospitals in Arizona, including Banner Health (with a total of 22 hospitals in Arizona) and Catholic Healthcare West (with 3 hospitals in Arizona) were in the process of implementing inpatient electronic health record (EHR) systems as well as private health information



exchanges (HIE) to fulfill ARRA/HITECH Meaningful Use requirements. The Community Data Exchange Outreach Team was going to visit and initiate discussions with the hospitals that are in the process of implementing such systems. Data sharing and business association agreements were going to be signed between ADHS and each of the hospitals. The project objective was to enhance STARLIMS to receive lab orders and send results to clinical laboratories and hospitals by September.

Unfortunately, due to numerous staffing and technical constraints, this project had to be cancelled by ADHS and ASET and it never took off.

Quantitative Criteria Full 2013 update will be provided by Q4 2013/

Performance Measure	Anticipated Completion Date	Frequency of Monitoring	Data Source and Reporting Method
Develop monthly progress reports on project status and evaluate progress towards project milestones.	Ongoing	Monthly	Progress updates at steering team meetings.
Number of hospitals that have signed data sharing agreements for exchange of laboratory orders and results with ADHS.	TBD	Monthly	Report on the number of signed agreements.
Complete a catalog of state public health laboratory test orders using standard codes (LOINC).	TBD	Once	Percentage of laboratory test codes cataloged.
Number of laboratories exchanging lab orders and results with the state public health lab for Pilot stage.	Target: 5 TBD	Quarterly Starting 4 th Qtr. of 2012	Number of successful message transactions per week for participating labs.
Number of lab orders and results exchanged with the state public health lab for the Pilot stage.	Target: 10% of total volume TBD	Quarterly Starting 4 th Qtr. of 2012	Number of successful message transactions per week for participating labs.

Table 2: State Laboratory Interoperability Project Performance Metrics

Target Population

- Hospitals
- Labs
- ADHS

Required Data

- See Table 2: State Laboratory Interoperability Project Performance Metrics above

Source(s) and Approach

- Data will be obtained through scheduled project updates with and reports from Arizona Department of Health Services (ADHS)

Analysis Method

- ASET will review the ADHS reports and assess progress in meeting performance metrics on a monthly/quarterly basis.



Program Performance Analysis

- Identify baseline level of exchange of structured labs
- Assess the rate of growth in exchange of structured labs using the data sources described above

Qualitative Criteria (Outcomes)

- Ability of public health to provide laboratory interoperability
- Level that Public Health staff is able to use support laboratory interoperability.

Assessment of Key Approaches and Strategies

- How effective was investing in public health infrastructure to help improve their ability to help providers meet current MU requirements?
- What lessons were learned?



Identify and Understand Conditions that Support or Hinder Implementation

(This section will be updated by Q4 2013)

The following questions will be used to evaluate conditions which may have impacted the success of Arizona's approaches and strategies for HIE.

1. How has Arizona's market place approach to statewide HIE supported or hindered the exchange of health information?
2. How has using existing resources such as those in AZHEC and HINAZ enhanced the adoption of HIE?
3. To what extent has coordination with Arizona's Regional Extension Center / AzHeC for stakeholder outreach and communication supported these strategies?
4. To what extent has cooperation within state agencies impacted these strategies? What lessons were learned?
5. To what extent has the state legal environment supported the strategies?