Health Information Exchange

Ann Geyer
Partner, Tunitas Group

Chief Privacy & Security Officer,
University of California, Berkeley

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Outline

- HIE concept & rationale
- Uses & benefits
- Challenges & issues
- Success factors

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Health Information Exchange

Goal: To automate and facilitate the electronic exchange of health information across disparate healthcare and government organizations

History

Type	CHINs	RHIOs	NHIN/HIE
Dates	1990	2000	2010
Funding	Fed-ATP	Industry	Fed-ARRA
Focus	EDI-billing	EDI-HEDIS	Full clinical-EMR
Approach	Proprietary data exchange; Fledgling Internet	Internet; Confused architectures	Enterprise EMRs with middleware HIE services
Sponsors	Vendor driven	HC Consortiums	States/Feds
Issues	Technical	Competition	Value
	Sustainable business model Attracting/supporting physician participation		

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Drivers

- Breakdown silos of proprietary data
- Facilitate physician communication
- Support patient mobility and continuum of care
- Reduce duplication of effort costs
- Enable national health analysis and outcomes research
- Reduce governmental healthcare spending

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HIE Penetration

- All 50 states have HIE initiatives
- Most locally/regionally driven
- Consensus model constrains decisions;
  minimal standards for liability/governance/security
- Limited revenue based funding (as yet)
- No dominant operational model (trial & error)
- Adoption elusive (misaligned value-cost equations)
- More failures than successes

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Nothing Simple about HIE

- Stakeholder Diversity
- Contradictory Viewpoints
- Hardware & Software
- Organizational Structures
- Data Standards
- Communication Models
- Policy & Procedures
- Business Practices
- State Medical Practice Laws

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Numerous Stakeholders

Health Care Providers	Employers and Payers	Consumers	Public Interest
Clinicians	Employers	Employees	Public Health
Physician Practices	State	Persons	School Districts
Hospitals and Health Systems	Federal	Families	Emergency Preparedness / Event Management
Ambulatory Care	Private	Caregivers	Policy Officials/ Government
Specialty Hospitals	Business Associations	Advocacy Groups	Accreditation /Regulatory
FQHCs/CBHOs	Unions	Media	Research and Education

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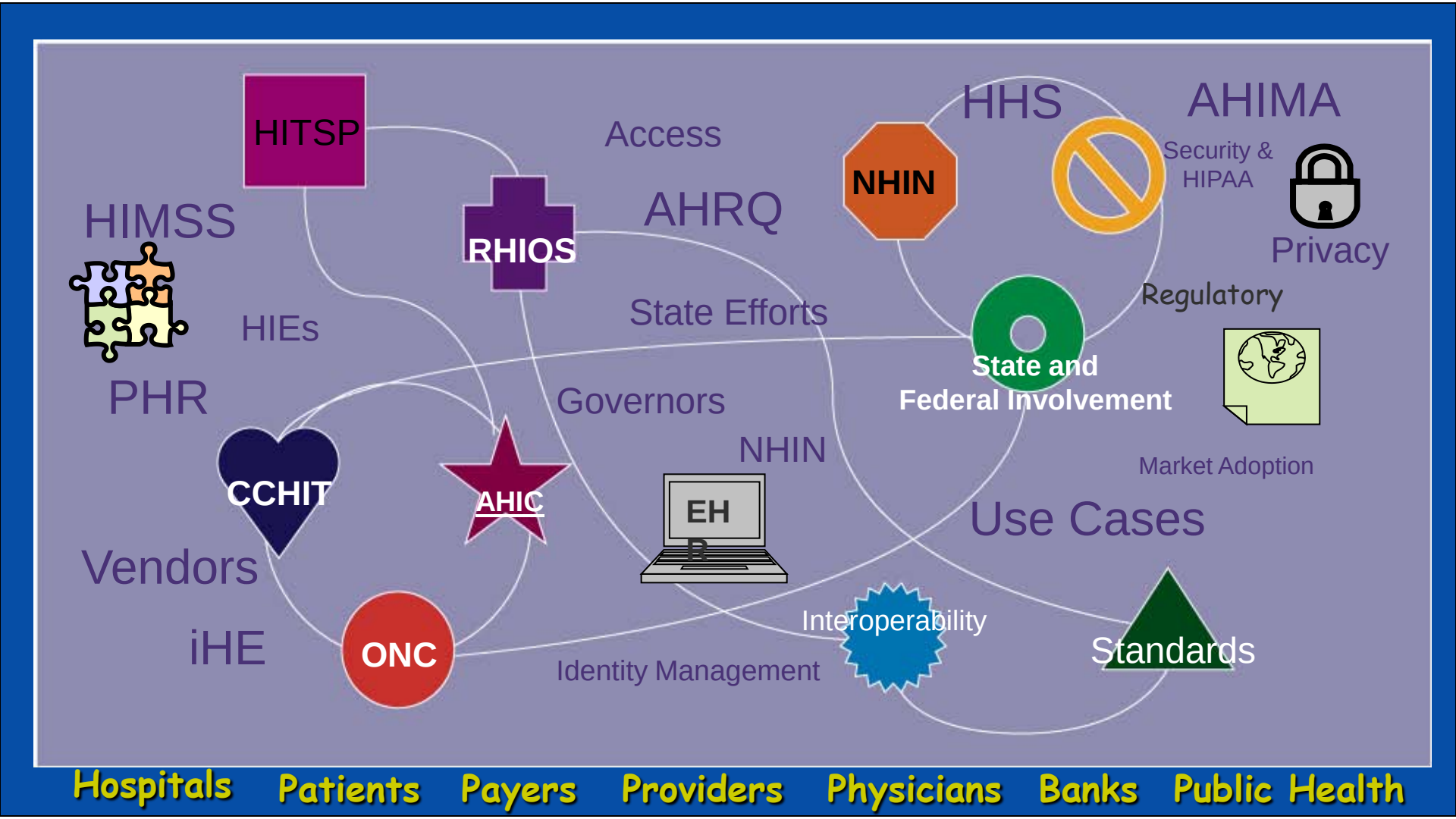
Confusing Roadmap



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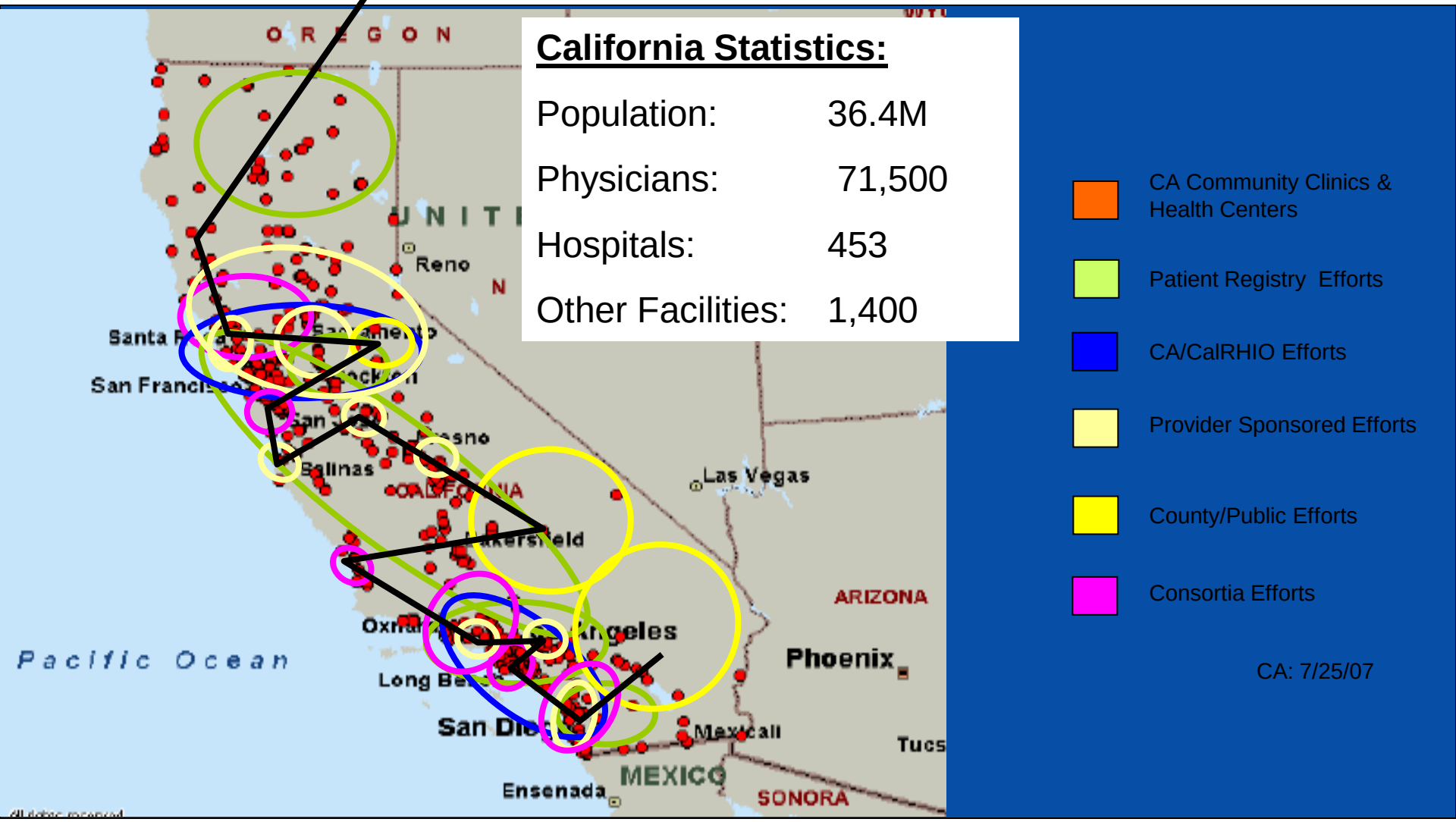
Automonous HIE Landscape



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HIE Market Factors

- Program Structure
  - No single organizational structure
  - Challenging to market and support
- Technology
  - Myriad of application programs
  - Many still proprietary with limited data import/export capabilities
  - Federal funds require adherence to standards; not yet available
- Sustainability
  - Reasonable start-up funding
  - Aggressive gov't push for self-reliance
  - Challenging pricing and demand management issues
  - Basic economic premises unproven

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HIE Market Factors (2)

- Delivering Value through reasonable Use Cases
  - Diagnostic results delivery
  - CCR/CCD Exchange
  - Medication/Allergy History
  - ED Linking/Clinical Summary
  - Registry State Reporting (Immunizations)
- Facilitating Exchange through HIE Services
  - Patient Identity Management
  - Patient Consent Management
  - Record Locator Service
  - Provider Directory

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Major Challenge in a Nutshell

- Invest intelligently
- In the right solutions
- According to logical plans
- That are well executed
- By leaders who can overcome competition, conflicting policy, and idiosyncrasies

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Will ARRA-HITECH Make The Difference?

- Direct stimulation of HIE
  - $1B in seed funds
  - Meaningful use mandates
  - Regional Extension Centers
  - $300M for state HIE organizations
  - Other federal funding ~ $2.5b designed for specific types of HIE operators
- Certified EMR
  - Includes requirement to connect & use HIE technology/service
- Sec of DHHS
  - Req'd to adopt interexchange standards (NHIN)
  - Deadline—Dec 09
  - Fed agencies must comply; states likely as well
  - Private sector voluntary
  - Medicare/caid contractors compelled by contract

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Getting to Viable HIE

- Clearly defining the data exchange model and the specific data to be exchanged
- Developing standards for acceptable data quality and specifying how data quality will be measured
- Defining a process to capture accurate and reliable patient identity for disparate enterprise use
- Developing methods to identify and eliminate duplicate patient records across disparate organizations

Getting to Viable HIE (2)

- Auditing the accuracy of correctly identifying individuals across disparate organizations as well as accurate and reliable data linking
- Auditing the accuracy of the clinical documentation within EMRs, RHIOs, and HIE activities
- Establishing mandatory privacy and security policies for access and receipt of health information in an HIE context including user provisioning, authorizing, and authenticating users, and auditing access

Privacy –A Sticky Wicket

- Privacy solutions before HIE OR
  HIE to drive privacy solutions

- Interoperable HIE preconditions
  - Uniform access management policies
  - Acceptable limits on appropriate use
  - Level of patient control over information
  - Tech/operational choices that incorporate privacy & security principles

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HIE Futures

- Federal funding masks the HIE business sustainability challenges
  - Mass stimulus short term band aid
  - More “Santa Barbara” deaths likely
- Value delivery must be proven
  - Patient care duplication and cost reduction unsound
  - Data accuracy and reliability subversive
  - No pay for value business model
  - Competitive pressures too strong for trust building

Success Factors

- EMR penetration is critical
- Portability demand actually develops
- Costs & value can be realistically aligned

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