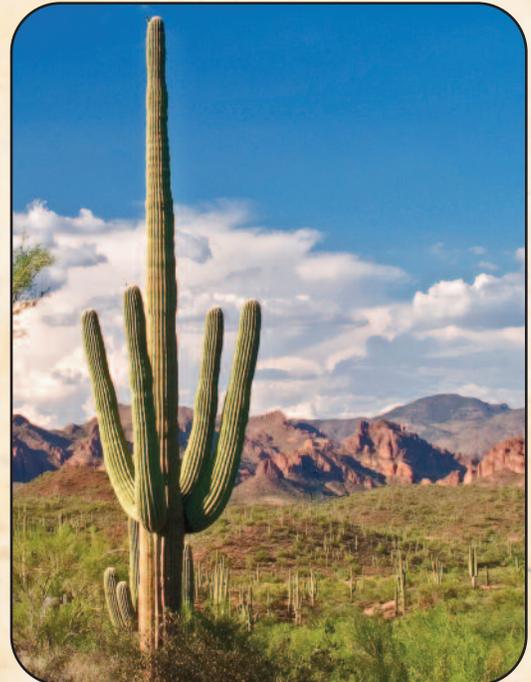# Arizona's Health IT
*R*oadmap 2.0

ROADMAP 2.0 VISION STATEMENT

Arizonans will experience an improved quality of health enabled by robust health information technology and exchange.

WELCOME LETTER

Dear Arizona Health Care Stakeholders,

We are pleased to present *Arizona's Health IT Roadmap 2.0*. Today in health care we are experiencing a true transformation made possible by recent advancements in health information technology (HIT or health IT) and health information exchange (HIE). *Roadmap 2.0* provides an HIT/HIE direction and vision for Arizona for the next three years and beyond, and it signals the start of a renewed quest for better care, better outcomes and lower costs through collaborative health IT advancement.

Arizona's Health IT Roadmap 2.0 describes 19 key initiatives to advance HIT/HIE in Arizona, recommending action in areas ranging from stakeholder engagement and policy development to technology infrastructure implementation and exploration of innovative technology models that support care delivery transformation.

Overall, *Roadmap 2.0* identifies three essential strategies that will guide the continued adoption and advancement of HIT/HIE in Arizona. To be successful, our statewide community must:

- Continue to support physicians and other providers in their adoption and use of technology
- Accelerate and expand the secure sharing of health information among health care providers
- Continue to coordinate and convene health care stakeholders to develop strategies that meet evolving HIT/HIE business needs

On behalf of the State of Arizona and Arizona Health-e Connection, we would like to personally thank all of the 300+ stakeholders who participated in *Roadmap 2.0*'s envisioning workshops, surveys and public meetings to gather key information and insights – your participation was critical and appreciated. We would also like to thank Laura Kolkman and her team at Mosaica Partners who directed the roadmap process and the roadmap Executive Council that provided guidance and support throughout the project.

While the publication of *Arizona's Health IT Roadmap 2.0* signifies the end of a yearlong process, more importantly, it signifies the beginning of Arizona's future HIT and HIE success. We look forward to working collaboratively with Arizona health care stakeholders as we continue our quest to better health care enabled by robust health information technology and exchange.

Sincerely,

Melissa A. Kotrys, MPH
Chief Executive Officer
Arizona Health-e Connection

Lorie Mayer
State HIT Coordinator
State of Arizona

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EXECUTIVE SUMMARY

Health care in the United States is undergoing a historic transformation. The focus on the Triple Aim of better care, better outcomes, and lower costs, involves all aspects of health care – providers, patients, and payers. Accomplishing this transformation is only possible with broad and appropriate access to robust health information made possible through advancements in health information technology (HIT). Making this capability a reality for Arizona was a key driver for the creation of *Arizona's Health IT Roadmap 2.0* (*Roadmap 2.0*).

Arizona has a rich history of supporting and promoting HIT and health information exchange (HIE). In 2006, Arizona published its first HIT/HIE roadmap, the Arizona Health-e Connection Roadmap (Roadmap 1.0). Due in part to its ability to leverage federal funding, Arizona has made significant strides in HIT/HIE since that first roadmap was published; however, there is still much to accomplish. *Roadmap 2.0* sets the direction for Arizona's continued success.

> "The *Roadmap 2.0* process has been driven by a goal of truly transforming health care in Arizona by enabling the secure sharing of health information among Arizona providers to support a triple aim of better care, better outcomes and decreasing costs."
>
> *– David A. Dexter*
> *President & CEO*
> *Sonora Quest Laboratories*

Throughout the creation of the Roadmap, there was a concerted effort to obtain widespread stakeholder input to ensure that *Roadmap 2.0* represents a broad spectrum of viewpoints. The process to develop *Roadmap 2.0* included multiple stakeholder workshops, a community survey, and community information sessions, all of which involved a wide range of stakeholders. More than 300 individuals – representing over 70 organizations – were involved in developing *Roadmap 2.0*.

VISION

Arizonans will experience an improved quality of health enabled by robust health information technology and exchange.

Roadmap 2.0 describes specific initiatives that Arizona should undertake to establish the HIT/HIE capabilities necessary to support health care transformation. These initiatives were developed as a result of an extensive process that created a vision, mission, principles, and objectives that support and describe Arizona's future direction.

The *Roadmap 2.0* vision represents Arizona's aspiration for the future.

While the vision is aspirational, the *Roadmap 2.0* initiatives are specific and actionable. These initiatives, while varied in their content and outcomes, revolve around three essential strategies that are critical to Arizona's success:

- Continue to support physicians and other providers in their adoption and use of technology
- Accelerate and expand the secure sharing of health information among health care providers
- Continue to coordinate and convene health care stakeholders to develop approaches that meet evolving HIT/HIE business needs

During the course of developing the roadmap, a significant change in the relationship between Arizona Health-e Connection (AzHeC) and Health Information Network of Arizona (HINAz) occurred. Through a series of conversations and stakeholder interviews, Arizona health care stakeholders sent a clear message to the boards of directors of both organizations that a closer association between these two key organizations would produce valuable synergies. As a result, the boards of AzHeC and HINAz investigated options for closer alignment and in early 2014 created a formal affiliation between the two organizations. This new model reflects the voice of Arizona health care stakeholders and provides a single point of access for all community-wide HIT and HIE activities.

Arizona is well positioned for HIT/HIE success. *Roadmap 2.0* sets the path forward through the description of 19 initiatives (found at the end of this summary) that describe what Arizona needs to do to further establish its HIT/HIE capabilities. The initiatives address five key domains:

- Stakeholder Engagement & Participation
- Governance, Policy, & Planning
- State Level HIT/HIE Business Infrastructure
- Privacy & Security
- Technology

Overall funding for the wide range of initiatives contained in *Roadmap 2.0* poses a challenge and, for some of the initiatives, there is no budgeted funding. However, due to the intentional alignment between *Roadmap 2.0* and the business plan of the newly affiliated AzHeC/HINAz organization, many of the initiatives will be addressed, either in part or in full. *Roadmap 2.0* success will require the combined support, leadership, and participation of all Arizona stakeholders.

> "I believe that our common commitment to put the patient first will help us put competition aside and drive adoption of interoperability and content standards to enable more complete information at the point of care."
>
> *– Tony Fonze*
> *President & CEO*
> *St Joseph's Hospital*

Roadmap 2.0 is not a static document. It is a prescription for action that sets the trajectory for using technology to support health care transformation. Arizona has established a solid foundation, and the roadmap offers a realistic and actionable plan for health care transformation through HIT/HIE. Now, it is up to the health care stakeholder community to step up to the challenge and build on that foundation to deliver the capabilities needed for health care transformation. The path forward has been defined – now it is time to work together to meet the challenge of true transformation.

Roadmap 2.0 Initiatives

STAKEHOLDER ENGAGEMENT & PARTICIPATION

01 – Stakeholder Engagement and Collaboration
Continues current, and develops and implements new, programs that promote statewide multi-stakeholder engagement and collaboration.

02 – Stakeholder Information and Education
Continues current, and develops and implements new, HIT/HIE educational and outreach programs for the various health care stakeholder segments.

GOVERNANCE, POLICY, & PLANNING

03 – Statewide Governance of Health Information Exchange
Refines and clearly describes the roles, responsibilities, and accountabilities of the AzHeC and HINAz boards and the State of Arizona related to statewide HIT/HIE within the public-private partnership governance model.

04 – Interoperability and Content Standards Agreement and Adherence
Ensures that Arizona uses HIT/HIE interoperability and content standards for the exchange of health care information.

05 – Statewide Unique Patient Identifier
Explores the feasibility for alternative approaches for identifying a patient.

06 – Incentives to Support Continued Expansion of HIT/HIE
Builds upon current programs for incenting providers to adopt HIT and participate in HIE. Explores and identifies innovative ways to incent providers to continue to adopt and/or mature their use of HIT/HIE.

07 – Collaboration and Support for Broadband Access
Coordinates information on broadband access assistance available to health care providers.

08 – Influence HIT and HIE Vendors
Develops an approach to help Arizona providers bring their needs to the attention of HIT and HIE vendors and promotes the development of appropriate solutions to address those needs.

09 – Statewide Vision and Framework for HIE
Develops the process and provides the content for Arizona's ongoing vision for health information exchange.

STATE LEVEL HIT/HIE BUSINESS INFRASTRUCTURE

10 – HIT/HIE Program Information and Collaboration Office
Establishes an office and formalizes a program to gather and disseminate information on HIT/HIE related tools and activities.

11 – Statewide HIE Rollout, Onboarding, and Use
Develops and implements a plan to expand the rollout, onboarding, and use of the statewide HIE services.

Roadmap 2.0 Initiatives

12 – HIT/HIE Assistance to Providers

Continues, and develops and implements new, programs to assist health care providers adopt and expand the use of HIT/HIE.

PRIVACY & SECURITY

13 – Patient Consent Approach

Creates a common approach that can be used statewide for complying with patient consent requirements. Ensures alignment with state and federal regulations relating to consent for securely sharing physical and behavioral health information.

TECHNOLOGY

14 – Statewide HIE Services and Technical Architecture Description

Creates and maintains a resource that describes the services provided by the statewide HIE (functional description), and the statewide HIE technical architecture (technical description).

15 – HIE Consent Management Engine

Develops a technical infrastructure to support the common statewide patient consent approach and processes identified in *Initiative 13 – Patient Consent Approach*.

16 – Statewide MPI/RLS Expansion

Explores opportunities to leverage the statewide HIE master patient index (MPI) / record locator service (RLS) technical framework.

17 – Tools to Support Public Health Reporting

Develops a strategic approach that uses HIT/HIE tools and resources, including the statewide HIE, to streamline the sending and receiving of data between ADHS and providers.

18 – Tools and Support for Health Care Transformation: Care Coordination, Analytics, and Emerging Technologies

Develops a resource to gather and provide information on tools that support health care transformation, including the alignment with new payment models. As needed, develops community-wide strategies for tool implementation.

19 – Integrated Physical and Behavioral Health Information Exchange

Creates and implements a strategy for the integrated sharing of information between behavioral health and physical health care providers.

INTRODUCTION

Health care transformation is an important goal for Arizona. *Arizona's Health IT Roadmap 2.0* describes what Arizona needs to put in place – from a health information technology/health information exchange (HIT/HIE) perspective – to enable efforts that support health care transformation. Implementing these initiatives will continue to move Arizona towards a health care environment that supports the Triple Aim of better care, better outcomes, and lower costs.

During the course of developing the roadmap, a significant change in the Arizona Health-e Connection (AzHeC)/Health Information Network of Arizona (HINAz) relationship occurred. There was a clear message from Arizona health care stakeholders regarding the potential synergies that could result from a closer association between these two organizations. As a result of this, the boards of both organizations investigated options for closer alignment. In early 2014, the boards of both organizations approved a formal affiliation. The new model is a direct reflection of the voice of Arizona health care stakeholders.

This organizational change occurred late in the process of developing the roadmap. To ensure alignment between *Roadmap 2.0* and the newly created business plans of AzHeC and HINAz, the project team reviewed the initiatives and modified them where necessary.

There are three essential strategies that will guide the continued adoption and advancement of HIT/HIE in Arizona. They are:

- Continue to support physicians and other providers in their adoption and use of technology
- Accelerate and expand the secure sharing of health information among health care providers
- Continue to coordinate and convene health care stakeholders to develop approaches that meet evolving HIT/HIE business needs

There are five major sections in *Roadmap 2.0*. Each section provides insight into how Arizona can leverage its successful HIT/HIE accomplishments, focus on the key priorities, and continue to support its journey to health care transformation.

> "We are witnessing rapid change in how all providers will be paid, change that requires better information sharing to enable improved care coordination. The next two years will be a critical time to remove barriers and facilitate health information exchange for Arizona providers."
>
> *– Ken Adler, MD*
> *Medical Director*
> *Arizona Community Physicians*

The *"Background"* section provides a review of the current HIT/HIE environment in Arizona. It also describes the many activities and initiatives Arizona has undertaken through the years that show both the State's and the health care community's dedication to advancing HIT/HIE. Since the first roadmap was released in 2006, Arizona and the nation have invested large amounts of resources and funding to encourage HIT/HIE adoption and use. The results for Arizona are impressive.

The *"How Roadmap 2.0 Was Created"* section describes the approach that the project team used to develop the roadmap. Ensuring broad health care stakeholder representation was a principle that guided every step. The multiple avenues designed to encourage stakeholders to provide input and receive updates on the creation of this roadmap supports this focus on stakeholder inclusion.

The *"Going Forward – Initiatives"* section describes the 19 initiatives that Arizona needs to put in place, from an HIT/HIE related perspective, to enable efforts that support health care transformation. Implementing these initiatives continues to move Arizona towards a health care environment that supports better care, better outcomes, and lower costs.

> "As the largest insurer in the State of Arizona, AHCCCS has been and continues to be a strong supporter of ongoing community efforts to leverage better health information technology and exchange as a way to bend the cost curve and improve quality for our members and all Arizonans."
>
> *– Tom Betlach*
> *Director, AHCCCS*

The *"Funding"* section recognizes that finding the resources to support the initiatives may be a challenge. It will require the efforts of all stakeholders working together to be successful. While there is no funding budgeted for some of the initiatives, this section presents approaches for Arizona to take to obtain the resources necessary for *Roadmap 2.0* implementation.

> "The *Roadmap 2.0* process has been successful in developing consensus on how to collaboratively advance health information technology and health information exchange in our great state. More importantly, it has reaffirmed that we should have one broad-based organization with a history of success, Arizona Health-e Connection, that leads this collaborative process."
>
> *– Dave Kempson*
> *Director of Data Strategy/Ops & Business Systems*
> *Apps, Blue Cross Blue Shield of Arizona*

Lastly, the section on *"Next Steps"* provides a list of actions Arizona should take to ensure that *Roadmap 2.0* is implemented and Arizona continues its progress towards enabling health care transformation.

SECTION

3

BACKGROUND

Arizona has a rich history of supporting and promoting HIT/HIE. It recognized early that a statewide infrastructure to exchange health information electronically would improve the quality and reduce the cost of health care in Arizona. Significant progress has been made over the last eight to ten years. This section provides a brief overview of that progress.

The 2006 Arizona HIT/HIE Roadmap

In 2006 Arizona published its first HIT/HIE roadmap, the "Arizona Health-e Connection Roadmap" (referred to as *Roadmap 1.0* in this document). This roadmap was developed as a result of the 2005 gubernatorial executive order to develop a strategy to achieve a vision of electronic health technology adoption and data exchange among all payers, health care providers, health care consumers, researchers, and government agencies, as appropriate. It was supported by broad stakeholder engagement and commitment to developing and implementing that strategy.

Perhaps one of the most significant *Roadmap 1.0* initiatives was the establishment in 2007 of Arizona Health-e Connection (AzHeC). AzHeC is a public-private partnership, a statewide non-profit, that drives the adoption and optimization of HIT/HIE.

Many of the initiatives defined in *Roadmap 1.0* have been completed or have been initiated and are still ongoing. *Roadmap 1.0* provided the foundation for many of the HIT/HIE initiatives within the state and established a solid foundation upon which today's approach to HIT/HIE in Arizona was built. (See table on next page for details.)

The pace of change in health care has been exponential since the first roadmap was published. Statewide activities and initiatives have been inspired and/or supported (and in some cases, mandated) by federal regulations, legislation, or grant funding.

> "The partnership between Arizona Health-e Connection and the State of Arizona has successfully promoted broad-based community collaboration to advance health information technology and health information exchange in pursuit of the triple aim of better care, better outcomes and lower costs."
>
> *– Don Hughes*
> *Deputy Director of Policy*
> *Office of the Governor*

The following table shows the status of initiatives launched by *Roadmap 1.0*.

Status of Roadmap 1.0 Initiatives		
DOMAIN	**KEY INITIATIVES**	**STATUS**
Stakeholder Engagement	• Through the Clinical Task Group, engage a broad range of stakeholders to determine priorities for needed capabilities	Complete
	• Develop a Marketing Plan to maintain project momentum and generate enthusiasm, with associated presentations	Complete
	• Develop and distribute a quarterly newsletter	Ongoing
	• Develop an Education Plan, including development of materials to help communities and regions get started	Ongoing
	• Market and educate the health care community about Health-e Connection	Ongoing
	• Encourage HIT/HIE Adoption	Ongoing
	• Identify and approach Arizona Medical Trading Areas (MTAs)	Not Pursued
Governance	• Establish the Health-e Connection organization	Complete
	• Develop a shared vision statement, guiding principles and operations of a statewide collaborative	Complete
	• Coordinate with current Arizona HIT initiatives	Ongoing
	• Develop a participation structure to develop consensus about the overall technical approach	Ongoing
Business & Finance	• Develop a statewide strategic and business plan	Complete
	• Identify and establish additional sources of funding	Ongoing
	• Identify and establish baseline measures for Health-e Connection outcomes	Ongoing
	• Obtain Health-e Connection outcome measurements	Ongoing
Privacy Security & Legal	• Develop model participation agreements	Complete
	• Identify examples of best practices from other regions	Complete
	• Identify specific legal actions required including whether statutory or regulatory amendments are needed	Complete
Technology	• Develop Arizona's statewide web portal with security infrastructure components	Complete
	• Pilot a basic patient health summary	Complete
	• Establish an HIT adoption plan	Complete
	• Implement statewide patient locator	Complete
	• Implement secure messaging	Ongoing
	• Develop a provider directory, master patient index and begin data transformation	Ongoing
	• Enhance Public Health functions	Ongoing
	• Establish the first MTA information exchange with a results delivery service	Not pursued
	• Provide guidance to first MTA information exchange for enhanced services	Not pursued
	• Enhance the patient health summary with data from MTAs	Not pursued
	• Develop statewide personal health record access	Deferred
	• Add functions for oral health and other healthcare professions	Deferred

The table below highlights many of the key initiatives that were launched or funded by Arizona or Federal programs. See APPENDIX A: Background, "Federal HIT/HIE Initiatives Key to Arizona's Progress" for a more detailed description of the key federal programs that supported Arizona's progress.

Key Initiatives Launched by Arizona or Federal Programs

ARIZONA

2006	2007	2008	2009	2010	2011	2012	2013
GITA receives $350K grant to participate in HISPC Health-e Connection Roadmap published	AzHeC established to spearhead HIT efforts AHCCCS receives two Medicaid Transformation Grants totaling $16M for HIT/HIE AHCCCS initiates project to conduct HIE proof of concept RHITA rural program awards $1.5M for enabling HIT ASU CHiR begins annual Arizona physician EMR survey Arizona Telemedicine Program shares in a $16M grant for the SW Telehealth Access Grid	AMIE initiates proof of concept GITA receives an additional $414K HISPC contract award AzHeC leads EAzRx, Arizona's statewide e-prescribing initiative RHITA program awards $1.4M for rural RHIO planning	RHITA program awards $900K for rural HIT/HIE efforts AMIE and SAHIE merge to form HINAz AzHeC conducts statewide consumer focus groups	AzHeC receives $12M grant to develop Arizona REC Arizona receives $9.3M under the State HIE Cooperative Agreement Program ASET strategic and operational plans for ONC SHIECAP are approved and implemented	AZ HB 2620 removes barriers to HIE HINAz announces launch of robust HIE in Arizona AzHeC creates Arizona HIE Marketplace AHCCCS makes first EHR Incentive Payments to eligible hospitals	ASET awards the statewide HIE Core Services contract to HINAz AZ HB 2369 allows EPCS in AZ REC reaches goal of enrolling 1,958 primary care providers ASET offers Unconnected Providers Grant Program AzHeC launches the Arizona e-prescribing initiative AHCCCS makes first EHR incentive payments to eligible professionals	Medicare/ Medicaid EHR incentive payments pass $300M HINAz Privacy and Security Assessment conducted eHealth4AZ campaign launches ASET offers Enterprise HIE Grant Program Public Health initiates Meaningful Use strategies Arizona's Health IT Roadmap 2.0 project launches

FEDERAL

2006	2007	2008	2009	2010	2011	2012	2013
CCHIT certifies first 37 ambulatory EHRs HITSP publishes first set of interoperability specifications ONC announces support for trial implementations for the NHIN	HHS awards $22.5M to test and implement nine prototype HIEs FCC launches Access to Health care in Rural America through Broadband Telehealth	HHS releases Federal HIT Strategic Plan 2008-2012 ONC and OCR jointly release HIT privacy and security toolkit CMS MIPPA establishes regulatory standards and provider incentives for e-prescribing	President signs American Recovery and Reinvestment Act HITECH Act promotes adoption of EHR and HIE CMS Meaningful Use program is initiated President's Council of Advisors on Science and Technology is formed CMS e-prescribing incentives go into effect	Patient Protection and Affordable Care Act (PPACA) is signed into law ARRA funds SHIECAP and REC programs Meaningful Use Stage 1 – Final Ruling DEA issues final rule permitting e-prescribing of controlled substances	Beacon Community Program begins CMS announces the first 32 Medicare Pioneer ACOs	CMS announces the first 27 Medicare Shared Savings program recipients CMS announces additional Medicare ACOs	Meaningful Use Stage 2 Final Ruling OCR announces the Final Omnibus HIPAA rule

Arizona HIT/HIE Projects

This section highlights many of Arizona's HIT/HIE projects to date. They are grouped into six key areas:

- Governance
- Privacy & Security
- E-prescribing (eRx)
- Electronic Health Records (EHRs)
- Health Information Exchange (HIE)
- Consumer engagement

■ GOVERNANCE

Arizona has a strong history of collaboration between public and private health care stakeholders. The state promotes community involvement in planning and decision-making regarding the strategic approach and implementation of HIT/HIE. The three entities who lead this effort in Arizona are:

- Arizona Health-e Connection
- Health Information Network of Arizona
- State of Arizona

Arizona Health-e Connection

Arizona Health-e Connection (AzHeC) is a public-private partnership that improves health and wellness by advancing the secure and private sharing of electronic health information. Incorporated in 2007, AzHeC drives the adoption and optimization of HIT and HIE. The primary roles it performs include: serving as an educator and clearinghouse for HIT information; researching, developing and advocating statewide HIT policies; and leading and supporting provider adoption of HIT and HIE across Arizona. AzHeC's largest program, the Arizona Regional Extension Center (REC), has assisted over 2,800 Arizona providers in adopting EHRs and achieving Meaningful Use since its creation in 2010.

Health Information Network of Arizona

The Health Information Network of Arizona (HINAz), a collaborative effort of major health care entities in Arizona, was formed in 2010 as two regional health information organizations (HIOs) came together with a vision to support the exchange of health information across the state of Arizona. HINAz provides secure sharing of health information among authorized health care providers, improving health care coordination, quality, and safety while reducing costs. HINAz is Arizona's largest and only statewide HIO. As of December 31, 2013, it had 37 participating organizations, consisting of 12 hospitals, 7 health plans, 3 community health centers, 1 reference lab, 7 community providers, 3 long term care facilities, and 2 county corrections departments.

State of Arizona Government

Three State agencies are involved in HIT/HIE in Arizona: Arizona Health Care Cost Containment System (AHCCCS) – the State's Medicaid agency, Arizona Strategic Enterprise Technology Office (ASET), and Arizona Department of Health Services (ADHS). ASET provided programmatic oversight to the ONC State HIE

Cooperative Agreement Program (SHIECAP). Arizona's State HIT coordinator reports to both AHCCCS and ASET to ensure coordination and alignment between Medicaid, Public Health, and ASET information technology efforts.

In addition, the State of Arizona has a presence on the Board of Directors of AzHeC and HINAz. Today the State continues to support the public-private governance model created and supported by Arizona's health care stakeholders.

■ PRIVACY AND SECURITY

Arizona takes a collaborative and transparent approach to statewide health IT policy development. The State and AzHeC collaborated to convene key stakeholders to participate in national and federal initiatives and then to leverage the results of those efforts in Arizona.

Examples of HIT/HIE privacy and security efforts in Arizona include:

- Arizona Health Privacy Project
- AzHeC Legal Committee
- HINAz Privacy & Security Assessment

Arizona Health Privacy Project
In 2006, Arizona received $350K from the Agency for Healthcare Research and Quality (AHRQ) to participate in the Health Information Security and Privacy Collaboration (HISPC) grant program. Much of this work laid the foundation for the privacy and security standards and processes in Arizona today. In 2008, an additional $414K was received to continue that work.

AzHeC Legal Committee
Since its inception, AzHeC has led statewide health IT policy development. A legal committee was established to investigate and address Arizona statutory and regulatory areas that might need to be modified to facilitate the secure sharing of health information. The committee discovered that many Arizona business practices relating to health information privacy were actually stricter than HIPAA required. To address this issue, the committee developed a model participation agreement as a guide for organizations planning HIE participation.

AzHeC has also led and supported multi-stakeholder efforts to draft and pass legislative bills. The bills supported include:

- **House Bill (HB) 2620** – HB 2620 was passed into law in 2011. This bill removed barriers and established rules and regulations for the secure exchange of health information in Arizona. It also specified that an opt-out patient consent approach is required for patient information exchanged via an HIO.
- **House Bill (HB) 2369** – Subsequent to the 2010 federal Drug Enforcement Agency (DEA) rule allowing electronic prescribing of controlled substances (EPCS), the legislature passed HB 2369 into law in 2012 making EPCS legal in Arizona. The bill also enhanced state statutes relating to HIT.

HINAz Privacy and Security Assessment

In 2013, ASET worked with HINAz to determine their level of compliance with the (then) upcoming HIPAA/Omnibus rule. This was an important step to ensure continued trust and participation in HIE.

Through a series of workshops and meetings, independent privacy/security consultant experts conducted an analysis of HINAz's capacity to manage and operate their privacy and security program. HINAz was able to address and close the gaps that were identified to ensure it was in compliance with the September 23, 2013 compliance date. HINAz continues to strengthen its security program by involving its participants and business associates.

In 2014, the statewide HIE will conduct a mock audit of its privacy and security policies and procedures. An independent consultant will conduct the audit to ensure a high level of confidence and transparency in the results.

■ E-PRESCRIBING

Over the last decade, Arizona has experienced a high rate of adoption of e-prescribing (eRx). As of September 2013, Arizona's eRx rate was above the national average with nearly 60% of all Arizona prescriptions being routed electronically. Many initiatives have contributed to this success. Examples of programs which have directly impacted eRx rates in Arizona include:

- EAzRx Program (2008-2009)
- Arizona E-prescribing Initiative (2013)
    - E-prescribing Outreach and Technical Assistance
    - Community Pharmacy Financial Support
    - E-prescribing of Controlled Substances (EPCS)

EAzRx

In 2008, AzHeC created the EAzRx Steering Committee to implement eRx strategies across the state. This initiative was partially funded by a UnitedHealthcare grant. The goal was to achieve an eRx rate of nearly 100% among eligible prescribers by 2013. The governor supported this initiative by issuing an executive order that directed state agencies to work with AzHeC and EAzRx to educate providers and employers about the benefits of eRx, increase the use of eRx in the contracted health plans of the state agencies, and to identify barriers and make recommendations to address them.

2013 Arizona E-prescribing Initiative

The Arizona E-prescribing Initiative, a statewide eRx program supported by SHIECAP funding and led by AzHeC, set three goals to be achieved by the end of 2013:

- 70% of all Arizona prescriptions will be electronically routed to pharmacies
- 60% of all Arizona prescribers will route prescriptions electronically
- 100% of Arizona pharmacies will have and use eRx capabilities

The following projects were part of the Arizona E-prescribing Initiative:

- *E-prescribing Outreach and Technical Assistance Program*
  Provided monthly education, newsletters, bulletins and alerts, and worked with pharmacies and providers one-on-one to address adoption issues.

- *Community Pharmacy Financial Support Program*
  Provided funding to independent, community pharmacies not currently accepting e-prescriptions to help them implement and enable eRx.

- *E-prescribing of Controlled Substances Program*
  Developed a campaign to increase the awareness and use of eRx of controlled substances (EPCS). Under the program, qualifying providers received $200 to offset EPCS identity proofing costs. Arizona pharmacies have rapidly upgraded their systems and adopted EPCS certified technology since the outreach began.

Arizona eRx Progress

The eRx rate of adoption has seen tremendous progress in Arizona.

Growth in eRx
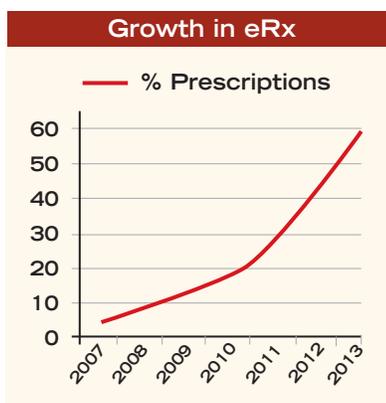
— % Prescriptions

Arizona eRx Status[1,2]

- ■ 60% of all prescriptions were electronically routed.
- ■ 63% of all prescribers routed prescriptions electronically (up from 2.89% in 2008).
- ■ 99% of all pharmacies have and use eRx capabilities.

Arizona EPCS Status[3]

- ■ Nearly 13,500 prescriptions for controlled substances were sent electronically by December 2013, compared to May 2013, which had only 196 EPCS transactions. This is a growth rate of more than 6,700%.

- ■ The number of providers who met the criteria to e-prescribe controlled substances in Arizona has grown significantly – from 16 providers in May 2013 to 196 providers by the end of 2013. This is an increase of more than 1,000%.

Growth in EPCS

AZ EPCS Transactions
Certified EPCS Providers
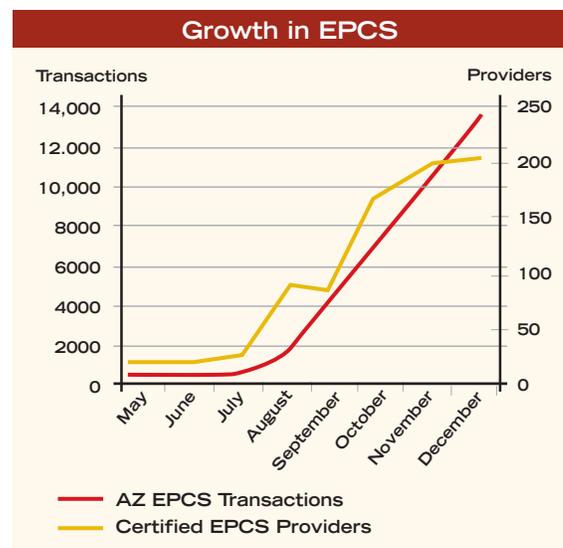
1 State Progress Report on e-Prescribing - Arizona, Surescripts 2013, Data as of 12/31/12
2 Arizona State HIE PIN Performance Measure Data, ONC, March 2013, Data as of 12/31/12
3 Data reports from SureScripts, LLC as of December 2013

■ ELECTRONIC HEALTH RECORDS

It is essential to capture patient information electronically to be able to readily share it with other providers. In 2013, Arizona achieved approximately 80% provider EHR implementation rate. Examples of programs which have influenced EHR adoption in Arizona include:

- Rural Health Information Technology Adoption Program
- Arizona Regional Extension Center
- Medicare and Medicaid EHR Incentive Programs
- Arizona State University Center for Health Information and Research Survey

Rural Health Information Technology Adoption

In 2007, Arizona Governor Napolitano established the Rural Information Technology Adoption (RHITA) grant program to increase the adoption of health information technology among rural health care providers and to facilitate health information exchange. This program focused on 30 communities targeting the implementation of EHRs, core IT systems and home health telehealth programs. The program was funded at nearly $4 million from 2007 to 2009.

Arizona Regional Extension Center (REC)

In April 2010, AzHeC was awarded a $10.8 million grant (later increased to $12 million) by the Office of the National Coordinator for Health Information Technology (ONC) to develop the Arizona Regional Extension Center (REC) to assist Arizona health care providers adopt EHRs and achieve Meaningful Use incentives. The REC offers membership and "hands-on" technical assistance services to qualified health care providers. To date, the REC has supported over 2,800 Arizona providers in adopting EHRs and achieving Meaningful Use.

Medicare and Medicaid EHR Incentive Programs

Meaningful Use incentives are administered by CMS for the Medicare program and by AHCCCS for the Arizona Medicaid program. Eligible professionals must choose one program; however, eligible hospitals may attest and receive incentives from both programs.

As of November 2013, there were 9,043 eligible professionals and 76 eligible hospitals who had registered for EHR incentives in Arizona; and nearly $320 million in incentive payments have been distributed.

Meaninful Use Incentive Payment Status				
Provider Type	Medicaid		Medicare MU**	Total
	A/I/U*	MU**		
Eligible Professionals	$51,134,593	$ 2,738,419	$65,296,146	$119,169,158
Eligible Hospitals	$76,799.226	$28,775,716	$94,087,798	$199,662,740
*Adopt/Implement/Upgrade **Meaningful Use				$318,831,898

Arizona State University Center for Health Information & Research Survey

In 2007, the Arizona State University Center for Health Information & Research (CHiR) was commissioned by AHCCCS (and later by ASET) to survey Arizona's physicians to determine the current status of their EHR adoption, how they use their EHR systems, and for those that have not yet adopted systems, their future plans and the barriers that might keep them from acquiring/using EHR systems. The Arizona Medical Board and the Arizona Board of Osteopathic Examiners have supported CHiR in this research. Since 2012, the two licensing Boards have included this electronic survey as part of the license renewal process. By 2013, survey response rates were over 90%.

EHR Adoption[4]*:* Results have been dramatic. The percentage of Arizona physicians using EHRs increased from approximately 45% in 2007-2009 to approximately 80% in 2012-2013. The current trend suggests that, with very few exceptions, all Arizona physicians will be using EHRs by 2018.

Growth in EHR Adoption Rate

% EHR Adoption

■ HEALTH INFORMATION EXCHANGE

To achieve better care, better outcomes, and lower costs, health care providers must have access to the most current patient information regardless of what provider or facility the patient has visited. Health information exchange efforts have been ongoing in Arizona since 2004. Examples of programs which have influenced HIE adoption include:

- Arizona's HIE organizations
- Arizona HIE Cooperative Agreement Program
- Meaningful Use Stage 2
- New payment models

Arizona's Health Information Exchange Organizations

In 2004, the Southern Arizona Health Information Exchange (SAHIE) formed when the health care community in southern Arizona began to explore the possibility of a regional health information organization to improve access to patient information.

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4 Johnson WG, Harootunian G, Sama TL. (October 2013). Phoenix (AZ): Arizona State University, Center for Health Information & Research. Physicians' use, exchange, and evaluation of electronic medical records (PDF)

In 2007, AHCCCS received $16 million in federal funding through two Medicaid Transformation grants to fund HIT and HIE projects for Medicaid in Arizona. A portion of the grant helped form a web-based HIE called Arizona Medical Information Exchange (AMIE). AMIE later became a separate non-profit organization.

In 2009, the board members of AMIE decided to suspend technical operations to pursue a vision of developing a single state level HIE by partnering with SAHIE. The Health Information Network of Arizona (HINAz), a public-private partnership, was formed as a result of this consolidation. At the time that AMIE decided to suspend technical operations, there were 3.1 million patient records in the master patient index and it was providing up to 10 different types of records.

Arizona HIE Cooperative Agreement Priority Areas

In March of 2010, Arizona was awarded $9.3 million through the ONC State HIE Cooperative Agreement Program (SHIECAP). This funding provided a catalyst to develop the necessary infrastructure for Arizona's HIE capability. The grant was managed and overseen by the Arizona Strategic Enterprise Technology (ASET) office within the Arizona Department of Administration (ADOA).

Six program priority areas were identified for the SHIECAP funding. See APPENDIX A: Background, "Arizona Health Information Exchange Projects" for a more complete description of SHIECAP programs not described later in this section.

Arizona SHIECAP Priority Areas	
Develop Sustainable Exchange Marketplace • HIE Marketplace • Direct Secure Messaging	**HIE Core Services RFP** • Governance • Master Patient Index / Record Locator Service • Provider Directory
Foster Robust HIE Sub-Grant Program • Unconnected Providers – HIE Planning and Connectivity • Enterprise Expansion of HIE	**Support Policy Development** • Environmental Scans • Arizona Stakeholder Interviews • *Arizona's Health IT Roadmap 2.0* • ASU/CHiR Provider Adoption Survey
Coordinate State and Federal Partners • Arizona Public Health Preparation for Meaningful Use • Coordinate Outreach to Federal Organizations: Indian Health Services, Veterans Administration and Social Security Administration	**Provider and Consumer Outreach and Education** • Arizona E-prescribing Initiative • Consumer Education/Outreach Campaign • Provider Outreach

Meaningful Use Stage 2

With the announcement of Meaningful Use Stage 2 criteria, the requirements for HIE were expanded. Key updates related to HIE included more aggressive targets for data sharing for transitions of care, sharing health information with patients and electronically submitting public health data.

New Payment Models

New payment models have also driven the exchange of health information across large integrated delivery networks and extended networks, as well as closer payer/provider collaboration. In 2011, CMS announced the first 32 Pioneer Accountable Care Organizations (ACOs). These organizations were charged with improving the quality of care and reducing Medicare expenditures through shared accountability and cost-savings. Banner Health was one of the first Pioneer ACOs named in 2011. By 2014, CMS announced an additional eight ACOs in Arizona.

Commercial payers have also formed ACOs with many Arizona hospitals and provider groups. To support these efforts, many health systems, and large provider groups have invested in HIT/HIE. Some have implemented internal or private HIE infrastructure to support secure electronic exchange with both affiliated and non-affiliated providers.

■ CONSUMER AND PATIENT ENGAGEMENT

Consumers are beginning to become more engaged in their health and health care, but there is still much to be done to educate and engage consumers and patients.

Arizona has a history of encouraging consumers to not only take charge of their own health care, but also to become involved in helping the community and the state chart a path forward. Consumers and consumer representatives have been active participants in workgroups, AzHeC and HINAz boards, and other related HIT/HIE activities. Arizona is committed to ensuring that the patient remains at the center of initiatives and has a "seat at the table."

Examples of programs which have focused on consumer and patient engagement in Arizona include:

- AzHeC Consumer Advisory Council
- eHealth4AZ Campaign

AzHeC Consumer Advisory Council

The AzHeC Consumer Advisory Council was established to provide a forum for consumer education, comment, and participation in the development of consumer stakeholder feedback on principles, standards, and initiatives relating to the electronic transfer of personal health information. Formed in 2009, the council consisted of individuals from all walks of life, especially those who are not directly affiliated with the health care industry. The council addressed issues such as the privacy and security of personal health information and electronic exchanges, consumer control of electronic personal health information, consumer access to electronic health information, and consumer education regarding HIT/HIE. The council provided recommendations and assisted with distribution of information to the community. Most importantly, the council ensured that the consumer voice was incorporated into all aspects of HIT/HIE planning and development at AzHeC.

eHealth4AZ

In 2013, ASET funded a consumer education and engagement project through the State HIE Cooperative Agreement Program. The project kicked off in April 2013 with a focus on developing and executing a community-wide consumer education and awareness campaign. The resulting campaign, eHealth4AZ, was launched in November 2013. The campaign was guided by a Consumer Connections Task Force, which included over 50 health care and consumer advocacy organizations. The campaign focused on raising awareness of the consumer benefits of eHealth tools such as EHRs, eRx, patient portals, the secure sharing of patient information, and the progress being made in Arizona in these areas.

eHealth4AZ included a coordinated public relations and advertising initiative aimed at raising awareness of health IT tools and resources. The focal point of this campaign is a consumer website, www.ehealth4az.org.

> eHealth4AZ produced a video that is available at www.ehealth4az.org to get reactions from patients who have experienced the benefit of ehealth tools – electronic health records, patient portals, e-prescribing and electronic health exchange. Here is a sampling of what they said:
>
> • "I think it's the future. I think that people want to have access to their medical records at their fingertips and access at any time."
> *– Sarah O.*
>
> • "I get the lab results online, and they're password protected. I think it gets rid of a lot of paperwork….Electronic health care means better health care for me and for my family."
> *– Shirley Y.*

While the funding for the campaign ended in December 2013, there is great interest in continuing the work of the Consumer Connections Task Force in 2014 and beyond.

SUMMARY

As a result of the progress already made, and with strong health care stakeholder collaboration to support its efforts, Arizona is well-positioned to continue progress in HIT/HIE. These efforts will ensure Arizona's continued position as a health care leader.

With this solid progress in HIT/HIE as a backdrop, Arizona launched the *Roadmap 2.0* project to update the vision for HIT/HIE in Arizona and chart a path forward.

HOW *ROADMAP 2.0* WAS CREATED

The project to develop *Roadmap 2.0* spanned almost a year. Hundreds of individuals and organizations – from public and private sectors across Arizona – participated and contributed their time and expertise to this effort.

The *Roadmap 2.0* core project team consisted of the State HIT Coordinator and the principals of both Arizona Health-e Connection (AzHeC) and Mosaica Partners, a national health information exchange consulting firm.

The project was run by the core project team and guided by an Executive Council. While working together as a team, each of the core team member organizations also had specific roles to play in the project.

The Executive Council was comprised of recognized leaders in Arizona's health care community and represented a wide range of interests and expertise. This group provided guidance and independent oversight to the project, acted as a sounding board, and provided insightful review of the project's activities and its outputs.

Roadmap 2.0 Executive Council Members

David Dexter, Chair
President & CEO
Sonora Quest Laboratories

Kenneth Adler, MD *Medical Director* Arizona Community Physicians	**Tony Fonze** *President & CEO* St. Joseph's Hospital
Thomas Betlach *Director* AHCCCS	**David Kempson** *Director of Data Strategy/Ops &* *Business Systems Apps** BCBS of Arizona
Don Hughes *Deputy Director of Policy* Office of the Governor	**Scott Whyte** *VP, IT Connectivity** Dignity Health

* Job titles at the time of participation in *Roadmap 2.0*.

The State HIT Coordinator provided guidance and input to the *Roadmap 2.0* project. This ensured that *Roadmap 2.0* leveraged prior work in both the public and private sectors and represented a broad, statewide view.

AzHeC acted as the public face and voice of the project and served as the convener and coordinator of health care stakeholders. One of AzHeC's key roles was to engage and inform the health care community and the public at large. AzHeC also contributed expertise regarding HIT/HIE in Arizona.

Mosaica Partners was responsible for guiding the project through a structured approach that would result in a relevant, action-oriented HIT/HIE roadmap. Mosaica provided experience and expertise in HIT and HIE best practices and employed their proven HIT/HIE planning methodology to guide the *Roadmap 2.0* development process.

Vision and Mission

The *Roadmap 2.0* vision and project mission were developed by the core project team and the Executive Council. These set the stage and provide the context for the *Roadmap 2.0* initiatives.

VISION

Arizonans will experience an improved quality of health enabled by robust health information technology and exchange.

The vision is aspirational. It is the vision of the desired future state for Arizona as it relates to health care and the role of HIT/HIE.

The project mission describes the role the *Roadmap 2.0* will play in moving Arizona towards its vision.

MISSION

Determine the roadmap for Arizona to establish effective, efficient health information and exchange.

Principles and Objectives

Agreed upon principles and objectives provided the direction and guidance for the project.

Principles

The following principles, developed by the project team and supported by the Executive Council, permeated the planning, activities and results of *Roadmap 2.0*.

- Ensure broad-based ongoing health care stakeholder involvement
- Ensure that the roadmap addresses statewide HIT/HIE needs
- Enable and advance the use and adoption of HIT/HIE in Arizona
- Leverage Arizona's prior work and investments in HIT/HIE
- Create achievable, actionable, and practical initiatives

Objectives

The objectives were developed by the core project team, refined by the Executive Council, and commented on by key stakeholders. As used in *Roadmap 2.0*, objectives are statements that describe what Arizona needs to achieve to realize its vision.

- Patients receive safe, effective care every time
- Health outcomes are optimized
- Coordinated care is the standard
- Efficient, effective care processes are enabled by health information sharing
- Appropriate health information is available at the point(s) of care for all patients
- All health care stakeholders can securely exchange health care data
- Patient information is shared in accordance with privacy and security regulations
- Medical errors are reduced
- Unnecessary duplicative medical procedures are reduced
- Compensation and incentives are aligned with the Triple Aim
- Policies and regulations are better aligned to support quality care
- Health care data supports analysis of patient outcomes for quality improvement
- Statewide health information exchange is effectively used
- Patients are engaged and accountable
- Treatment choices are informed by value

Approach Used to Develop *Roadmap 2.0*

The project team was committed to developing *Roadmap 2.0* in the most open, transparent, and inclusive manner possible. Significant effort went into ensuring broad participation by Arizona's health care community. This inclusive approach was essential for the roadmap to: accurately reflect the status of HIT/HIE in Arizona, describe the aspirations of Arizona's health care community, identify gaps and barriers that need to be addressed, and develop relevant, actionable initiatives.

> " I am encouraged that the Health IT Roadmap is seeking a variety of perspectives. In the end, that will help lead to a comprehensive approach."
>
> *– Curtis Page, MD*
> *CEO, Commonwealth ACO*
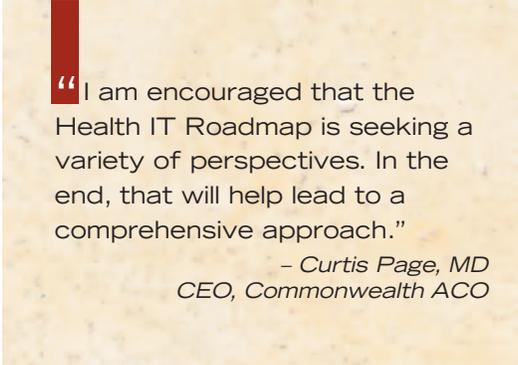
In addition to the members of the core project team and the Executive Council, participants represented a wide range of health care stakeholders from throughout Arizona.

More than 300 individuals – representing over 70 organizations – were involved in developing *Roadmap 2.0.*

There were several methods used during the development of the roadmap to ensure stakeholder engagement. Obtaining stakeholder input and ensuring good communication were two of the key drivers of many project activities. Specific activities focused on stakeholder participation and communication included:

- Community Information Sessions
- Meaningful Use Workshops
- Envisioning Workshops

- Community Survey
- Focused Workshops

A list of stakeholder participants can be found in APPENDIX B: How *Roadmap 2.0* Was Created, "List of *Roadmap 2.0* Participants."

Stakeholder Organizations Represented	
Health Care Providers 　Behavioral Health 　Hospital Systems 　Long Term / Post-Acute Care 　Physicians 　Other Providers	**Government Agencies** 　Corrections 　County Public Health 　Federal Partners – IHS 　Public Health – ADHS
Health Care Ancillary Providers 　Imaging 　Laboratories 　Pharmacy	**Other** 　AzHeC 　BHINAz 　Educational institutions 　HINAz 　Legal Counsel
Health Care Payers 　AHCCCS 　Commercial Payers	**Community** 　Open meeting attendees 　Survey respondents

Process

The approach that was used to develop *Roadmap 2.0* is based on accepted leading practices that are used in quality function deployment and Six Sigma projects worldwide. It was tailored by Mosaica Partners to meet Arizona's specific needs.

Community Information Sessions

There were two meetings in Phoenix (with remote access options) to which the community was invited. At these meetings, community members received project updates, asked questions, and contributed their perspectives. In addition, there was a presentation at the Western States Health-e Connection Summit & Trade Show where a project update was provided. Members of the project team were available at all sessions to answer questions and receive feedback.

Meaningful Use Workshops

Two Meaningful Use-focused workshops were held – one workshop with representatives from Arizona Department of Health Services (ADHS) and one with representatives from AHCCCS. Each workshop focused on what the respective organizations needed to have in place to support the EHR Incentive Programs (Meaningful Use).

> "We need to look at where we need to be for the patient. We may compete for business, but we need to coordinate the sharing of patient information."
>
> *– Jim Cramer*
> *CIO, Scottsdale Healthcare*

Envisioning Workshops

A wide range of health care stakeholders participated in a series of six envisioning workshops. The purpose of these workshops was to:

- Familiarize stakeholders with the *Roadmap 2.0* process
- Obtain their input on the capabilities that need to be present to achieve the *Roadmap 2.0* objectives
- Understand their perspective on potential issues/challenges in implementing the capabilities
- Understand what they viewed as the key elements for success of HIT/HIE in Arizona

The capabilities addressed in the workshops describe what Arizona must be able to do to achieve its objectives. The need for the capabilities and how Arizona will bring them about provides the framework for the subsequent activities in the project.

Community Survey

Following the envisioning workshops, the project team conducted a survey to test whether the findings of the workshops were reflective of the broader stakeholder community. A survey, based on the workshop findings, was distributed to over 3,000 individuals through AzHeC's distribution channels. The survey was available online for two weeks and produced 181 responses. The results of the survey showed that there was strong agreement between the workshop findings and the views of the broader stakeholder community.

Focused Workshops

Following the envisioning workshops, two additional workshops were held. These workshops focused on areas that are more detailed.

The first workshop focused on identifying what needs to be in place, from a technical, operational, and policy perspective, for the capabilities to exist. These are referred to as "enablers." This understanding – of what needs to be continued, improved, implemented, or discontinued – provided the framework for designing the initiatives.

The second workshop focused on obtaining stakeholders' input on a list of potential initiatives required to put the enablers in place. The resultant initiatives address the gaps between Arizona's current HIT/HIE environment and the environment required in the future. A timeline of the events, workshops, and activities that took place during the creation of *Roadmap 2.0* can be found in APPENDIX B: How *Roadmap 2.0* Was Created, "Events, Workshops, and Activities."

A summary of the approach used in creating this roadmap can be found in APPENDIX B: How *Roadmap 2.0* Was Created, "Summary of Roadmap 2.0 Creation Approach."

> "We are at the convergence of multiple forces, with changing payment models, the need to share information and the need to engage patients, and we need to collaborate to have a coordinated statewide plan."
>
> *– Kim Salamone*
> *VP Health Information Technology*
> *Health Services Advisory Group*

Through the work of the project team, the multiple stakeholder sessions, and the guidance of the Executive Council, 19 initiatives were identified. These initiatives are described in the next section.

THE PATH FORWARD – INITIATIVES

The results of the nearly year-long effort to create *Roadmap 2.0* are presented in 19 initiatives. These initiatives are recommendations for what Arizona needs to do to ensure it continues on its course to have the HIT/HIE capabilities in place that will enable its ongoing health care transformation.

The initiatives presented in this roadmap are the result of many factors identified and considered during the process of its development. Those factors include: Arizona's past and current efforts in HIT/HIE, the health care environment in Arizona, the national health care environment, broad input from Arizona health care stakeholders, and domain knowledge of best practices and emerging trends in HIT/HIE.

> "We are starting to stitch together a plan. We need to find incremental steps to begin to share patient information."
>
> *– Kelly Summers*
> *CIO, Maricopa Integrated Health System*

Programs, such as the EHR Incentive Programs, were also factored into the design of the initiatives to ensure that Arizona both builds the necessary capabilities to support providers and can take advantage of available program and funding opportunities.

Many of the *Roadmap 2.0* initiatives are interdependent and some may contain overlapping outcomes. Providing flexibility in how the initiatives can be implemented offers Arizona the ability to seek out and adapt to various funding opportunities.

The success of the initiatives is dependent upon the health care community in Arizona continuing on its course of collaboration, active participation, and the sharing of common goals. Throughout the development of the roadmap, health care stakeholders reaffirmed their willingness to collaborate.

Initiative Domains

The initiatives recommended in the roadmap are grouped into five domains.

> "We face serious resource issues, but this process can help prioritize what we should be doing."
>
> *– Bob England*
> *Director, Maricopa County Department of Health*

Stakeholder Engagement & Participation
Active stakeholder participation is critical to the success of HIT/HIE. Participation fosters an ongoing sense of ownership and trust, enabling the initiatives to succeed. Without stakeholder engagement, efforts will become confusing, uncoordinated, and eventually unproductive.

The initiatives in this domain establish the framework upon which a continuing dialogue with stakeholders can be maintained.

Governance, Policy, & Planning

A community-wide infrastructure that supports HIT and HIE must have a well-defined, supporting framework to be successful. This domain addresses key stakeholder issues that require statewide agreement and coordination across multiple public and private organizations. These initiatives create the fabric for seamless statewide exchange of health care information in Arizona.

- *Governance* – Trust is the key to success. Clear, transparent governance, especially in the HIE environment, is essential to establishing and maintaining the trust of stakeholders. Formalizing a statewide governance structure for HIE is a priority. With the affiliation of AzHeC and HINAz, it is critical to quickly establish and communicate the roles, responsibilities, and accountabilities of the organizations and describe how the State, stakeholders, and other public and private organizations will be involved.

- *Statewide Policy & Process* – Stakeholders require clarification on statewide issues as they develop their own business plans. Policies and processes relating to HIT/HIE need to be developed and communicated to stakeholders.

- *Planning for the Future* – With the basics in place, Arizona needs to develop and implement more sophisticated HIT/HIE capabilities that support health care transformation. Developing the vision of statewide HIT/HIE will provide the framework – and inform ongoing plans – for the new capabilities and services that Arizona health care stakeholders will require.

State Level HIT/HIE Business Infrastructure

HIT/HIE is changing at an ever increasing pace. It is essential that Arizona focuses on the coordination of HIT/HIE-related information and programs and on expanding the HIT/HIE services to providers. This domain focuses on the operational aspects of implementing and maintaining the state level capabilities that Arizona needs.

Privacy & Security

Protecting patient privacy is paramount. Patients must trust that their information is handled appropriately. Providers and others authorized to access patient health information have an obligation to protect a patient's confidentiality and ensure that information is secure, yet accessible to those who have the need and permission to access it. This domain focuses on ensuring that privacy policies are understood and consistently implemented.

> "I was pleased with the discussion. We are in a new environment, and we are open to sharing data that can improve the quality of care and lower costs."
>
> *– Christi Lundeen*
> *Chief Innovation Officer*
> *Mercy Maricopa Integrated Care*

Technology

Roadmap 2.0 success hinges on the appropriate use of technology to meet community-wide business needs. The initiatives in this domain implement and expand the technical capabilities necessary to securely and accurately exchange, aggregate, and present patient information. They develop and implement the capabilities – both near term and in the future – that will enable continuous improvement in health care.

Initiatives

The 19 *Roadmap 2.0* initiatives are listed below, within their respective domains. A brief description is provided for each initiative. A more complete description of each initiative can be found at the end of this section. *Note:* The initiative ID is for identification purposes only and does not imply priority or implementation order.

Roadmap 2.0 Initiatives

STAKEHOLDER ENGAGEMENT & PARTICIPATION

01 – Stakeholder Engagement and Collaboration
Continues current, and develops and implements new, programs that promote statewide multi-stakeholder engagement and collaboration.

02 – Stakeholder Information and Education
Continues current, and develops and implements new, HIT/HIE educational and outreach programs for the various health care stakeholder segments.

GOVERNANCE, POLICY, & PLANNING

03 – Statewide Governance of Health Information Exchange
Refines and clearly describes the roles, responsibilities, and accountabilities of the AzHeC and HINAz boards and the State of Arizona related to statewide HIT/HIE within the public-private partnership governance model.

04 – Interoperability and Content Standards Agreement and Adherence
Ensures that Arizona uses HIT/HIE interoperability and content standards for the exchange of health care information.

05 – Statewide Unique Patient Identifier
Explores the feasibility for alternative approaches for identifying a patient.

06 – Incentives to Support Continued Expansion of HIT/HIE
Builds upon current programs for incenting providers to adopt HIT and participate in HIE. Explores and identifies innovative ways to incent providers to continue to adopt and/or mature their use of HIT/HIE.

07 – Collaboration and Support for Broadband Access
Coordinates information on broadband access assistance available to health care providers.

08 – Influence HIT and HIE Vendors
Develops an approach to help Arizona providers bring their needs to the attention of HIT and HIE vendors and promotes the development of appropriate solutions to address those needs.

09 – Statewide Vision and Framework for HIE
Develops the process and provides the content for Arizona's ongoing vision for health information exchange.

Roadmap 2.0 Initiatives

STATE LEVEL HIT/HIE BUSINESS INFRASTRUCTURE

10 – HIT/HIE Program Information and Collaboration Office
Establishes an office and formalizes a program to gather and disseminate information on HIT/HIE related tools and activities.

11 – Statewide HIE Rollout, Onboarding, and Use
This initiative develops and implements a plan to expand the rollout, onboarding, and use of the statewide HIE services.

12 – HIT/HIE Assistance to Providers
Continues, and develops and implements new, programs to assist health care providers adopt and expand the use of HIT/HIE.

PRIVACY & SECURITY

13 – Patient Consent Approach
Creates a common approach that can be used statewide for complying with patient consent requirements. Ensures alignment with state and federal regulations relating to consent for securely sharing physical and behavioral health information.

TECHNOLOGY

14 – Statewide HIE Services and Technical Architecture Description
Creates and maintains a resource that describes the services provided by the statewide HIE (functional description), and the statewide HIE technical architecture (technical description).

15 – HIE Consent Management Engine
Develops a technical infrastructure to support the common statewide patient consent approach and processes identified in *Initiative 13-Patient Consent Approach*.

16 – Statewide MPI/RLS Expansion
Explores opportunities to leverage the statewide HIE master patient index (MPI) / record locator service (RLS) technical framework.

17 – Tools to Support Public Health Reporting
Develops a strategic approach that uses HIT/HIE tools and resources, including the statewide HIE, to streamline the sending and receiving of data between ADHS and providers.

18 – Tools and Support for Health Care Transformation: Care Coordination, Analytics, and Emerging Technologies
Develops a resource to gather and provide information on tools that support health care transformation, including the alignment with new payment models. As needed, develops community-wide strategies for tool implementation.

19 – Integrated Physical and Behavioral Health Information Exchange
Creates and implements a strategy for the integrated sharing of information between behavioral health and physical health care providers.

The following graphic shows the suggested timeframe for implementation of the various initiatives.

Roadmap 2.0 Timeline

	Prior	2014	2015	2016
STAKEHOLDER ENGAGEMENT & PARTICIPATION				
01 – Stakeholder Engagement and Collaboration		Ongoing – Continue		
02 – Stakeholder Information and Education		Ongoing – Continue		
GOVERNANCE, POLICY, & PLANNING				
03 – Statewide Governance of Health Information Exchange		Phase 1 – 2014	Phase 2 – 2015	
04 – Interoperability and Content Standards Agreement and Adherence		Early 2014		
05 – Statewide Unique Patient Identifier			Early to Mid 2015	
06 – Incentives to Support Continued Expansion of HIT/HIE		Ongoing – Continue		
07 – Collaboration and Support for Broadband Access		Early 2014		
08 – Influence HIT and HIE Vendors		Late 2014		
09 – Statewide Vision and Framework for HIE		Early 2014		
STATE LEVEL HIT/HIE BUSINESS INFRASTRUCTURE				
10 – HIT/HIE Program Information and Collaboration Office		Formalize in 2014		
11 – Statewide HIE Rollout, Onboarding, and Use		Ongoing – Continue		
12 – HIT/HIE Assistance to Providers		Ongoing – Continue		
PRIVACY & SECURITY				
13 – Patient Consent Approach		Early 2014		
TECHNOLOGY				
14 – Statewide HIE Services and Technical Architecture Description		Ongoing – Continue		
15 – HIE Consent Management Engine		Late 2014		
16 – Statewide MPI/RLS Expansion		Ongoing – Continue		
17 – Tools to Support Public Health Reporting		Ongoing – Continue		
18 – Tools and Support for Health Care Transformation: Care Coordination, Analytics, and Emerging Technologies		Mid 2014		
19 – Integrated Physical and Behavioral Health Information Exchange		Mid 2014		

Initiative Descriptions

The following pages provide detailed descriptions of the initiatives. Each initiative description contains the following:

INITIATIVE NAME

Domain: Domain Name	Initiative ID: Identifier
	Domain: The domain with which the initiative is associated Initiative ID: A number used to identify the initiative *Note:* The initiative ID is for identification purposes only and does not imply priority or implementation order.
Description	Brief description of the initiative
Background	Context for the initiative
Purpose	Why the initiative should be implemented
Outcome	The results of implementing the initiative
Suggested Approach	Means by which the initiative can be addressed
Leadership Recommendations	Key organizations or roles to lead the initiative implementation
Timing	Suggested timing for the initiative

STAKEHOLDER ENGAGEMENT & PARTICIPATION

STAKEHOLDER ENGAGEMENT AND COLLABORATION

Domain: Stakeholder Engagement & Participation ....Initiative ID: 01

Description	This initiative continues current, and develops and implements new, programs that promote statewide multi-stakeholder engagement and collaboration.
Background	Community collaboration, commitment, and participation are critical to Arizona's efforts to improve patient care and outcomes through the use of HIT/HIE.
Purpose	Drive engagement and collaboration on HIT/HIE among health care stakeholders.
Outcome	The outcome of this initiative is engaged, collaborative stakeholders through programs that promote their engagement and foster collaboration on HIT/HIE.
Suggested Approach	■ Develop and agree upon stakeholder roles and responsibilities relating to HIT/HIE. ■ Develop and implement a structure to create community-wide opportunities for discussion, consensus and strategy development. ■ Strategies developed should leverage existing capabilities and organizations already in place such as boards, professional organizations, current AzHeC and HINAz efforts and other community and statewide programs. *Example activities may include:* • Foster agreement among multiple health care organizations to securely share patient information with caregivers who are outside of their respective organizations • Develop clear descriptions, by stakeholder segment (and across segments), of the value of sharing patient information • Convene committees such as: ◦ Legal Committee ◦ Consumer Connections Taskforce ◦ Privacy and Security Committee
Leadership Recommendations	AzHeC is recognized as the statewide convener of health care stakeholders and should continue to lead this effort.
Timing	This effort is ongoing and should be continued and expanded in 2014.

STAKEHOLDER INFORMATION AND EDUCATION

Domain: Stakeholder Engagement & Participation ....Initiative ID: 02

Description	This initiative continues current, and develops and implements new, HIT/HIE educational and outreach programs for various health care stakeholder segments.
Background	Motivating stakeholders to adopt and use HIT/HIE is key to improving health care in Arizona. Information for, and education of, stakeholders related to the value and benefits of HIT/HIE are important elements in creating this motivation.
Purpose	Ensure that health care stakeholders are educated and informed on areas relating to HIT/HIE.
Outcome	This initiative creates health care stakeholders who are better informed and better educated on HIT/HIE. The programs offered will provide information and education that helps the various stakeholder segments – patients, consumers, providers, and payers – to better understand the value of HIT/HIE and will motive them to participate.
Suggested Approach	■ Develop and share success stories and information about best practices. ■ Provide stakeholder specific information on HIT/HIE initiatives, strategies and rules/regulations, etc. ■ Provide education on the value and benefits of HIT/HIE to each stakeholder segment. ■ Provide education on the roles and responsibilities of each of the stakeholder segments such as privacy and security responsibilities and the requirements for participation in HIE. ■ Provide education on approaches to access patient information. ■ Disseminate information on the status of HIT/HIE activities in Arizona and the nation. ■ Build upon the work already completed by current and past initiatives. Other initiatives included in *Roadmap 2.0* may include their own topic-specific education materials and processes. Those efforts should be coordinated with the efforts in this initiative.
Leadership Recommendations	AzHeC should continue and expand its role as the statewide resource on HIT/HIE and play a key role in the development and implementation of programs. Health care and consumer organizations may also be requested to lead/co-sponsor various projects.
Timing	Additional programs and strategies should be developed in 2014.

GOVERNANCE, POLICY, & PLANNING

STATEWIDE GOVERNANCE OF HEALTH INFORMATION EXCHANGE

Domain: Governance, Policy, & Planning...Initiative ID: 03

Description	This initiative refines and clearly describes the roles, responsibilities, and accountabilities of the AzHeC and HINAz boards and the State of Arizona related to statewide HIT/HIE within the public-private partnership governance model.
Background	A key to robust, sustainable health information exchange is trust. States are currently experimenting with different types of governance models where state government and legal oversight differ depending on the preference of the stakeholders. Arizona has pursued a public-private governance model where State agencies sit on the boards of directors of community-wide organizations and stakeholder participation has been voluntary and collaborative. Through the roadmap process, stakeholders reaffirmed their agreement with the public-private collaborative governance model and approach. The affiliation of AzHeC and HINAz requires that clear roles, responsibilities, and accountabilities relating to their role(s) in statewide governance of HIE are defined and well communicated.
Purpose	Provide understanding of statewide governance of HIE in Arizona. Describe the need for an ongoing role of State HIT Coordinator.
Outcome	This initiative will ensure that the AzHeC and HINAz boards, within the new affiliation model, and the State understand and are able to carry out their responsibilities for governing HIE in this voluntary public-private partnership model. It will define and communicate how the statewide HIE will be governed in Arizona and the roles and responsibilities both for those charged with the responsibility of providing HIE and for those participating in HIE. It will describe the role and responsibilities of the State HIT Coordinator.

Suggested Approach	The initiative involves two phases for addressing statewide HIE governance:
	
	Phase 1:
	1. Clarify AzHeC/HINAz affiliation relationship
	    • Clarify the organizational framework between AzHeC and HINAz in the affiliation model
	    • Clearly communicate the roles, responsibilities and accountabilities of the affiliated organizations
	2. Reaffirm support for the role of the State HIT Coordinator. The role includes the following:
	    • Promote and monitor the implementation of *Roadmap 2.0*
	    • Support health care providers in the adoption and use of HIT/HIE
	    • Serve as a focal point for coordination of federal HIT/HIE activities in Arizona
	    • Facilitate HIT/HIE collaboration across State agencies

- Facilitate HIT/HIE collaboration between the State and the HIT/HIE public-private partnership organizations
- Facilitate HIT/HIE collaboration with other states
- Serve as a health information technology advisor to the State

3. Clearly communicate the roles and responsibilities for those organizations participating in statewide exchange of health information.

Phase 2:

1. Monitor effectiveness of HIE governance and identify and assess gaps related to HIE oversight and enforcement, including the role of the State. Recommend modifications and improvements as needed.

Areas to consider include:

- Identify HIE governance best practices
- Explore the HIE governance approaches other states are taking and evaluate relevance and possible adoption in Arizona
- Identify any needs for additional enforcement and oversight
- Adoption and use of national standards for the exchange of health information
- Explore services for the public to report concerns relating to the use of personal health information (e.g. Ombudsman-like services)

Leadership Recommendations	AzHeC should lead this effort with strong collaboration with the State and other stakeholders.
Timing	*Phase 1:* 2014 *Phase 2:* 2015

INTEROPERABILITY AND CONTENT STANDARDS AGREEMENT AND ADHERENCE

Domain: Governance, Policy, & Planning ....Initiative ID:04

Description	This initiative ensures that Arizona uses HIT/HIE interoperability and content standards for the exchange of health care information. It also ensures that Arizona has input into, and stays informed on, emerging national technical standards and tools.
Background	Lack of semantic interoperability and the inconsistent use of standards between different HIT/HIE systems is a major barrier to the sharing of health care information that must be removed to achieve broad, effective HIE.
Purpose	Drive agreement and support for how national HIT/HIE standards will be implemented in Arizona.
Outcome	Widespread consistent use of HIT/HIE standards for all health care providers in Arizona.
Suggested Approach	*Engage in standards development* • Describe how Arizona health care stakeholders can engage in HIT/HIE standards development efforts *Standards-based approach for HIT/HIE* • Develop and implement an approach for Arizona to ensure that there is agreement on and consistent use of how Arizona applies the national standards • Describe field mappings for key data and specific data formats as appropriate to ensure semantic interoperability for providers in Arizona • Identify best practices that are relevant to Arizona HIT/HIE *Statewide HIE standards implementation* • Develop and implement plans for HIE using a standards based approach for the statewide HIE
Leadership Recommendations	The State HIT Coordinator should ensure that Arizona is represented on national level workgroups and standards setting organizations. AzHeC will serve as the convener for stakeholder discussions on standards and interoperability. A workgroup should be convened that will drive the discussion and come to agreement on standards use.
Timing	The workgroup should be launched in 2014.

STATEWIDE UNIQUE PATIENT IDENTIFIER

Domain: Governance, Policy, & Planning..Initiative ID: 05

Description	This initiative explores the feasibility for alternative approaches for identifying a patient.
Background	The lack of a unique identifier for every patient causes difficulty in ensuring that: 1) patient records are always matched to the correct patient and 2) all records belonging to a patient are identified and associated with the patient. As the number of patients and the number of organizations participating in HIE grows, the complexity of correct patient record matching is magnified. Arizona should explore best practices and identify alternative approaches it can use to address the increasing complexity of correctly matching patients to all of their available records across multiple organizations.
Purpose	Drive continuous improvement in the accurate and complete matching of patient records across multiple organizations.
Outcome	The outcome of this initiative is a recommendation for how Arizona will identify patients (and their health care records) across multiple health care settings and providers.
Suggested Approach	- The recommendation should consider the processes and the tools to resolve patient identity challenges. - The recommendation should also consider how to address not only patients who have health care information in Arizona, but also those whose information may be located in multiple states. - Convene stakeholders to discuss and evaluate the effectiveness of the current approach for patient identification and records matching. - Convene a committee to explore alternatives and develop recommendations.
Leadership Recommendations	AzHeC should be the organization to convene stakeholders to address this issue.
Timing	Efforts should begin in early to mid-2015.

INCENTIVES TO SUPPORT CONTINUED EXPANSION OF HIT/HIE

Domain: Governance, Policy, & Planning..Initiative ID: 06

Description	This initiative builds upon current programs for incenting providers to adopt HIT and participate in HIE. It explores and identifies innovative ways to incent providers to continue to adopt and/or mature their use of HIT/HIE.
Background	While HIT/HIE adoption in Arizona has increased significantly, there are still many providers who have not adopted and implemented technology. Incentives – monetary and other – can help move these providers towards full adoption and use of HIT/HIE.
Purpose	Continue to identify and implement incentives to drive adoption and use of HIT/HIE.
Outcome	The outcome of this initiative is expanded provider use of HIT/HIE through approaches and incentives that enhance the value proposition for participation in HIT/HIE.
Suggested Approach	- Explore additional opportunities with payers, foundations, health systems, grants, and other sources of funding to incent providers to adopt and use HIT and HIE. - Collaborate with payers to provide incentives for HIE participation. - Broaden the financial incentives for HIT/HIE adoption to a wider set of providers (e.g. behavioral health and long term care) through identification of new sources of funding. - Ensure that Medicaid and Medicare providers continue to move through Meaningful Use Stage 2 and Meaningful Use Stage 3. - Continue recruitment of eligible participants for the EHR Incentive Programs. - Consider how patients may be involved in urging their providers to adopt and use HIT/HIE. - Continue to leverage the REC program to assist providers. - Leverage the AHCCCS supported HIE onboarding program for hospitals, community health centers and rural health clinics. - Explore expansion of the AHCCCS HIE onboarding program.
Leadership Recommendations	AzHeC should convene the stakeholders who will address this initiative and the statewide HIE should implement the AHCCCS HIE onboarding program. AHCCCS should continue to lead the Medicaid EHR Incentive Program and related strategies, as well as monitor the HIT/HIE requirements for its health plan contractors.
Timing	Current incentive efforts are ongoing. The efforts to build additional incentive resources should begin in early- to mid-2014.

COLLABORATION AND SUPPORT FOR BROADBAND ACCESS

Domain: Governance, Policy, & Planning..Initiative ID: 07

Description	This initiative coordinates information on broadband access assistance available to health care providers.
Background	There are still many providers in Arizona who do not have access to affordable broadband. High-speed access at an affordable cost is essential for participation in HIE. There are multiple funding streams whose aim is to improve broadband access. Some of these programs are focused on health care, but many others are funded through community based programs or other non-health care specific programs. Health care stakeholders need an efficient way to be informed of local and state opportunities available to assist them obtain improved broadband access.
Purpose	Identify, communicate, and support efforts to increase broadband access to health care providers.
Outcome	The outcome of this initiative is better informed providers regarding programs that could assist them in obtaining affordable broadband connections.
Suggested Approach	■ Identify sources of assistance available to providers for broadband connectivity. ■ Continue to identify federal and state programs that focus on providing broadband access to areas currently lacking such service and communicate those opportunities. ■ Provide information on broadband funding opportunities. ■ Assist providers in becoming aware of programs and assistance that can help them acquire affordable broadband connection. ■ Encourage broadband initiative efforts in Arizona to share information on their programs.
Leadership Recommendations	ASET should take the lead on this initiative with support from AzHeC for communication to the health care community.
Timing	Efforts should begin in early 2014 to collect information on existing and planned programs.

INFLUENCE HIT AND HIE VENDORS

Description	This initiative develops an approach to help Arizona providers bring their needs to the attention of HIT and HIE vendors and promotes the development of appropriate solutions to address those needs.
Background	Traditionally, providers (especially small, community providers) often do not have the necessary background and in-depth information to make the decisions that are necessary when it comes to selecting and implementing HIT and HIE vendor solutions. Providers appreciate support and resources that can assist in the vendor selection process and in ensuring that they are compliant with various requirements, such as Meaningful Use, interoperability standards, etc. Additionally, the costs to interface EHRs with external systems, such as other EHRs, HIEs, etc., are substantial. These aspects of vendor relations can be barriers to provider adoption of HIT/HIE.
Purpose	To bring Arizona's providers' needs to the attention of HIT and HIE vendors and use economies of scale to promote the development of appropriate solutions to address those needs.
Outcome	The outcome of this initiative is the implementation of a process(es) by which Arizona can communicate provider requirements to HIT/HIE vendors with an "Arizona voice."
Suggested Approach	- Leverage the investments made in the REC Vendor Alliance Program and the Arizona HIE Marketplace. - Blend the REC Vendor Alliance Program and HIE Marketplace into a common Arizona HIT/HIE vendor program. - Develop a process for vetting vendors and providing a "seal of approval" for use in Arizona. - Convene stakeholders to develop basic messages to vendors. - Negotiate discounts with HIT/HIE vendors on behalf of Arizona providers.
Leadership Recommendations	AzHeC should lead this effort. Strong support and collaboration among providers is essential.
Timing	Exploration of the needs and feasibility should begin by late 2014.

STATEWIDE VISION AND FRAMEWORK FOR HIE

Domain: Governance, Policy, & Planning..Initiative ID: 09

Description	This initiative develops the process and provides the content for Arizona's ongoing vision for HIE.
Background	The HIT/HIE landscape is dynamic. Arizona health care stakeholders need a description of the overall statewide vision for HIT/HIE in Arizona that supports them in their overall planning efforts for improving health care.
Purpose	Provide a living resource to help guide and support stakeholder planning efforts.
Outcome	This initiative will develop and maintain a living resource which describes the overall evolving statewide vision and "blueprint" for HIT/HIE in Arizona. The vision should reflect a statewide plan – developed with broad stakeholder input – for sharing health care information across a broad spectrum of health care providers and patients. It should consider local, state, and national/federal efforts. Note: The blueprint may include descriptions of components that are provided outside of the statewide HIE architecture.
Suggested Approach	*Vision contents* The vision will describe the evolving service offerings and access opportunities for broad and efficient HIE in Arizona. It should anticipate the expanding needs for multiple users, devices, locations, and information sources and types. The vision should include, but not be limited to: - Enhanced provider directory - Referral management - Quality reporting assistance - HIE to HIE connectivity - Interoperability tools - Patient access - Device connectivity - Interstate and federal connectivity - Behavioral health care information *Process to develop the vision* The business requirements for the evolving vision should be obtained through broad stakeholder input and may also reflect the needs determined by other initiatives in this roadmap. *Process to maintain the vision* Develop the processes and a framework for updating and documenting Arizona's evolving HIE capabilities. This vision (and documentation) should be reviewed and updated at least annually.
Leadership Recommendations	The State HIT Coordinator and AzHeC collaboratively will initiate and support the ongoing development of the vision.
Timing	An initial vision should be developed by late 2014.

STATE LEVEL HIT/HIE
BUSINESS INFRASTRUCTURE

HIT/HIE PROGRAM INFORMATION AND COLLABORATION OFFICE

Domain: State Level HIT/HIE Business Infrastructure ....Initiative ID: 10

Description	This initiative establishes an office and formalizes a program to gather and disseminate information on HIT/HIE related tools and activities. The office will also coordinate some statewide HIT/HIE activities.
Background	There is a growing body of information relating to HIT/HIE and the opportunity for participation in HIT/HIE is constantly evolving. A common point of information collection and dissemination is needed to ensure that access to up-to-date information is readily available to stakeholders. A central coordination point for statewide HIT/HIE activities can prevent redundant activities or missed opportunities. Establishing this office will leverage and formalize many of the efforts already underway within AzHeC.
Purpose	Establish a central hub for HIT/HIE information and coordination in Arizona.
Outcome	This initiative will provide a common place for stakeholders to access HIT/HIE related activity information, ensure stakeholder collaboration and coordination, and facilitate a coordinated approach to statewide HIT/HIE related opportunities.
Suggested Approach	*Responsibilities of the Office* • Gather and disseminate information on HIT/HIE activity in Arizona • Develop processes to support and coordinate statewide HIT/HIE efforts as appropriate • Develop processes and tools to promote collaboration on HIT/HIE activities in Arizona • Develop processes to coordinate information on tools (e.g. consent toolkits) relating to HIT/HIE in Arizona • Develop and maintain a "dashboard" to easily communicate Arizona's progress in HIT/HIE • Coordinate, facilitate, and/or write grant applications for federal or other statewide HIT/HIE related grants • Gather and disseminate information on HIT/HIE related topics
Leadership Recommendations	AzHeC should establish this office as a formalization of the efforts it has already undertaken in the areas of education, serving as an information clearinghouse, and leading and coordinating statewide activities.
Timing	The formalization of this office should occur in first quarter 2014.

STATEWIDE HIE ROLLOUT, ONBOARDING, AND USE

Domain: State Level HIT/HIE Business Infrastructure ....Initiative ID: 11

Description	This initiative develops and implements a plan to expand the rollout, onboarding, and use of the statewide HIE services.
Background	The statewide HIE has been rolling out its services and onboarding providers since mid-2012, and needs to continue expanding its services to additional participants. Formal, well-communicated plans and implementation activity is fundamental to continued expansion and adoption of the statewide HIE.
Purpose	Increase the adoption and use of the statewide HIE.
Outcome	The outcome of this initiative is expanded active participation and use of the statewide HIE.

Suggested Approach	■ Leverage the work and funding to date and show specifically how the statewide HIE will realize the vision for statewide HIE services.
	
	■ Develop a plan including the following components:
	    • Describe a clear path to statewide HIE participation
	    • Include an outreach, communications and marketing plan
	    • Develop targeted growth plan by region, by stakeholder type, etc.
	    • Implement provider training and education
	    • Describe connection assistance and support
	    • Provide examples of use cases

Leadership Recommendations	This is a statewide HIE led initiative.
Timing	The statewide rollout, onboarding and use of the statewide HIE should be continued according to the statewide HIE business plan.

HIT/HIE ASSISTANCE TO PROVIDERS

Domain: State Level HIT/HIE Business Infrastructure ....Initiative ID: 12

Description	This initiative continues, and develops and implements new, programs to assist health care providers adopt and expand the use of HIT/HIE.
Background	While HIT/HIE adoption in Arizona has increased significantly, there are still providers who either have not implemented technology or are not taking full advantage of the technology they have. These providers continue to need assistance with making the changes necessary to implement, adopt, and optimize the use of HIT/HIE.
Purpose	Increase the assistance available to providers who are not fully utilizing technology.
Outcome	The outcome of this initiative is an increased number of providers in Arizona who are using, and optimizing the use of, HIT/HIE.
Suggested Approach	*The initiative should continue to leverage existing programs and services such as:* • Services that were offered through the Arizona Regional Extension Center (REC) program • Significant investments provided to date by the EHR Incentive Programs through AHCCCS and Medicare • The success of the eRx and EPCS programs • Build on current programs and include behavioral health and long term care/post-acute providers *Program services to consider include:* • Assistance in base EHR adoption • Support for practice transformation • Assistance in HIT/HIE workflow modification • Assistance for compliance with privacy and security requirements • Assistance in meeting and reporting on quality measures • Assistance in participating in HIE Special focus should be placed on those providers who are lagging in their adoption and use of HIT, or those with additional needs such as rural providers and small practices and those providers not included in previous incentive programs (e.g. behavioral health, corrections, and long term care). The programs should ensure that the efforts are sensitive to the needs of – and coordinated with – the local community to ensure sustainability.
Leadership Recommendations	AzHeC should lead this effort. Collaboration with AHCCCS is essential as AHCCCS: 1) administers the Medicaid EHR Incentive Program in Arizona; and 2) requires its health plan contract providers to use HIT/HIE.
Timing	This initiative should continue the current efforts of the REC program. Expansion to a broader range of services and provider types should begin as soon as resources are available.

PRIVACY & SECURITY

PATIENT CONSENT APPROACH

Domain: Privacy & Security ....Initiative ID: 13

Description	This initiative creates a common approach that can be used statewide for complying with patient consent requirements. It ensures alignment with state and federal regulations relating to consent for securely sharing physical and behavioral health information.
Background	There is a need for enhanced consistency in the provider and consumer communities relating to the consent by patients for sharing health care information across organizations. A clear and broadly accepted understanding of the process for, and requirements for complying with, patient consent will promote the exchange of health information.
Purpose	Provide a statewide HIE consent approach that can be used as a model by all providers in the state.
Outcome	The outcome of this initiative will be a common, streamlined, patient-focused approach to patient consent for sharing health care information. This initiative will clarify where, when and by whom patient consent is to be obtained (e.g. at source of information, at time of access, etc.). It will also clarify how providers can consistently comply with federal and state regulations pertaining to the sharing of patient information in Arizona.
Suggested Approach	The consent process should be addressed in two phases. Phase 1 should focus on information related only to the sharing of information related to physical health. Phase 2 should build on the work of the first phase to incorporate the specific needs for consent to share behavioral health information. - Develop clear, consistent statewide processes for providers to share patient information across providers and organizations. - Consider recommending a statewide "break the glass" policy for emergency situations. - Develop an approach that can be used both within Arizona and for interstate sharing of health information. - Provide common tools and resources related to patient consent for sharing health information. - Reconvene the legal committee to provide subject matter expertise and leadership support.
Leadership Recommendations	AzHeC should lead this effort.
Timing	Efforts should begin as soon as possible in 2014

TECHNOLOGY

STATEWIDE HIE SERVICES AND TECHNICAL ARCHITECTURE DESCRIPTION

Domain: Technology ....Initiative ID: 14

Description	Creates and maintains a resource that describes the services provided by the statewide HIE (functional description), and the statewide HIE technical architecture (technical description).
Background	Stakeholders would benefit from more clarity regarding the services that the statewide HIE provides and information on how they can access those services. A clear, well-communicated description of the statewide HIE services and its supporting technical infrastructure will address many stakeholder questions.
Purpose	Inform stakeholders regarding statewide HIE services and the technical architecture that supports the HIE. Develop processes to continue to document and distribute information on planned statewide HIE services as they are developed and implemented.
Outcome	The outcome of this initiative is to produce and maintain a living resource describing the statewide HIE services and technical architecture. This resource should provide both specific information on the services that the statewide HIE provides and guidance on how stakeholders can connect to those services.
Suggested Approach	*Statewide HIE Services* Clearly describe the HIE services and underlying functional requirements that the statewide HIE provides – or is planning to provide in the near-term. *Statewide HIE Technical Architecture* Describe the architecture and the supporting technical infrastructure that the statewide HIE uses to deliver its services. The description of this infrastructure should include the technology used, the various tools included, and the requirements for participant connection. The statewide HIE is not the only HIE solution available in Arizona. Therefore, the architecture of the statewide HIE must consider how it will facilitate multiple types of connections. It should include descriptions of support for various types of HIE participation including: • Individual provider connection • Health system connection • HIE or ACO network connection • Connection via eHealth Exchange (e.g. Federal partners such as IHS or VA or state to state) • HISP to HISP connectivity/interoperability
Leadership Recommendations	The statewide HIE will lead this effort. The statewide HIE will serve as the primary organization for community-wide solutions to HIE-related business problems.
Timing	This effort is underway and should continue.

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HIE CONSENT MANAGEMENT ENGINE

Domain: Technology ....Initiative ID: 15

Description	This initiative develops a technical infrastructure to support the common statewide patient consent approach and processes identified in *Initiative 13 – Patient Consent Approach*.
Background	Managing patient consent to share health care information is a complex endeavor. It is becoming increasingly complex as new requirements are added. The approaches of the past – "all in" or "all out" – will not be sufficient to meet the coming challenges of consumer-controlled consent, the increasing levels of granularity, and the multiple organizations involved in the patient consent process. The automation of the consent management process will ensure consistent compliance with privacy regulations and a patient's HIE consent.
Purpose	Automate the consent management process across patients, health care providers, and organizations through use of a common technical infrastructure.
Outcome	The outcome of this initiative is the implementation of a statewide consent management engine.
Suggested Approach	*Components* • Identify the functional and technical specifications for automating the patient HIE consent process, done in collaboration with *Initiative 13 – Patient Consent Approach*. • Identify appropriate consent management tools • Develop a plan for statewide implementation *The consent management engine should be able to:* • Manage consent from multiple sources (providers, HIEs, and patient generated sources) • Manage consent for various types of health information • Support current levels of consent for secure sharing of patient information • Support increasing levels of granularity of patient consent • Harmonize approaches and consent engines from multiple organizations to ensure there is consistent compliance with a patient's consent for the sharing of their information • Integrate with other technologies to deliver notices to providers if there is additional information in the HIE that has not been consented to be shared – as appropriate within current laws and regulations
Leadership Recommendations	The statewide HIE should lead this effort.
Timing	This initiative should begin by late 2014.

STATEWIDE MPI/RLS EXPANSION

Domain: Technology ....Initiative ID: 16

Description	This initiative explores opportunities to leverage the statewide HIE master patient index (MPI) / record locator service (RLS) technical framework to address the difficulties of matching patient records.
Background	Patients are cared for by multiple providers and in many health care settings. Correctly and completely matching patient records across these varied health care settings is becoming increasingly complex. Arizona needs a harmonized, well-communicated approach to address the multiple technologies and conventions currently in place to match patients to their health care records. There has already been significant investment made by the State into the statewide HIE's MPI/RLS. Opportunities to leverage this investment should be explored.
Purpose	Leverage the statewide HIE MPI/RLS for greater use.
Outcome	This initiative should identify opportunities to leverage the State's investment in the statewide HIE's MPI/RLS.
Suggested Approach	■ Explore the statewide HIE's MPI/RLS becoming the primary resource for patient identification and record matching in Arizona. ■ Expand the number of patients whose information is in the statewide HIE's MPI/RLS. ■ Expand the number of users of the statewide HIE's MPI/RLS. ■ Explore opportunities to leverage the use of the statewide HIE's MPI/RLS as a resource to other organizations needing this capability. ■ Develop an approach to support patients who have health care information in states in addition to Arizona.
Leadership Recommendations	The statewide HIE should lead this initiative.
Timing	Efforts should build on current capabilities.

TOOLS TO SUPPORT PUBLIC HEALTH REPORTING

Domain: Technology ....Initiative ID: 17

Description	This initiative develops a strategic approach that uses HIT/HIE tools and resources, including the statewide HIE, to streamline the sending and receiving of data between ADHS and providers.
Background	Currently ADHS has the ability to receive some types of information electronically, but the majority of their work is paper-based. The department and providers are interested in identifying opportunities to create and implement more efficient data sharing methods. Building on the CMS Meaningful Use program requirements, ADHS is interested in working with health care stakeholders to offer enhanced methods for sending and receiving information electronically.
Purpose	Enhance and expand the interoperability between health care providers' systems and public health reporting systems.
Outcome	The outcome of this initiative will be an enhanced capability for ADHS to electronically send and receive electronic health information.
Suggested Approach	■ ADHS will connect numerous providers within a short time to meet the Meaningful Use Stage 2 requirements, which include electronic submission of immunizations data, electronic lab reporting and syndromic surveillance. ■ Through knowledge gained by the Meaningful Use program, ADHS should work with stakeholders to identify additional program areas that could be enhanced to streamline public health reporting. These could include sharing of data through the statewide HIE, adoption of DIRECT protocols, or other transport methods.
Leadership Recommendations	ADHS should lead these efforts in collaboration with AHCCCS as the key funder of these efforts. AzHeC should be involved to convene stakeholders and understand their requirements. The statewide HIE should be involved to collaborate on the needs and timing of services it can offer.
Timing	These efforts are underway and should be continued.

TOOLS AND SUPPORT FOR HEALTH CARE TRANSFORMATION: CARE COORDINATION, ANALYTICS, AND EMERGING TECHNOLOGIES

Domain: Technology ....Initiative ID: 18

Description	This initiative develops a resource to gather and provide information on tools that support health care transformation, including alignment with new payment models. As needed, it also develops community-wide strategies for tool implementation.
Background	As new care delivery and payment models emerge, new capabilities will be needed. A key component for successful health care transformation is access to appropriate tools and technologies to enable the new capabilities.
Purpose	Provide information and resources on tools and technologies that support health care transformation.
Outcome	Processes to identify and disseminate information on HIT/HIE tools that enable health care transformation. Community-wide implementation strategies where appropriate.
Suggested Approach	Tools and support for health care transformation should be approached in two phases:

Tools and support for health care transformation should be approached in two phases:

- *Phase 1:* Develop a resource to provide information on the tools that enable health care transformation.
- *Phase 2:* Where needed, work with stakeholders to develop community-wide strategies for implementation and use of the tools.

Areas to support include:

- *Care Coordination*
  - Leverage the experience with care coordination tools already in use by ACOs, payers, PCMH groups, and others
  - Coordination of transitions of care alerts, such as admission/discharge/transfer (ADTs)
  - Referral management tools
  - Ready access to the patient's longitudinal record
  - Access to Continuity of Care Documents (CCDs)
  - Patient access to information using tools specifically designed for them and their caregivers (e.g. patient portal)
  - Tools should be appropriate for the level of information and access needed by the target users

- *Analytics*
  - Identify tools to collect and store aggregated patient information in a manner suitable for analysis
  - Identify tools that can analyze aggregated claims and clinical data
  - Leverage tools in use and ensure dissemination of information related to their capabilities and types of use (e.g. such as outcomes measurement and reporting, alerts, quality measurements and reporting, and performance reporting)
  - Identify methods for providing access to these tools
- *Emerging Technologies*
  - *m*Health and other emerging self-care-enhancing tools
  - Telehealth and remote monitoring tools

Key considerations:

- Determine the role of HIE in support of additional information needs/opportunities associated with these new tools
- Consider the emerging requirements of telemedicine to provide patient information at two – or more – simultaneous points of care
- Provide test sites for innovative health care technologies

Leadership Recommendations	This requires active participation from multiple key stakeholders. Participants may include providers, hospitals, payers, ACOs, AHCCCS, universities, consumers, and professional associations.
	The HIT/HIE Program Information and Collaboration Office should coordinate these efforts.
Timing	Early exploration and planning should begin in 2014.

INTEGRATED PHYSICAL AND BEHAVIORAL HEALTH INFORMATION EXCHANGE

Domain: Technology ....Initiative ID: 19

Description	This initiative creates and implements a strategy for the integrated sharing of information between behavioral health and physical health care providers.
Background	Arizona is at the national forefront as it relates to the integration of physical and behavioral health care. This integration continues to expand with Arizona's first fully integrated physical/behavioral health contract for the seriously mentally ill which was initiated in 2013. It is a natural extension of this care integration to provide appropriate electronic access to a patient's record across this continuum. There are efforts underway to exchange behavioral health information and it is critical that these efforts be coordinated and integrated with the statewide HIE. A strategy and implementation plan is needed to ensure the both the physical and behavioral health information of patients can be securely and readily accessed by their providers.
Purpose	To ensure that community-wide HIE efforts support information sharing across the continuum of care including both physical and behavioral health.
Outcome	The outcome of this initiative will be identification and resolution of challenges related to the sharing of behavioral health information through robust consent processes and policies. Additionally, a plan for the integrated sharing of physical and behavioral health information will be developed and implemented. Finally, the initiative will minimize the impact to providers who share patient information across multiple networks and types of care modalities through the close collaboration of the related HIE efforts.
Suggested Approach	■ Convene appropriate stakeholders to develop an integrated physical and behavioral health community-wide HIE strategy. ■ Identify potential challenges and roadblocks associated with consent for sensitive behavioral health information. ■ Develop and publish consent policies and processes to resolve challenges identified. ■ Implement a technical strategy which supports secure sharing of physical and behavioral health information across the continuum of care.
Leadership Recommendations	Statewide HIE to coordinate with behavioral health HIE efforts and lead a collaborative effort. All related HIE networks should participate in execution and implementation of the strategy.
Timing	Strategy development in first half of 2014. Implementation to begin in 2014 and continue until completion.

FUNDING

Overall funding for the wide range of initiatives contained in *Roadmap 2.0* poses a challenge and, for some of the initiatives, there is no budgeted funding. However, due to the intentional alignment between *Roadmap 2.0* and the business plan of the newly affiliated AzHeC/HINAz organization, many of the initiatives will be addressed, either in part or in full. *Roadmap 2.0* success will require the combined support, leadership, and participation of all Arizona stakeholders.

The initiatives were designed so that funding can be pursued through multiple channels – both targeted (actively seeking to fund a specific initiative) and opportunistic (responding to calls for grant applications and other opportunities that may arise). This prepares Arizona for optimum funding flexibility, while still having an overall roadmap of initiatives that will move Arizona closer to its vision.

Each initiative is independently described, in enough detail and within a bounded scope, that targeted funding specific to its implementation can be pursued. This funding could come through the solicitation of funds from organizations such as the State, health care related organizations, private foundations, or communities.

Alternatively, there is some intentional overlap among the initiatives so that an opportunistic approach to funding can also be used. This type of funding could occur through a variety of avenues ranging from the formal call for grant applications to an organization or individual who desires to provide funding to the HIT/HIE effort. Initiatives within the roadmap can be identified which, either in whole or in part, could be matched to the opportunity at hand. These initiatives can be customized (to a degree) to align with funding requirements and still meet their intended purpose.

This approach prepares Arizona for optimum funding flexibility, while still having an overall roadmap of initiatives that will move Arizona closer to its vision. Health care stakeholders are encouraged to continue to seek funding and resources through both traditional and innovative means including:

- Identify organizational or community projects that are synergistic with those in the roadmap and collaborate with these projects to meet both organizational and statewide needs
- Stakeholders should continue to provide resources and actively participate in committees and projects launched as a result of *Roadmap 2.0*
- Explore various funding sources including:
  - Federal grants and programs
  - State grants and programs

- Foundations – national, state, and community

- Payer-sponsored projects

- Provider-sponsored projects

- Community projects

- Individual funding

It is important for Arizona to continue the development of its HIT/HIE capabilities. Moving forward will require the efforts of all stakeholders, working together, to identify and obtain the resources which are required to support the implementation of the initiatives in this roadmap.

NEXT STEPS

Roadmap 2.0 is not a static document. It is a prescription for action that sets the trajectory to support health care transformation in Arizona. The following are recommended as a way forward:

- Formally deliver *Roadmap 2.0* to the State HIT Coordinator

- Confirm how lead organizations anticipate implementing their respective initiatives

- Optimize the opportunity presented with the affiliation of AzHeC and HINAz

- Actively pursue funding for projects that implement the initiatives

- Define and launch the projects that will implement the initiatives

- Continue the active engagement and participation of health care stakeholders in projects that will move *Roadmap 2.0* forward

- Actively monitor and support the progress of *Roadmap 2.0* through the role of the State HIT Coordinator

- Develop and implement a dashboard to track progress on *Roadmap 2.0* initiatives

Arizona has established a solid foundation for HIT/HIE. It is now up to the health care stakeholder community to continue to build on that foundation and establish the additional HIT/HIE capabilities that will enable Arizona to continue to lead in providing better care, better outcomes, and lower cost health care.

Arizona's Health IT Roadmap 2.0

APPENDICES

APPENDIX A: BACKGROUND

Federal HIT/HIE Initiatives Key to Arizona's Progress

Federal programs and funding over the last five years have sharpened the focus on HIT/HIE. Many of these programs have either directly or indirectly affected HIT/HIE efforts and funding in Arizona. Some of these programs were mentioned in the previous sections describing Arizona initiatives. To provide a more comprehensive view of key federal HIT/HIE related programs, several of the more significant federal initiatives affecting Arizona are highlighted below.

Health Information Security and Privacy Collaboration

Funded by AHRQ in 2006, the Health Information Security and Privacy Collaboration grant (HISPC) was a multi-state collaboration established to address the privacy and security challenges presented by electronic health information exchange.

Broadband

In 2007, the Federal Communications Commission (FCC) launched an initiative to increase access to health care in rural America through Broadband Telehealth.

E-prescribing Incentive

In 2008, CMS published the "2009 Physician Fee Schedule Payment Final Rule." The rule provided incentives for eligible providers, nurse practitioners, and physician assistants to incorporate eRx into their practices. The seven year payment schedule began in 2009 with a 2% incentive and decreased each year to a 0.5% incentive for 2013. Penalties began in 2012 at -1% and increased to -2% for 2013 and beyond.

ARRA/HITECH

The 2009 American Recovery and Reinvestment Act (ARRA), which included the Health Information Technology for Economic and Clinical Health Act (HITECH) funded at over $25 billion, launched several major health care and HIT/HIE-related programs. Examples of key federal HIT/HIE programs that supported efforts in Arizona include:

- Incentives for Meaningful Use of electronic health records (EHRs)

- Regional Extension Centers to assist health care providers with the selection and implementation of EHR technology and Meaningful Use achievement

- Certification of EHRs to ensure that they meet basic quality and safety requirements and adhere to industry standards

- State HIE Cooperative Agreement Program to support states' efforts in rapidly building capacity for exchanging health information across the health care system both within and across states

- The DIRECT Project was created to expand the standards and service descriptions available to address the key Stage 1 Meaningful Use requirements for exchange of clinical information for Meaningful Use.

- Workforce Development Program aimed to fill essential roles to guide providers and facilities in using health IT effectively to manage patient care and improve communications and information sharing

- HIT Policy Committee recommended a policy framework for the continued development and adoption of a nationwide HIT infrastructure (NHIN, NwHIN, eHealth Exchange)—a set of standards, services, and policies that enable the secure exchange of health information over the Internet

- HIT Standards Committee recommended standards, implementation specifications, and EHR certification criteria

- Improved Privacy and Security provisions require HIPAA-covered entities to report data breaches affecting 500+ individuals and extends the requirements to include business associates

- New rules for disclosure of a patient's health information extended to include data used for payment, treatment, and operations

- Broadband Initiatives funded by HITECH, included the new Broadband Technology Opportunities Program (BTOP), the new Rural Development Broadband Program, and the development of a National Broadband Plan

Nationwide Health Information Network / eHealth Exchange

The Office of the National Coordinator developed prototype architectures and enabled a trial implementation of the National Health Information Network (NHIN) Initiative. This has since been transitioned to Healtheway management and is now known as the eHealth Exchange. eHealth Exchange provides the pathway – through consistent policies for access to health data – to federal health care information from federal programs such as the Veterans Affairs, Department of Defense, Indian Health Service, and Social Security Administration.

Electronic Prescribing of Controlled Substances

In 2010, the Drug Enforcement Administration (DEA) lifted the federal restrictions against the use of electronic prescribing of controlled substances (EPCS).

Patient Protection and Affordable Care Act

The Patient Protection and Affordable Care Act (PPACA) was signed into law in 2010, and included the following key programs relating to HIT/HIE:

- Creation of a new payment model – Accountable Care Organizations (ACOs)

- Expansion of Medicaid coverage in the States

- Establishment of the Health Insurance Exchanges

Omnibus Final Rule

In 2013, the Office for Civil Rights (OCR) announced the Omnibus HIPAA Rule – updating four key areas: enforcement, security, privacy, and breach notification.

Many of these federal programs are ongoing and continue to impact and support HIT/HIE in Arizona.

Arizona's Health Information Exchange (HIE) Projects

This section describes Arizona health information exchange initiatives that were not previously covered in detail.

Statewide HIE Infrastructure – Core Services

Arizona recognizes that a statewide infrastructure to support the exchange of health information electronically will improve the quality of care and reduce its cost.

With the 2010 award of the State HIE Cooperative Agreement Program funds, Arizona had an opportunity to accelerate building the required infrastructure to facilitate secure exchange of patient health information. Core services, such as governance, directory services, master patient index and record locator services, could be implemented once and leveraged by organizations across the state. In 2011, ASET issued an RFP to establish these core capabilities. ASET awarded the "Health Information Core Services" contract to HINAz.

Arizona HIE Marketplace

The Arizona Health Information Exchange (HIE) Marketplace is a program established by AzHeC through ASET funding. It assists Arizona health care providers to identify viable options to participate in the secure exchange of health information. The first phase of the program identified the services of approved health information service providers (HISPs) that facilitate Direct Secure Messaging (DSM) between two trusted entities. Using nationally recognized standards, DSM enables Arizona health care providers to exchange patient health care information in a secure, simple, and inexpensive manner over the Internet.

The Arizona program was launched in April of 2012. As of September 2013, the HIE Marketplace had approved three HISPs and enabled 65 organizations (7 hospitals, 55 ambulatory, and 3 other) and 826 users for the DSM service.

Arizona Environmental Scans and Stakeholder Interviews

While the federal stimulus money encouraged many providers and organizations to plan for and implement EHR technology to support electronic information sharing, many providers were not eligible for those funds.

ASET, through the SHIECAP funding, launched a series of projects in 2012 to better understand the needs of several of these key provider segments: Rural, Behavioral Health, and Long Term Post-Acute Care. Interviews were conducted with 32 health care thought leaders representing 19 organizations. In addition, reports of nationwide environmental scans of the HIT/HIE activity in these areas were published. These reports summarize the common barriers to exchange, the drivers of HIE participation and the types of assistance needed to increase provider exchange capabilities. See APPENDIX C: Additional Resources, for links to these reports.

Unconnected Providers Grants Program

With the environmental reports to provide background, ASET launched an "Unconnected Providers Grants Program". This program was designed to target providers who had not yet planned for or implemented an information exchange strategy. In January 2013, ASET awarded 14 grants to organizations represented by long term care, behavioral health, adult detention, hospitals, Indian Health Services, rural communities, and medical centers. The Unconnected Providers Grant program required applicants to focus on at least one of three key focus

areas: electronic exchange of care summaries, electronic access to laboratory information, and/or eRx. Up to $1.1 million was available for this program.

Enterprise HIE Grant Program

The "Health Information Exchange Enterprise Grant Program" supported the acceleration of health information exchange for large health care organizations that are creating, developing, or maturing enterprise-wide HIE capabilities in Arizona. The HIE Enterprise grant program provided funding to organizations to support their acceleration of connecting providers within their own networks. Five grants were awarded in September 2013. Up to $1 million was made available for this program.

Arizona Department of Health Services Preparation for Meaningful Use

Currently the Arizona Department of Health Services (ADHS) is able to receive some types of information electronically, but the majority of their work is paper-based. To support the CMS Meaningful Use requirements, ADHS is enhancing its ability to send and receive information electronically.

AHCCCS and ADHS have worked collaboratively to obtain approval for funding that supports the connection of providers to meet the Meaningful Use Stage 2 requirements – including electronic submission of immunizations data, electronic lab reporting, and syndromic surveillance.

Coordination and Outreach to Federal Organizations

Stakeholders expressed a desire to ensure there was intentional inclusion and outreach to Arizona's federal health care partners. The state HIT Coordinator, AzHeC, and ASET worked together and identified key stakeholder contacts. They then held information sharing meetings with these stakeholders to ensure there was good communication between the state HIT/HIE planning efforts and the federal health IT priorities.

APPENDIX B: HOW *ROADMAP 2.0* WAS CREATED

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*Enablers Workshop
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September 30, 2013*

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*Pinal County Public Health*

Kay Ziegler
HealthNet

Envisioning workshop for Tucson hospitals and providers July 29, 2013

Events, Workshops & Activities

The table below shows the multiple opportunities for stakeholder participation in *Roadmap 2.0* creation.

Events, Workshops & Activities									
	2013							**2014**	
	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb
Public Health & Medicaid MU Pre-Workshops June 11-12	◆								
Executive Council Activities June 20, July 15, Aug 30, Nov 7, Jan 2014	◆	◆	◆			◆		◆	
Project Kick-Off Meeting June 24	◆								
Stakeholder Envisioning Workshops July 22 – Aug 2		◆							
Healthcare Stakeholders Survey Aug 14 – 26			◆						
Stakeholder Interviews Aug 19 – 30			◆						
Enablers Workshop Sept 6				◆					
Initiatives Workshop Sept 30				◆					
General Stakeholder Presentations June 24, Sept 11, Oct 1	◆			◆	◆				
Release Final Roadmap February 2014									
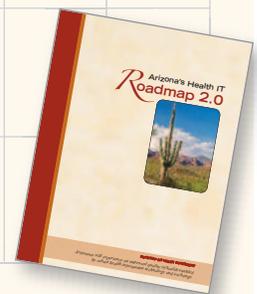
Summary of *Roadmap 2.0* Creation Approach

The high level approach used to develop *Roadmap 2.0* is summarized in the illustration below. One of the many advantages to this approach for developing initiatives is that each of the initiatives can be linked back to the objective(s) it supports.

Review of *Roadmap 2.0* Development Process
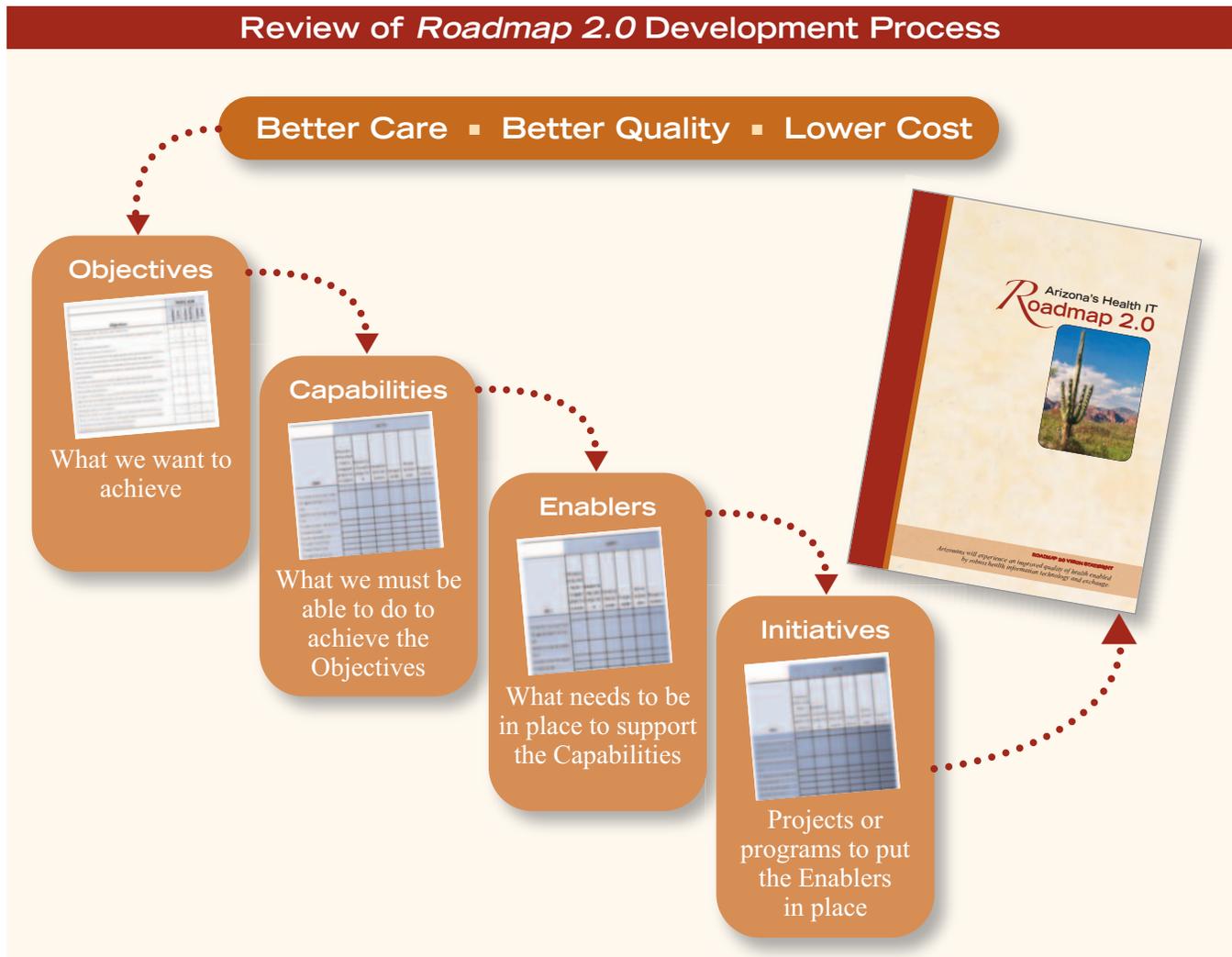
Reading from left to right on the illustration above shows a summary of the process used to identify the initiatives.

To understand how an initiative supports or helps achieve an objective it is possible to link an initiative back to the objectives. For example:

- Initiatives can be linked to the enablers that need to be improved or put in place
- Enablers can be linked to the specific capabilities that need to be present in the community
- Capabilities can be linked to the original community-defined objectives
- The objectives are what the *Roadmap 2.0* is striving to achieve

APPENDIX C: ADDITIONAL RESOURCES

- **Arizona Health-e Connection Roadmap (2006)**
  www.azhec.org/resource/resmgr/files/arizona_health-e_connection_.pdf

- **Arizona Health-e Connection Annual Report (2011)**
  www.azhec.org/resource/resmgr/docs/azhec_annual_rpt_2011_index.pdf

- **Arizona HIE Environmental Scan and Community Interviews (2012)**
  Arizona HIE Environmental Scan – Long Term Care (2012)
  Arizona HIE Environmental Scan – Behavioral Health Care (2012)
  Arizona HIE Environmental Scan – Rural Health Care (2012)

  For all reports see: http://hie.az.gov/env_scans.htm

- **Physicians' Use, Exchange, and Evaluation of Electronic Medical Records (2013)**
  Johnson WG, Harootunian G, Sama TL. (October 2013). Phoenix (AZ): Arizona State University, Center for Health Information & Research.
  http://chir.asu.edu/sites/default/files/AHCCCS%20EMR%20Report-October%202013%20Final-bj.pdf

- **The Use of Electronic Medical Records and Physicians' Attitudes toward a Health Information Exchange**
  Johnson WG, Harootunian G, Sama TL. (July 2012). Phoenix (AZ): Arizona State University, Center for Health Information & Research.
  http://chir.asu.edu/sites/default/files/AHCCCS%20Gov%20HIT%20EMR%20Report-July%202012%20Final1.pdf

- **Website Links**
  - ASET   aset.azdoa.gov
  - AzHeC   www.azhec.org
  - ASU CHiR   chir.asu.edu
  - AHCCCS   www.azahcccs.gov
  - ADHS – Public Health   www.azdhs.gov
  - BHINAz   www.bhinaz.com
  - Federal HIT/HIE site   www.healthit.gov
  - HINAz   www.hinaz.org