
**Arizona HIMSS Chapter
Educational Session
Creating a 21st Century Arizona
Medicaid Health System**

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Arizona Health Care Cost Containment System

Challenges Facing Medicaid Programs

- Rapid growth in membership
- Health Care System Maturity
- Ability to consistently control cost , assure access to care , and assure quality of care
- Health Disparities
- Over and Under Utilization of Services
- Consistent Evidence Based Patient Care Management
- The cycle time between new clinical discoveries and best practices and widespread adoption

Leadership in Stormy Times Requires Leadership Vision and Know How

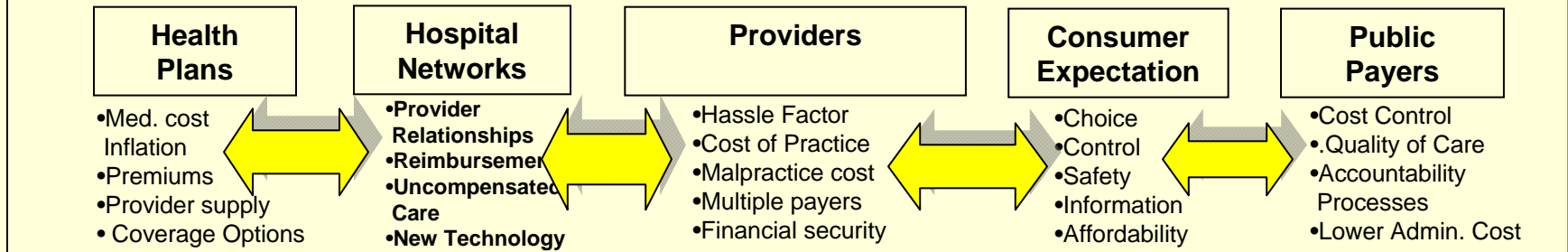


What's on the horizon?

Scan of State Health Care Environments



Strategic transformation Issues:



Synergies

State based Strategic HIT Initiatives:



The Purpose of Transforming the Medicaid Health Care System

To improve the healthcare systems' efficiency, patient care quality, foster the rapid and continuous adoption of clinical best practices, and improve public health's emergency and disaster response.

Essential Elements of Good Care Management



Elements of a Transformed Medicaid Healthcare System

- **Virtually integrated healthcare systems** able to access and exchange secure sources of the patient health information.
- **Web accessible health information and tools** that support the productive interaction between health care provider and patient.
- User “friendly” web accessible **health and wellness information and tools to raise Medicaid member health literacy** and that supports the patient’s active participation in their care management.
- Health care system that has **cost and quality transparency**.
- **Widespread adoption of health information technologies** that facilitate and supports the provision of evidence based, cost effective, and quality care management.

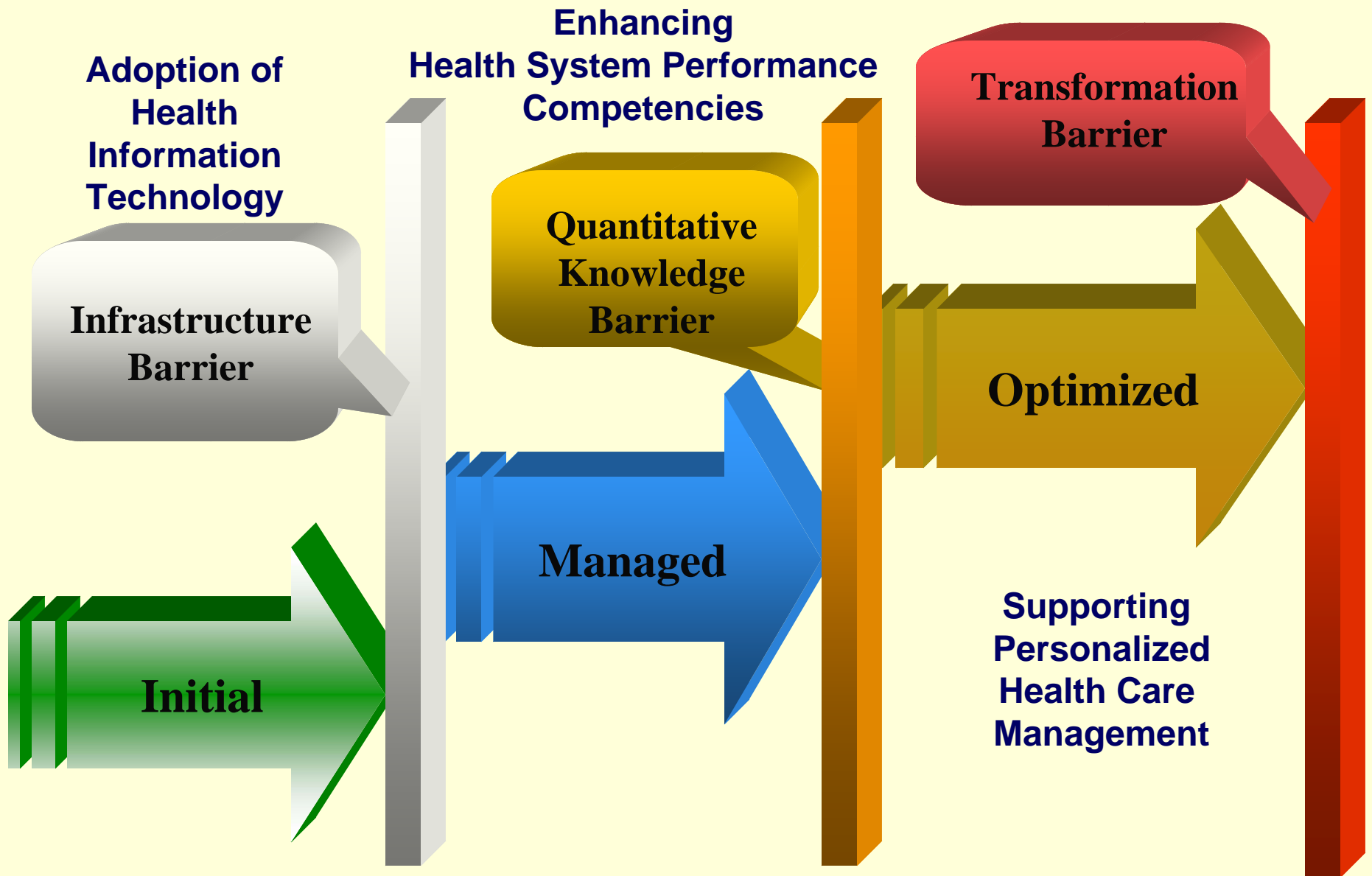
21st Century Medicaid Organizational Competencies

Customer Care	Operations	Medical Management	Financial Management
Web based Electronic Eligibility Screening and Processing	Electronic Claims EDI	Utilization Management	Expenditure management
Web based Provider Information Access and Administrative functions	Contracting & Network Mgmt Tools	Quality Improvement Management	Rate Setting Reimbursement Management
Web based Member Communications and Feedback	Health Information Exchange/ Electronic Health Records/E-Prescribing	Disease Management	Policy Modeling and Planning
Electronic Customer Relations Management Tools	Data Warehouse and Decision support tools	Case Management	Financial Performance Reporting
Web Based wellness and health promotion	Electronic Encounter Reporting	Predictive Modeling and Medical Risk Management	Fraud and Abuse Monitoring

New Solutions for Old Problems

- Cost Control
- Access to Care
- Quality of Care
- Patient Safety
- Health Disparities
- Decision Support

Health Care Transformation Maturity Model



Optimized Health System Maturity Capability

- **Fully integrated and coordinated patient centered health systems** including prevention, primary care, specialty care, hospital/institutional, population, and community health;
- **Performance focused on individual, family, population, community,** and any other factors that impact health and wellbeing;
- **Comparable quality and cost performance** at individual, population, community, state, and national level;
- **Health care networks resources designed and organized** around the individual health care plan and population health care needs including health, psychosocial, and community resources;
- **Aligned clinical decision support and patient decision support** tools that automatically update clinical and patient decision support applications and information;
- **Common electronic health record exchange standards** and capabilities that reliably and securely move information among health systems and networks to optimize care coordination;
- **Optimized health care cost, processes, quality, and patient care** driven by aligned reimbursement methodologies.

Medicaid Health System Transformation Performance Metrics

- **Lower pharmacy PMPM cost**
- **Lower Diagnostic PMPM cost**
- **Higher percentage of LTC members in home and community based settings**
- **Lower bed days and admissions per 1000**
- **Lower cost overall for long term care PMPM cost**
- **High member satisfaction**
- **High provider satisfaction**
- **Lower number of emergency room visits per 1000**
- **Greater healthcare capacity, access and quality of care**
- **Program compliance, integrity, performance accountability**
- **Improved overall health system administrative efficiency**

Value Proposition	AHCCCS	Health Plan	Patient Center Medical Home	Patient and Family
Pharmacy Cost	Lower Rx Cost PMPM	Lower Rx Cost	Less Administrative Cost	Less confusion
Improved Medication Management	Better member compliance	Better medication compliance	Medication history and care management	Improved outcome and compliance
Improved Quality Performance	Higher Quality Performance	Higher quality metrics performance	Pay for Performance Incentives	Improved quality of care
Reduced Diagnostic Cost	Reduction cost from unnecessary diagnostic procedures	Reduction in cost	Timely access to necessary diagnostic information	Reduced number of procedures
Improved Patient Satisfaction	Key result area	Increase enrollment and retention from satisfied members	Increased patient trust and patient compliance	Increased quality of patient experience
Improved provider satisfaction	Key result area	Stabilizes provider network makes it easier to recruit new providers	Make clinical practice more enjoyable	Increases patient since of worth
Reduce ER Utilization	Reduces PMPM cost	Reduces cost	Improves continuity of care	Reduces hassle factor and anxiety
Reduce Hospital Admissions	Reduces PMPM cost	Reduces cost	Improves continuity of care	Reduces hassle factor, loss of income, and anxiety
Improve Patient Safety	Prevents unnecessary cost	Prevents unnecessary cost	Reduces patient utilization and recovery	Improve patient confidence in the health system
Improved patient engagement and activation	Improves healthy behaviors and prevent long term cost	Reduces cost and increases compliance with prevention	Improve patient and provider relationship and communication	Improves patient compliance and self care competency
Overall	Reduction of PMPM and improve efficiency	Reduction of cost and improved quality performance	Improve practice efficiency and performance outcomes.	Patient centered care

E-Prescribing

**A Solution to Improve
Medication Management
and Reduce Drug Cost**

E-Prescribing Use Case Value Proposition

- The Return on Investment
 - Potential Areas for Cost Avoidance
 - Inpatient Stays
 - ER Visits
 - Prescriber Work Flows
 - Pharmacy Processing Flows
 - Fraud & Abuse

E-Prescribing Use Case

Return on Investment

- Quality of Care
 - Improved Medication Safety & Decreased Errors
 - Decreased Adverse Events
 - More Appropriate Medication Selection
 - Improved Clinical Outcomes
 - Enhanced Prescriber Efficiency
 - Streamlined Communication
 - Improved Patient Satisfaction

Consistent Medication Management is a Major Challenge Facing Medicaid

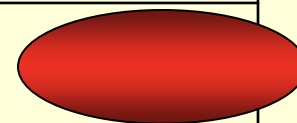
Medication Error Annual Stats:

- 7000 Deaths
- 1.3 million Injuries
- Cost
 - \$ 77B in 1995
 - \$177B in 2000
 - 70% Hospital
 - 18% Long Term Care

U.S. Food and Drug Administration Center for Drug Evaluation and Research, *Medication Errors*, February 2004

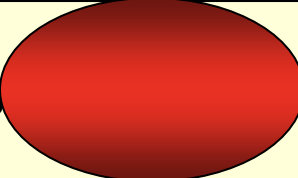
Ernst F and Grizzle A., "Drug-Related Morbidity and Mortality: Updating the Cost-of-Illness

Year	Billable Type	Total Amount Paid	Number of Unique Members	Average Cost per Stay	3% of the Inpatient Members	Potential Cost Avoidance with the Implementation of e-Prescribing
2006	FFS-Inpatient	\$ 289,971,225	46,977	\$ 6173	1409	\$ 8,697,757
2006	FFS-ER	\$ 44,102,924	62,623	\$ 704	1878	\$ 1,322,112
2006	Encounter-ER	\$ 66,640,459	117,256	\$ 568	3518	\$ 1,998,224
2006	Encounter-Inpatient	\$ 1,074,694,526	166,621	\$ 6450	4999	\$ 32,243,550
2007	FFS-Inpatient	\$ 263,142,852	45,749	\$ 752	1372	\$ 7,891,744
2007	FFS-ER	\$ 52,074,992	63,224	\$ 824	1897	\$ 1,563,128
2007	Encounter-ER	\$ 64,461,437	110,043	\$ 613	3301	\$ 2,023,513
2007	Encounter-Inpatient	\$ 892,544,063	139,886	\$ 6381	4197	\$ 26,781,057
TOTALS		\$ 2,747,632,487	752,379	\$ 3433	22571	



Prescribing Value Proposition Providers

Prescriber - The Medical Management Group Association estimates that each prescriber will save \$15,700 in administrative costs when e-prescribing is utilized.

Prescriber Type	Number of AHCCCS Registered Providers	20% of the Estimated Cost Avoidance
Physicians MDs & DOs	18,430	\$ 57,870,200
Physician Assistants	1,141	\$ 3,582,740
Nurse Practitioners	1,477	\$ 4,637,780
TOTAL	21,048	\$ 

E-Prescribing Value Proposition for Pharmacies

The Rupp Research suggests that it may be possible to reduce pharmacy labor costs by as much as 15.8 percent resulting in an average cost reduction of \$0.97 for each new prescription and \$0.37 for each refill prescription.

8.2 million annual RXs are filled and paid for by AHCCCS

- **61% New Rxs (5.1 M) X \$0.97 = \$4.95M**
- **39% Refill Rxs (3.2 M) X \$0.37 = \$1.18M**

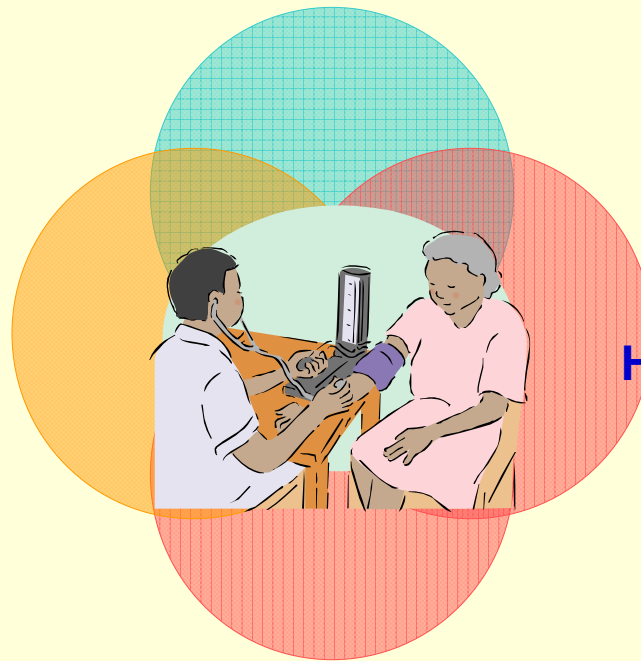
Potential Pharmacy Cost Avoidance = \$6.13M

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Root Causes of Health Disparities

Low Health Literacy

Lack of
Access to Care



Lack of
Health Care Coverage

Health System Maturity and Capacity

Four Level of Medicaid Health Literacy

- Basic Health Literacy
- Interactive Health Literacy
- Functional Health Literacy
- Specialized Health Literacy

New Web Tools for Raising Health Literacy



Specialized Health Literacy	
All Modalities:	Combination of all types of e-learning, web content, information from health plans, e-coaching/coach lines, physician consults, two-way conversations with provider, forums for caretakers, community resources
Functional Literacy	
All Modalities:	Combination of all types of e-learning, web content, information from health plans, e-coaching/coach lines, physician consults, two-way conversations with provider, forums on chronic illness
Interactive Literacy	
E-Learning:	Computer based training, webinars
Website:	Forums, Decision Points, Action Sets
Health Plans:	E-coaching, Coach lines
Providers:	Computer based training + consult, email, Provider-2-provider: wikis, forums, blogs
Basic Literacy - Knowledge Building Applications	
E-Learning:	Podcasts, Videos
Website:	Reading web content
Health Plans:	Re-direction to links, pamphlets
Providers:	Consult with patients

← Tools used to train families members on how to care for a dependent who requires daily direct care. Emphasis of education switches from self-management to caretaking

← Ability to comply to doctor's orders and or manage chronic illness, trauma rehabilitation or manage medical condition for a dependent through combination of knowledge-based and interactive tools and forced application of learning, coaching

← Information *plus* activity – forced critical thinking. Competency to communicate personal health issues, understands doctor's orders and is able to navigate world of services and providers

← Information ONLY – one way communication. General on care, wellness behaviors, AHCCCS health care

Delivering E-Learning Programming to Provider Sites

- Knowledge Builder eLearning Infrastructure
- Rapid eLearning Program Production Cycle
- Multiple content sources
- Multimedia production studio
- Consumer feedback loop
- Innovation Centers



*Provider E-Learning
Resource Center*



*For Mobile Health-E
Education*

Tablet

Developing New Tools to Raise Health Literacy in Medicaid

Health e-Learning/Multimedia

According to adult learning principles, adults learn much more effectively if the material is relevant and personally engaging. E-learning is a flexible tool that creates the opportunity for more personalized learning suited to culture, gender, ethnicity, and personal learning style.

Features of the eLearning Multimedia Component:

- Streaming video with dynamic video content
- *Interactive Tools* functionality about specific diseases (ex. Diabetes)
- Focus is on conditions of high prevalence diseases impacting the Medicaid population (ex. Diabetes, Oral Health Care, Asthma, etc.)
- Information presented in linguistically and culturally sensitive format
- Content offered in English and Spanish

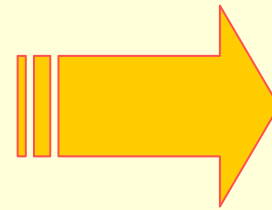
Arizona Medical Information Exchange AMIE

Rational for Wide Spread Adoption of Electronic Health Information (EHI) Technologies Can Help Achieve Better Outcomes and Lower Cost

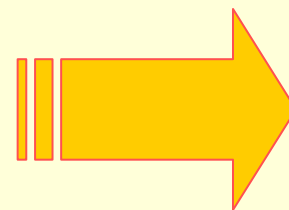
Improving Health care Quality and Cost Performance

ROI of EHI at Point of Care:

- Improved Patient Safety
- Reduced Complications Rates
- Reduced Cost per Episode of Care
- Improved Quality Performance



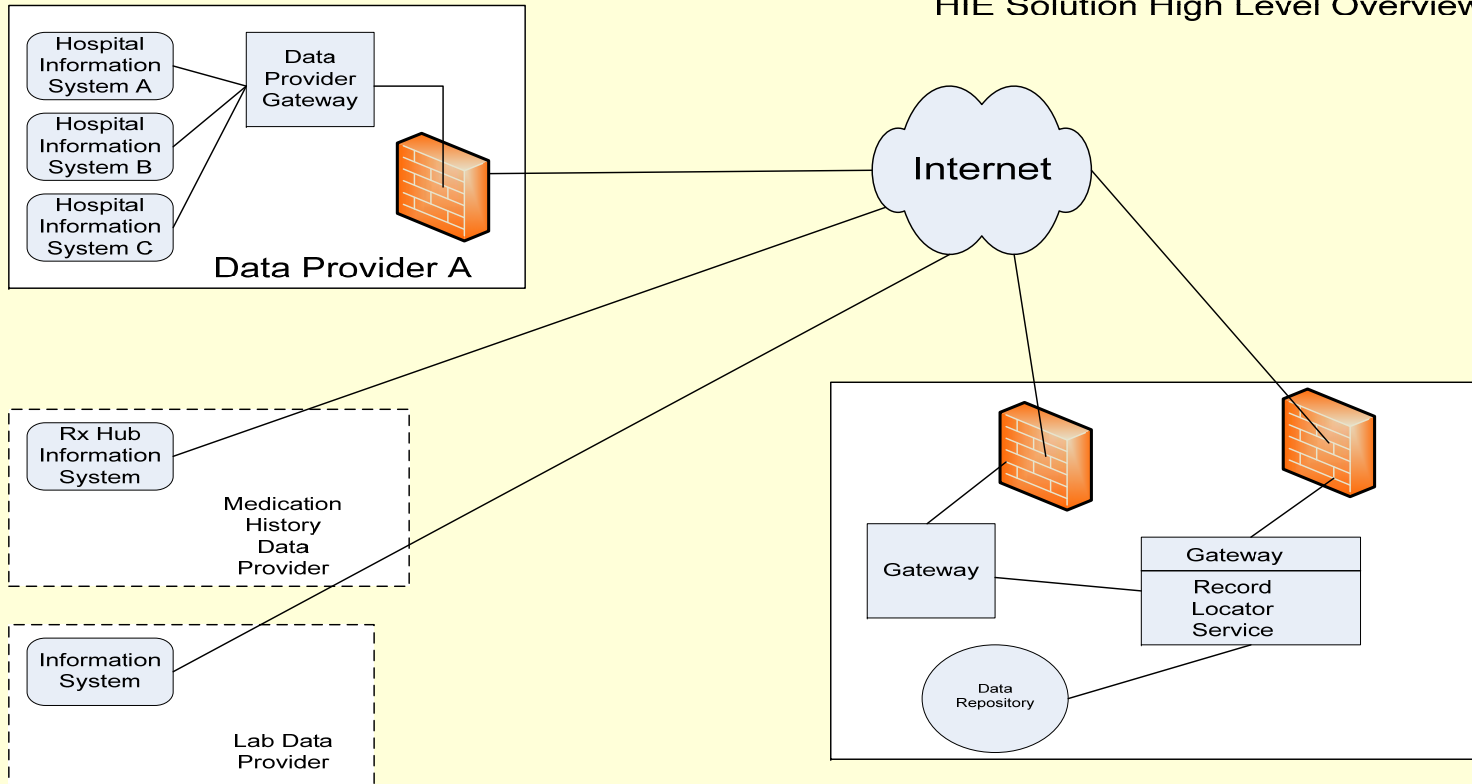
Better Outcomes



Lower Costs

Data Partners High Level Exchange Relationship Model

HIE Solution High Level Overview

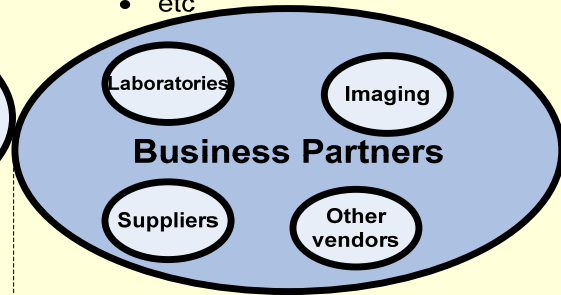
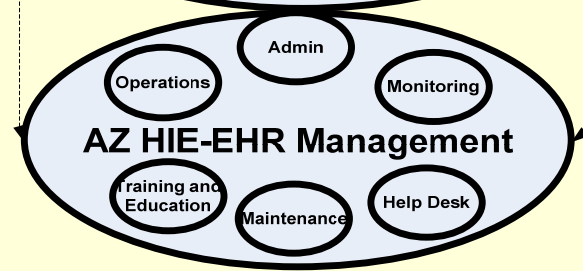
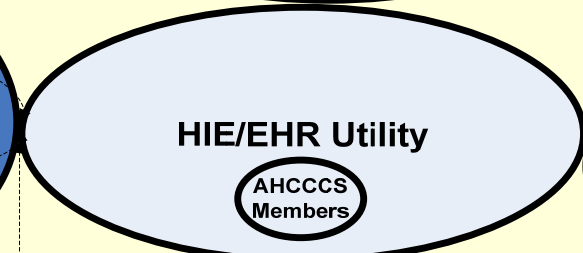
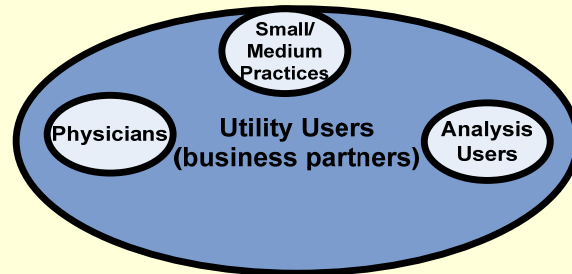
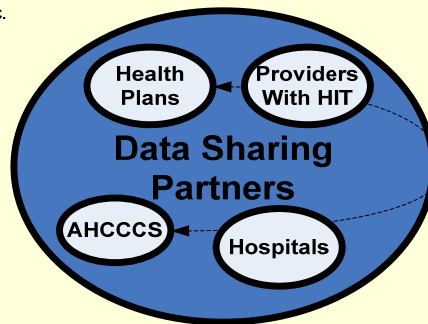


Data Partners Relationships

Data Partners are organizations that share or exchange data through the HIE-EHR Utility

e.g.

- Health Plans
- Hospitals
- Physicians
- Labs
- Imaging Labs
- Other HIEs – SAHIE, etc
- AZ Dept of Health Services
- Medicare
- Indian Health Services (IHS)
- etc.



Business Partners are organizations that expose web content and applications through the Utility web portal, for gain or mutual benefit; in other words, transact business through the Utility.

e.g. Sonora Quest Care360°.

- Laboratories
- Imaging
- Suppliers
- Durable Medical Equipment
- Pharmacies
- SureScripts
- RX Hub
- Other HIEs
- etc

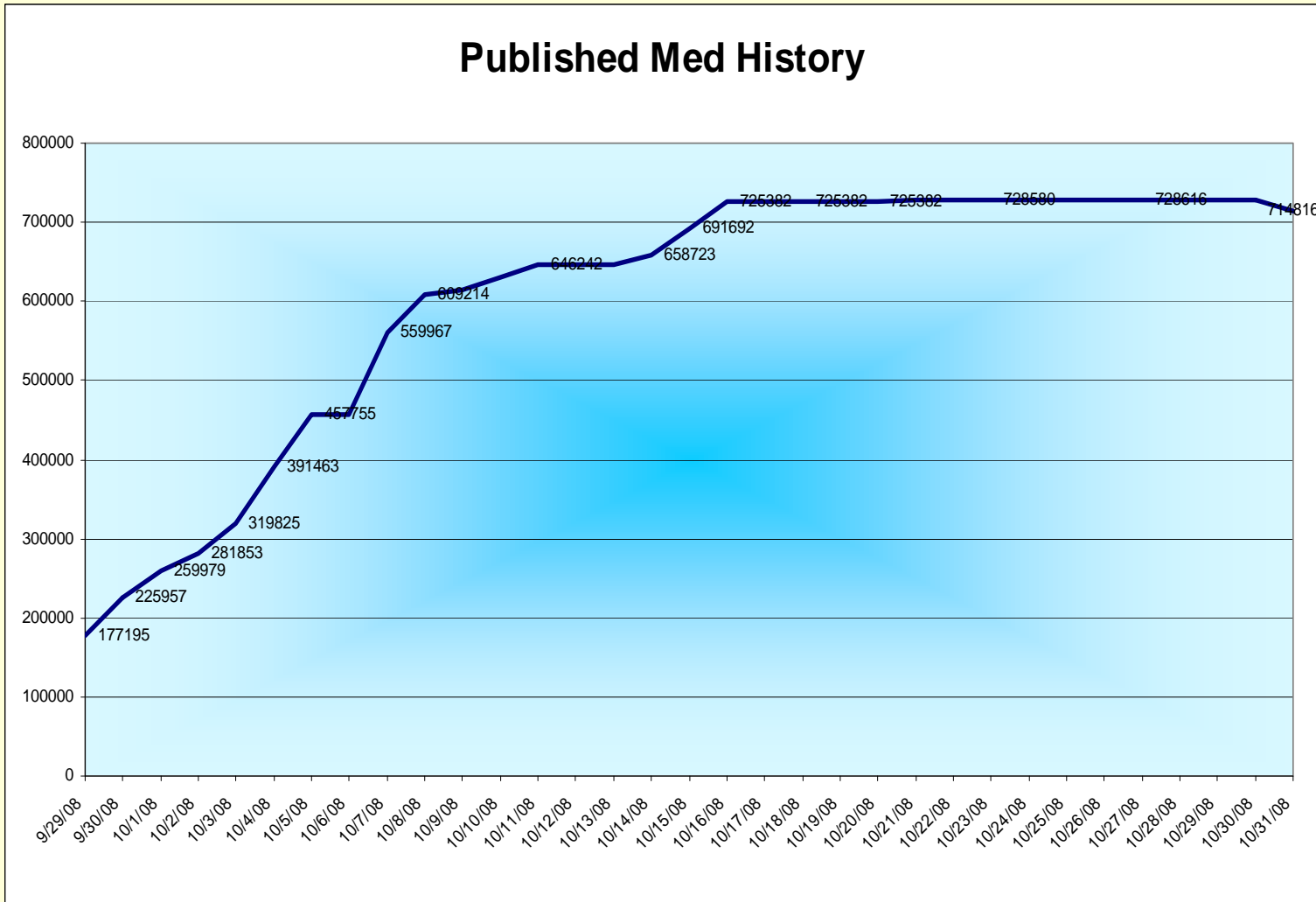
Utility Users are persons who use the functionality of the portal. e.g.

- Physicians
- Small/medium Practices
- Analysis users (TBD)
- Emergency Depts
- Dept of Public Safety
- AZ Department of Health Services
- etc

Administrative and management users use the portal to access administrative and management applications supported by the portal.

AMIE

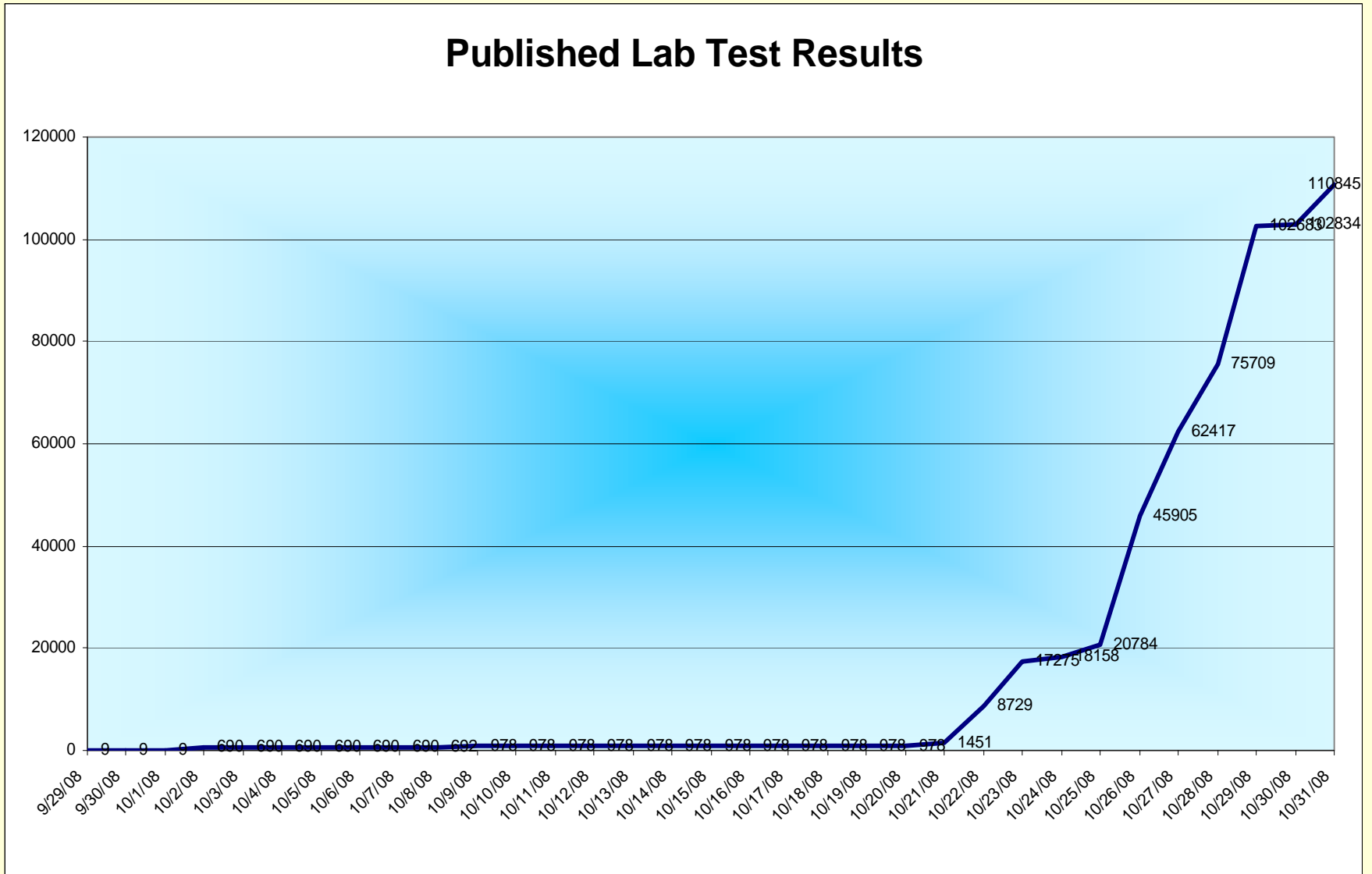
Proof of Concept Utilization



AMIE

Proof of Concept Utilization

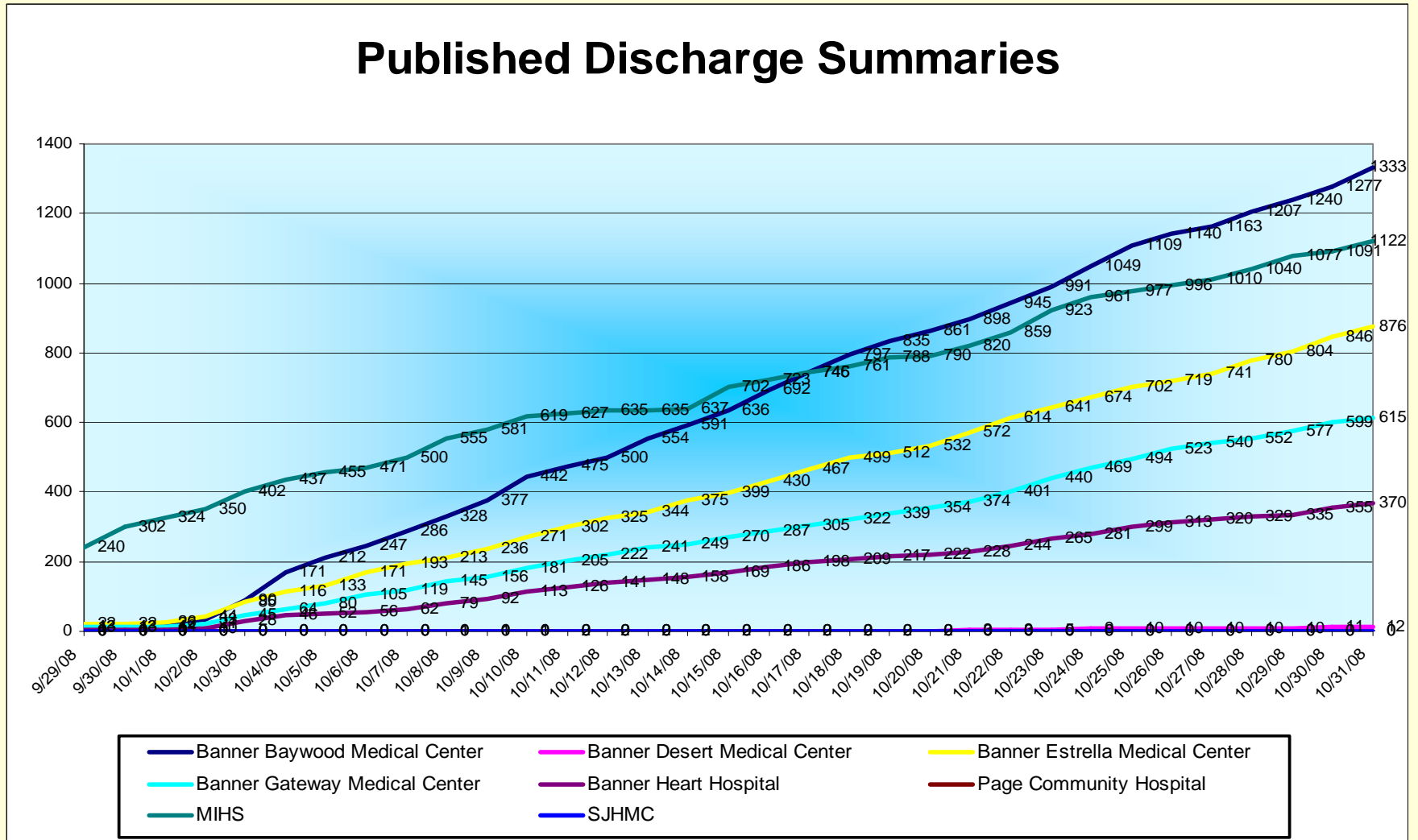
Published Lab Test Results



AMIE

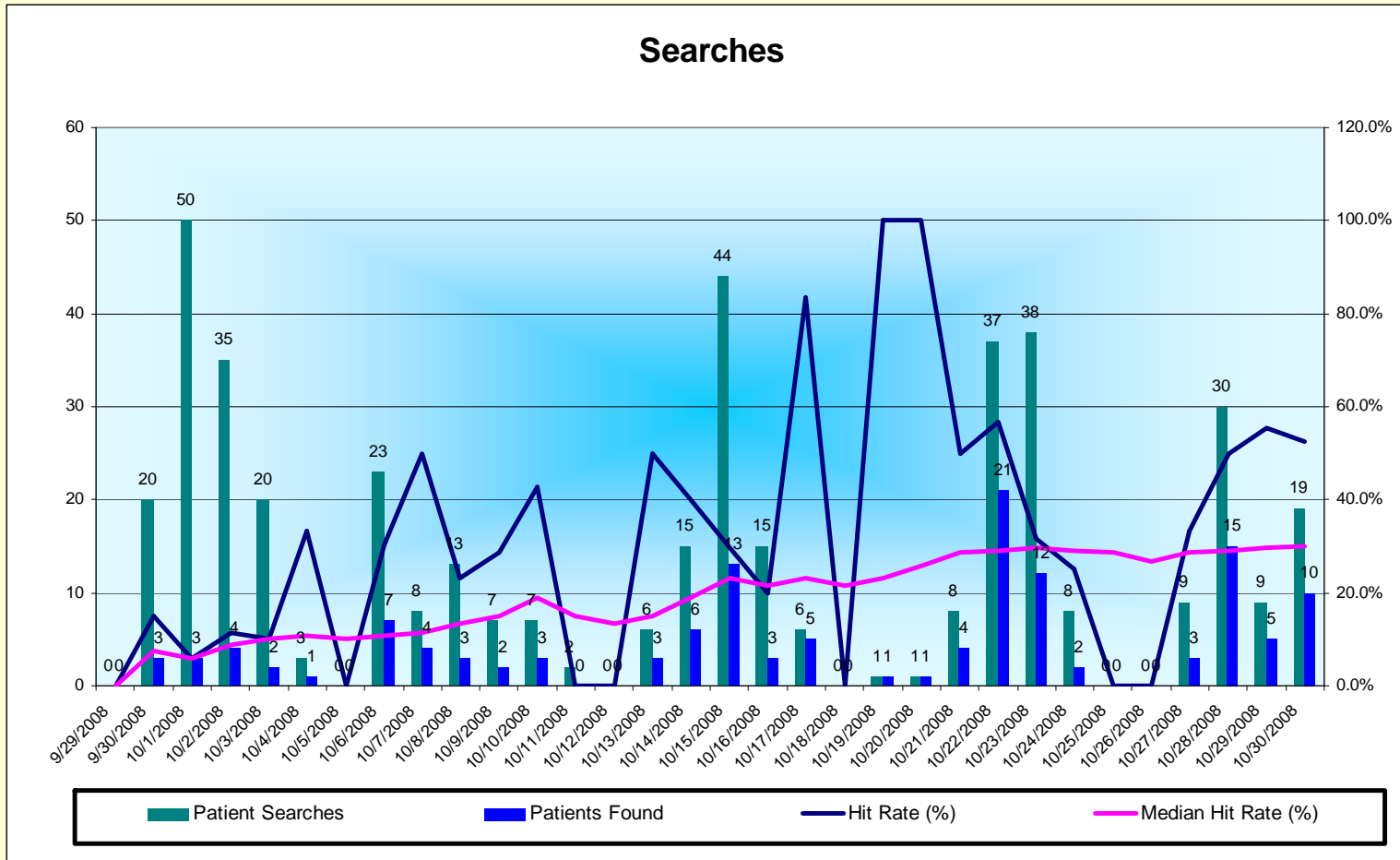
Proof of Concept Utilization

Published Discharge Summaries



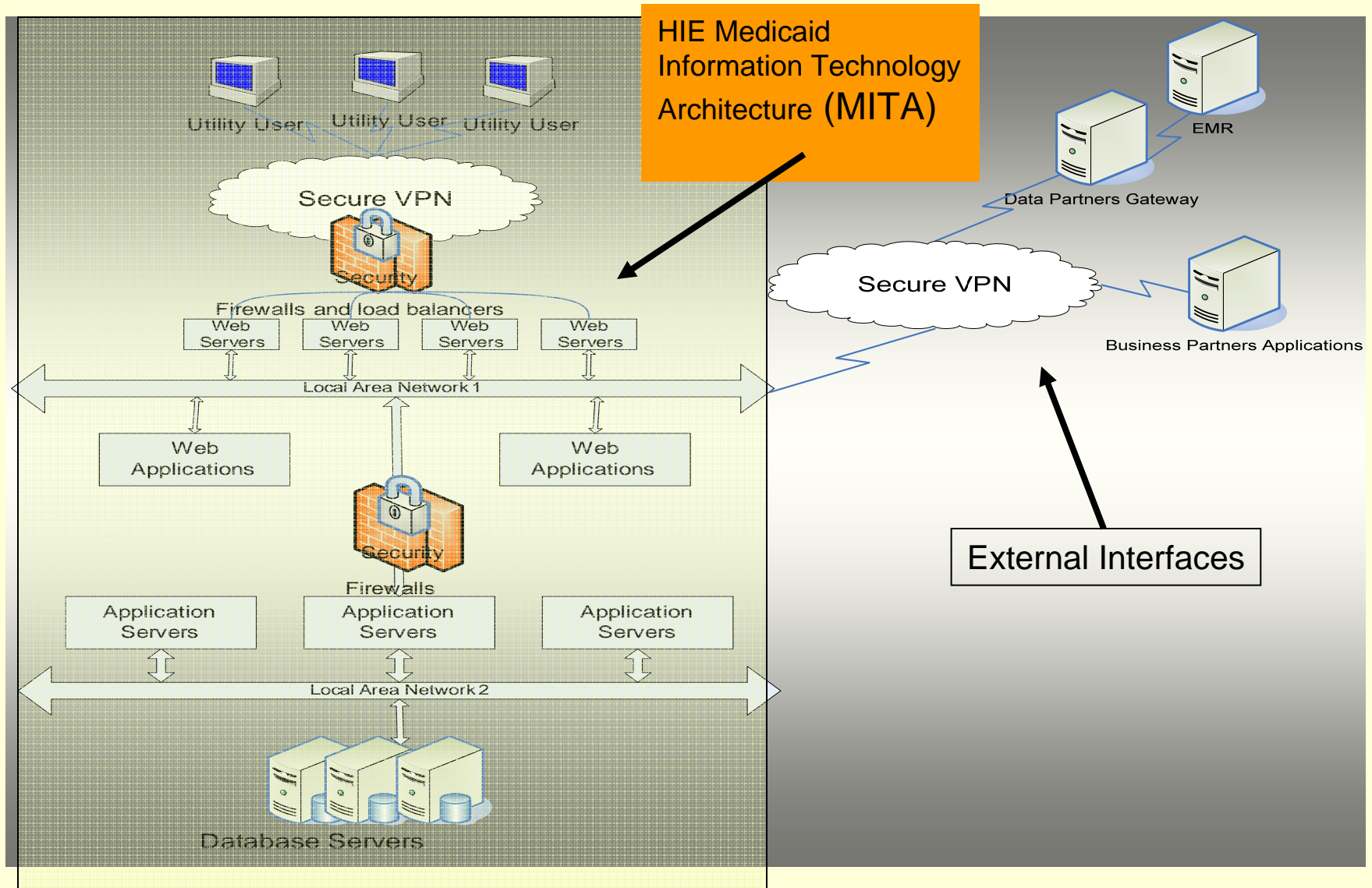
AMIE

Proof of Concept Utilization

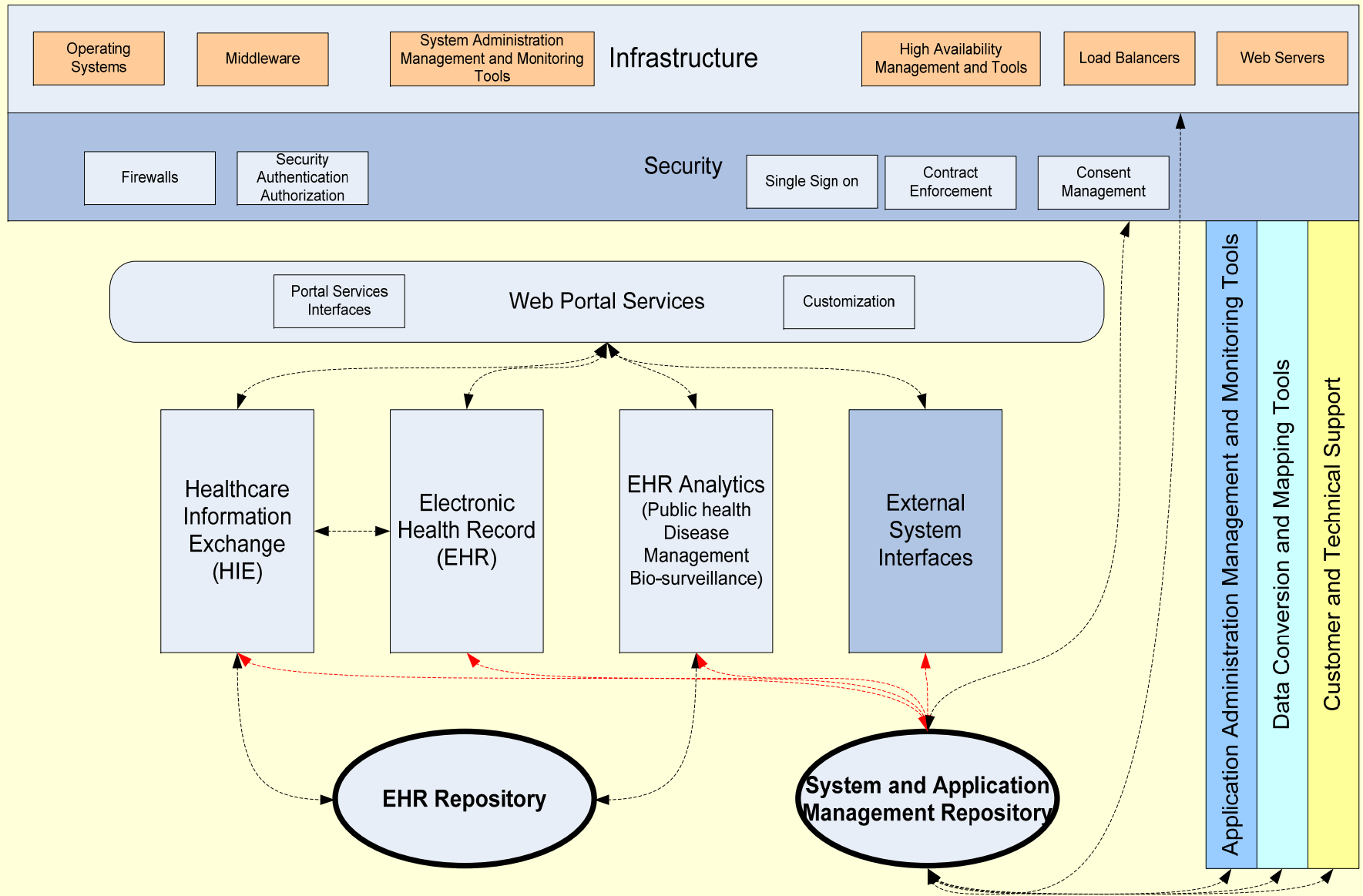


21st Century Medicaid Health Information Technology Environment

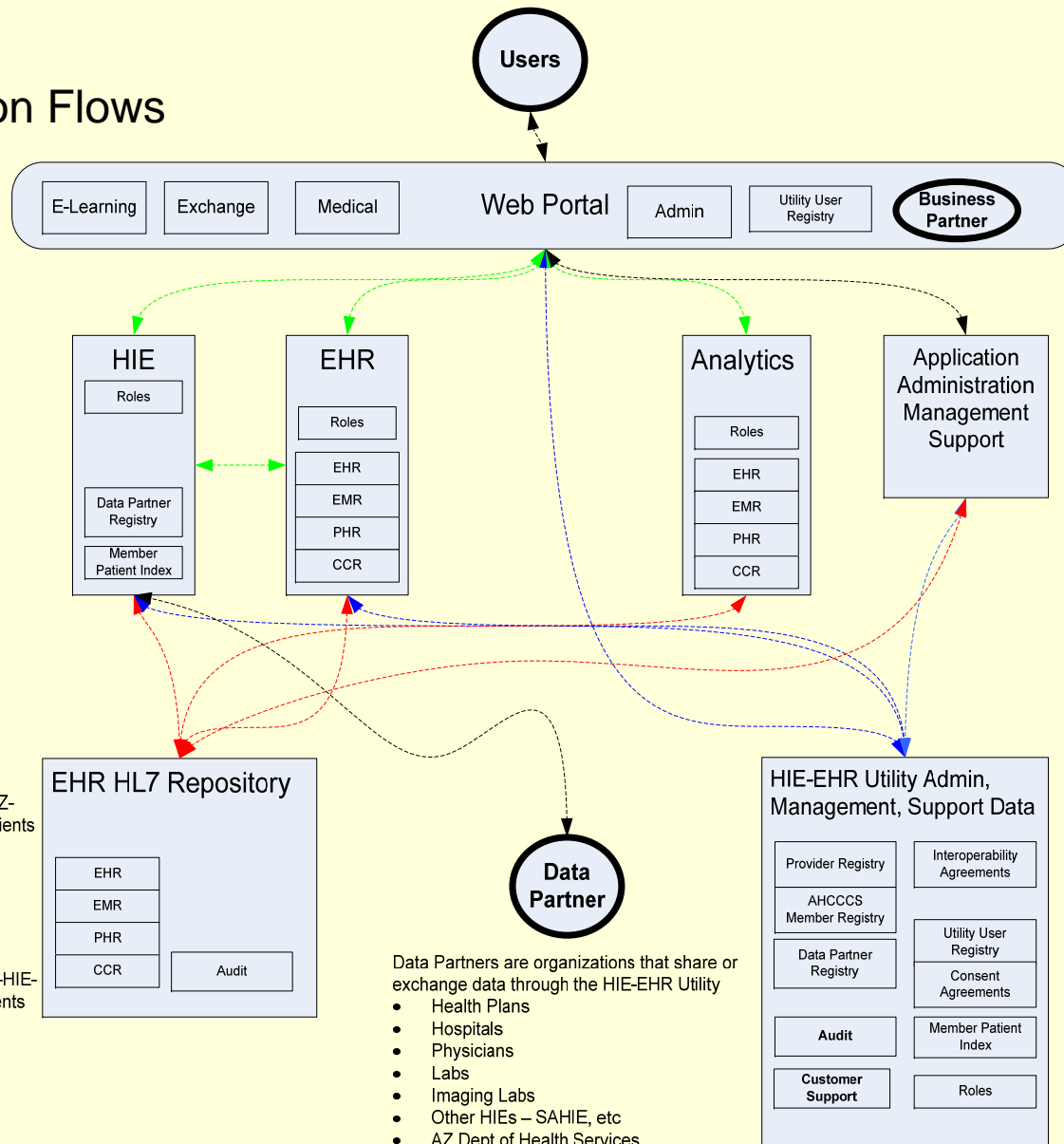
The HIE Environment



21st Century E-Health Infrastructure Configuration



Information Flows



The EHR HL7 Repository contains "identified" data in the custody of the AZ-HIE-EHR Utility with the consent of patients and providers

- Clinical
- Financial
- Pharmacy

The EHR HL7 Repository contains de-identified data in the custody of the AZ-HIE-EHR Utility without the consent of patients and providers

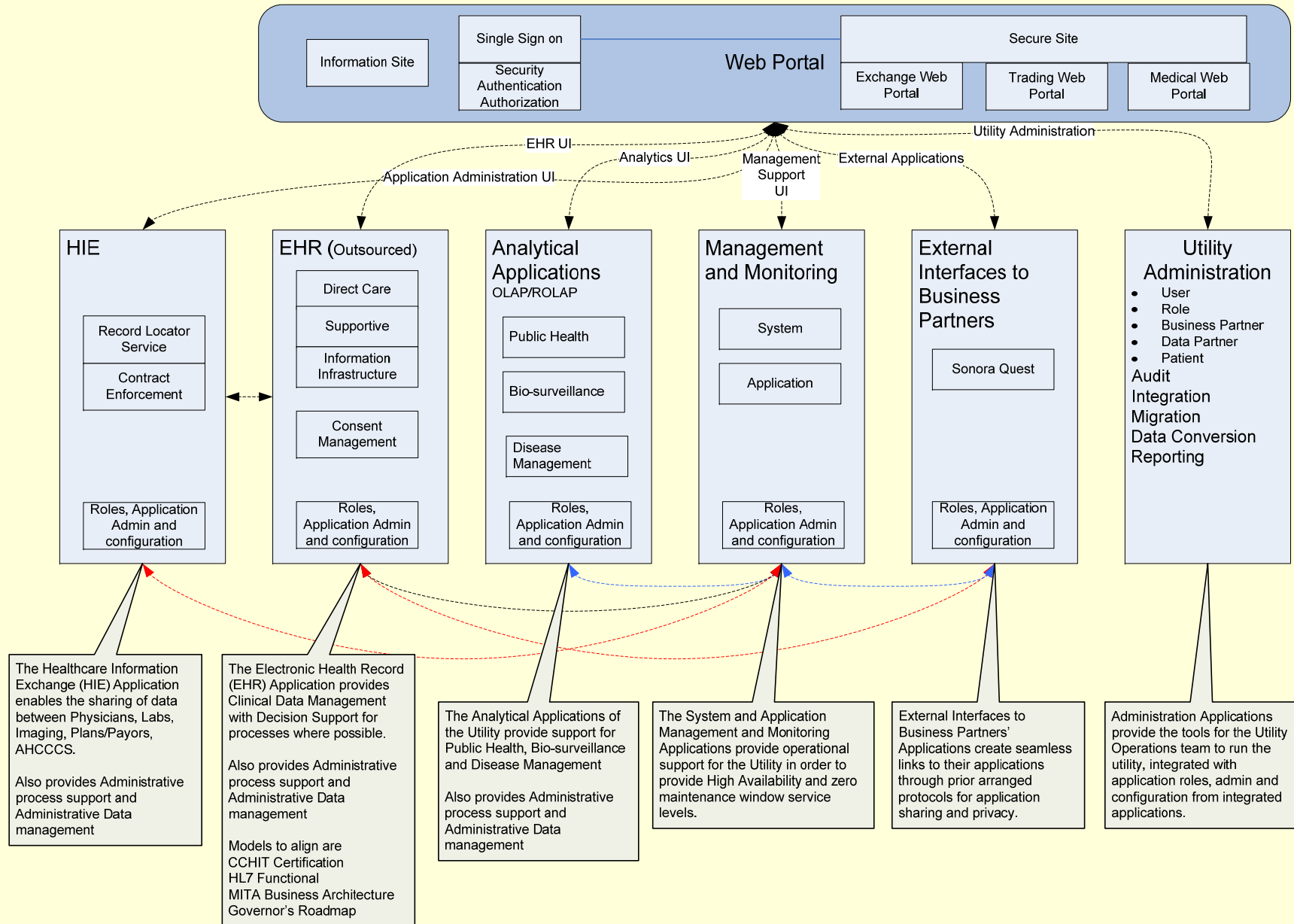
- Clinical
- Financial
- Pharmacy

Data Partners are organizations that share or exchange data through the HIE-EHR Utility

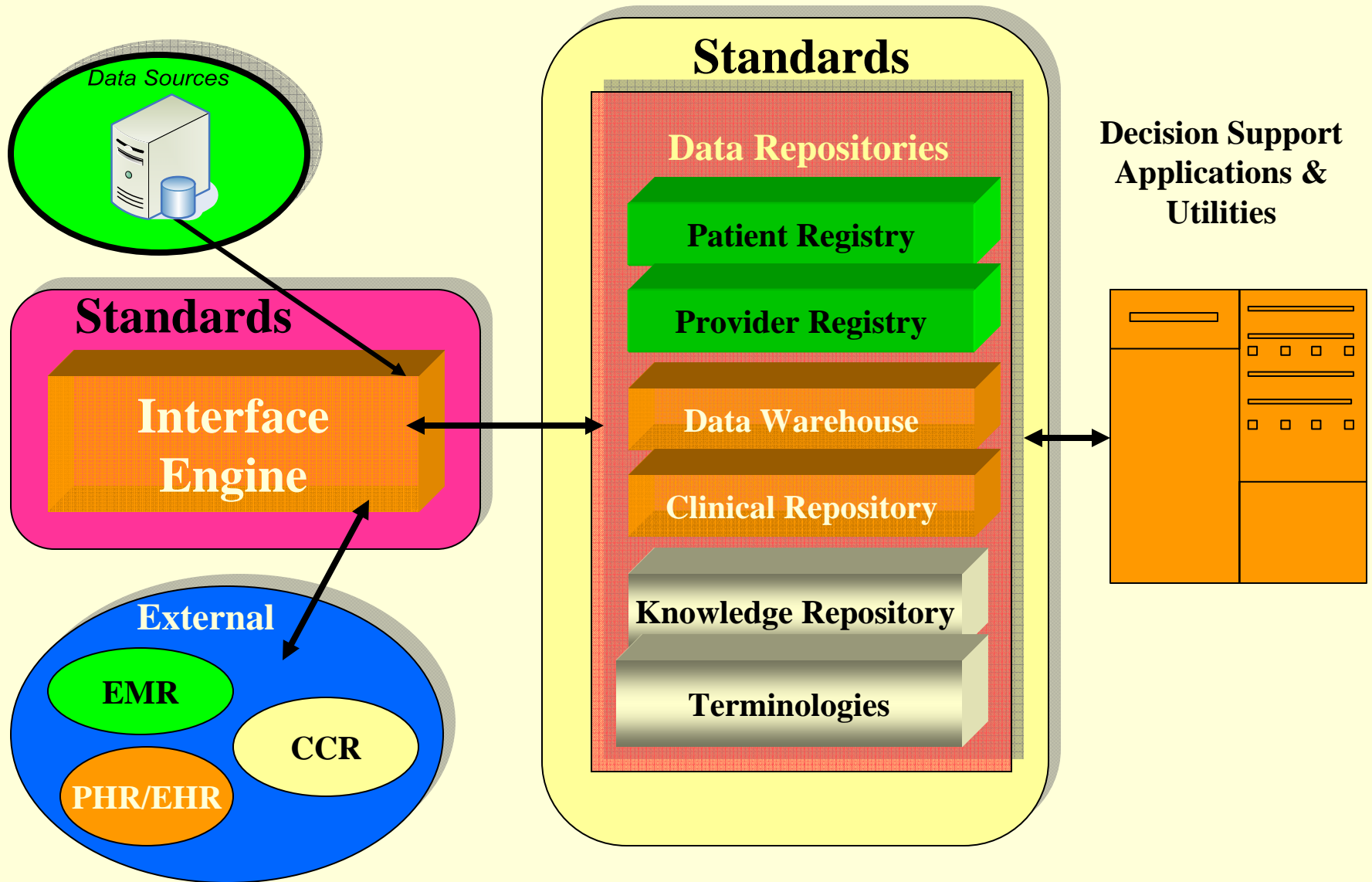
- Health Plans
- Hospitals
- Physicians
- Labs
- Imaging Labs
- Other HIEs – SAHIE, etc
- AZ Dept of Health Services

Management Data are data required to manage and operate the AZ-HIE-EHR Utility

Vision of 21st Century AHCCCS E-Health Information Environment



Electronic Health Record in Medicaid Data Repository Relationships



Scope of AHCCCS Health System Transformation Initiatives

- **Incentivize the widespread adoption of interoperable Electronic Health Information Technologies.**
- **Facilitate Electronic Health Information Exchange**
- **Facilitate the use of aligned Clinical and Enterprise Level Decision Support Tools.**
- **Support the use of clinical and patient decision support tools that use a common health data sets and evidence-based references.**
- **Support the use of internet e-learning and telecommunication infrastructure that supports the delivery of personalized health information and improves health literacy and self care competencies in Medicaid population.**

The Vision E-Health Connected Medicaid Health System

