

blue shield  
of california  
foundation

# Convening of Blue Shield of California Foundation Health Information Exchange Grantees and Stakeholders

Presenters:

Crystal Hayling, President and CEO, BSCF

Deborah, Schwab, Director, Health and Technology, BSCF

Kathy Kim, Consultant

Maria Chaves, Consultant

blue  of california

April 22, 2008

[blueshieldcafoundation.org](http://blueshieldcafoundation.org)

# Outline

- Welcome
- Context for HIE
- Key findings from BSCF grantees
- Impressions

# Welcome

# Objectives for today's convening

- Share aggregate findings from interviews and survey
- Share successes, lessons learned, and promising practices
- Network with Health Information Exchange (HIE) peers
- Display value created by BSCF grantee projects
- Develop ideas for moving HIE forward in California

# BSCF grants to 15 organizations with variable HIE project scopes (\$5.3M)

Grantees	Re-Grantees
<ul style="list-style-type: none"> <li>• CalRHIO</li> <li>• El Dorado County Department of Public Health/Accel</li> <li>• Long Beach Network for Health</li> <li>• Northern Sierra Rural Health Network</li> <li>• Redwood Community Health Consortium</li> <li>• Redwood MedNet</li> <li>• San Diego County Medical Society Foundation</li> <li>• San Mateo County Medical Center Foundation</li> <li>• Shasta Community Health Center</li> <li>• TIDES Center/CCI/CNEA</li> </ul>	<ul style="list-style-type: none"> <li>• Under CalRHIO               <ul style="list-style-type: none"> <li>– Alliance Medical Center</li> <li>– Community Health Partnership, Santa Clara</li> <li>– San Francisco Community Clinic Consortium</li> <li>– Tehachapi Valley Health Care District</li> </ul> </li> <li>• Under TIDES Center/CNEA               <ul style="list-style-type: none"> <li>– Planned Parenthood/NGHN</li> </ul> </li> </ul>



## Project locations

# Who you are



- 8 Chief Technology Officers/IT Executives
- 7 Executive Directors/CEO's/Presidents
- 5 State Executives
  - California Health and Human Services Agency
  - Department of Managed Care
  - Office of HIPPA Implementation
- 5 Project/Program Managers
- 4 Program Directors/VPs
- 3 Medical Directors/Physicians
- 2 CFO/Finance Executives
- 2 Foundation Program Officers
- 2 Consultants
- 1 Board Vice-Chair
- 1 Vice Provost of Health Affairs

# Who we are

1. Match with one of the facilitators: Kathy, Maria, Dana, Nancy
  - A. Designs and sells jewelry; used to live in Hawaii
  - B. Training for a triathlon; raises chickens
  - C. Works for 2 universities; writes fiction
  - D. Fantasy football commissioner; dresses up like Jerome Bettis for Halloween
2. Julie – True or False?
  - A. Loves whale watching
  - B. Belongs to a hardcore hula dance troupe
  - C. Wears cowboy boots on weekends
  - D. Cycling 545 miles from SF to LA!
3. Deborah – True or False?
  - A. Night Club Singer
  - B. Has 14 siblings
  - C. Former Competitive Ice Skater
  - D. Tired of hearing about Santa Barbara – “It closed down, let’s move forward”



# How do we compare?

## Data Points for National Benchmarking

- eHealth Initiative framework, 2007
  - Stages of development for HIE projects
  - Framework to categorize states progress
- America's health Insurance Plans (AHIP) survey, 2007
  - What the payers think
  - How do they evaluate HIEs
- IDC Health Industry Insights, 2008
  - Hospital Leading Indicators Survey, Q3, 2007
  - Straw poll of community hospital CIO's, February, 2008
  - Noteworthy national developments, 2008
  - Predictions, 2008

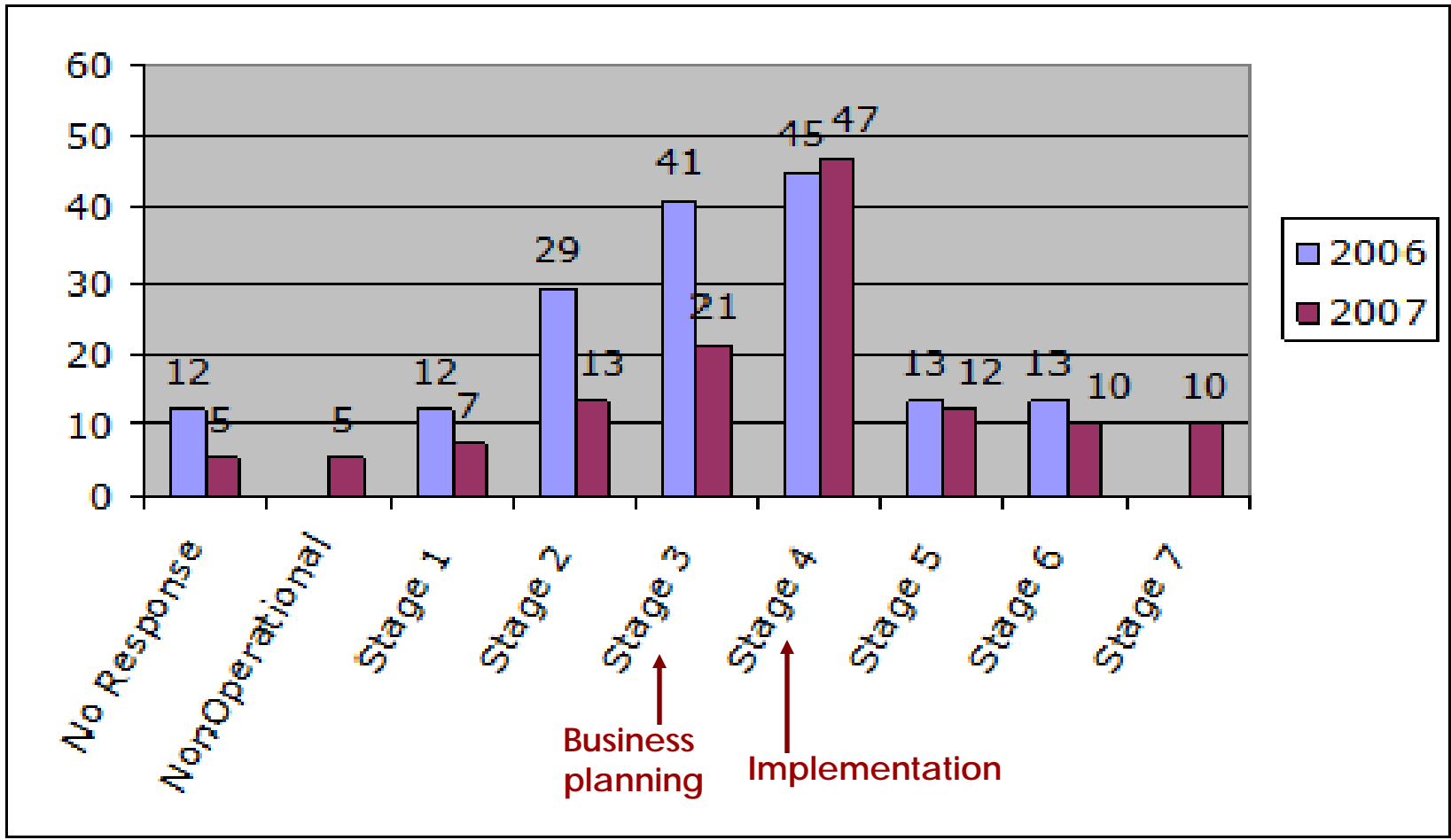
# For context, eHealth Initiative framework provides a model for an aggregate view

Stage	Characteristics
1	<b>Recognition of the need</b> for health information exchange among multiple stakeholders. (Public declaration by a coalition or political leader.)
2	<b>Getting organized</b> ; defining shared vision, goals, and objectives; identify funding; legal and governance set up. (Multiple, inclusive meetings)
3	Transferring vision, goals, & objectives to <b>tactics and business plan</b> ; defining needs & requirements; securing funding. (Funded home.)
4	Well under way with <b>implementation</b> – technical, financial, and legal. (Pilot project or implementation with multiyear budget identified.)
5	Fully operational health information organization; <b>transmitting data</b> that is being used by healthcare stakeholders.
6	Same as stage 5 and have a <b>sustainable business model</b> .
7	Demonstration of <b>expansion</b> of organization to encompass a broader coalition of stakeholders than present in the initial operational model.

Most Here

Source: Fourth Annual Survey of Health Information Exchange at the State, Regional and Community Levels, health Initiative. Dec 2007. [http://www.ehealthinitiative.org/2007HIESurvey/State\\_of\\_the\\_Field.asp#1](http://www.ehealthinitiative.org/2007HIESurvey/State_of_the_Field.asp#1), accessed Feb. 26, 2008)

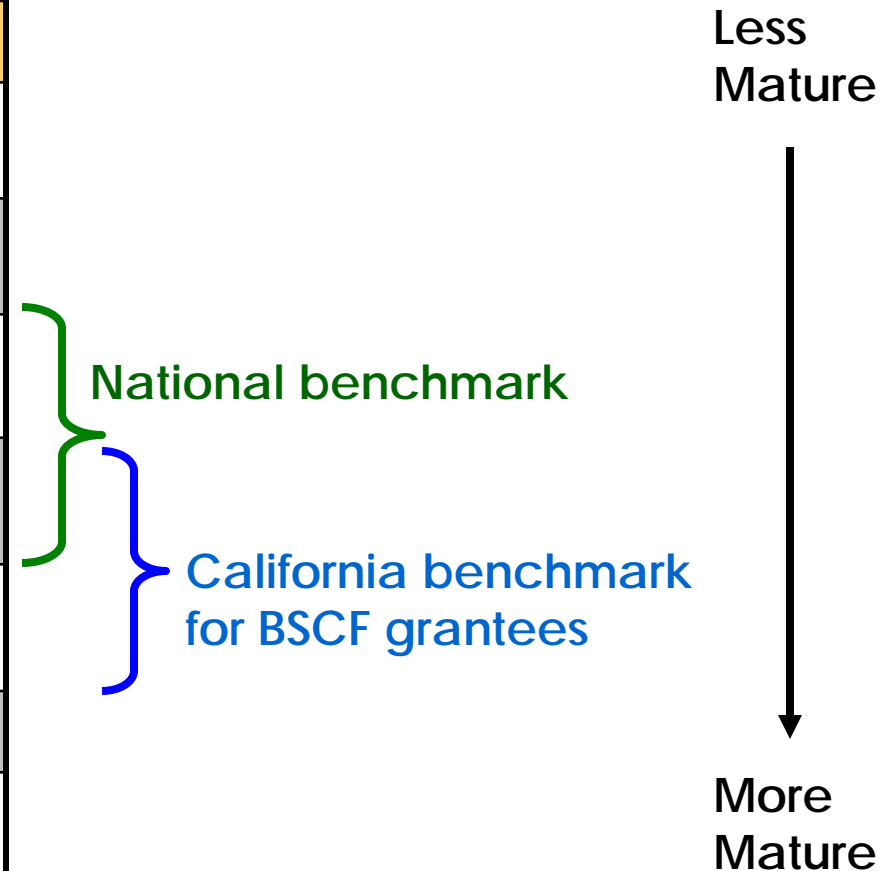
# Across the nation: HIEs continue to develop and mature



Source: Fourth Annual Survey of Health Information Exchange at the State, Regional and Community Levels, health Initiative. Dec 2007. [http://www.ehealthinitiative.org/2007HIESurvey/State\\_of\\_the\\_Field.asp#1](http://www.ehealthinitiative.org/2007HIESurvey/State_of_the_Field.asp#1), accessed Feb. 26, 2008)

# On a project basis, we're a little ahead of the national curve in development

Stage	Characteristics
1	Recognition of the need
2	Getting organized
3	Tactics and business plan
4	Implementation
5	Transmitting useful data
6	Sustainable business model.
7	Expansion



Source: Fourth Annual Survey of Health Information Exchange at the State, Regional and Community Levels, health Initiative. (Dec 2007. [http://www.ehealthinitiative.org/2007HIESurvey/State\\_of\\_the\\_Field.asp#1](http://www.ehealthinitiative.org/2007HIESurvey/State_of_the_Field.asp#1), accessed Feb. 26, 2008)

# On the state level, we're behind the majority

## State Level Activity: July 2006

Stage 1 AWARENESS 15%	Stage 2 REGIONAL ACTIVITY 17%	Stage 3 STATE LEADERSHIP 25%	Stage 4 STATEWIDE PLANNING 29%	Stage 5 STATEWIDE PLAN 8%	Stage 6 STATEWIDE IMPLEMENTATION 6%
<ul style="list-style-type: none"> <li>Recognition of the need for HIE among multiple stakeholders in your state, region, or community</li> <li>No coordinated, statewide activity</li> </ul>	<ul style="list-style-type: none"> <li>Regional or community-specific HIE activity</li> <li>Silos of HIE activity with possibly some cross-over</li> <li>No coordinated, statewide activity</li> </ul>	<ul style="list-style-type: none"> <li>Either legislation has been passed or an executive order issued</li> <li>Statewide planning initiative being formulated</li> </ul>	<ul style="list-style-type: none"> <li>Well underway with coordinated, statewide planning</li> <li>Structures in place have statewide representation</li> <li>Clear on how to deliver statewide plan</li> </ul>	<ul style="list-style-type: none"> <li>Plan / Roadmap complete and accepted</li> <li>Plan / Roadmap communicated to the public</li> </ul>	<ul style="list-style-type: none"> <li>Implementation of state plan or Roadmap is well underway, with key milestones completed</li> </ul>
		10 states	28 states	7 states	

**California**

**Majority**

Source: Third Annual Survey of Health Information Exchange Activities at the State, Regional and Local Levels. eHealth Initiative. Sept. 25, 2006.

# California is laying the groundwork for stage 3 (leadership) performance

.....➔

Stage 2	Stage 3
Regional Activity	State Leadership
<ul style="list-style-type: none"> <li>•Regional or community-specific HIE activity</li> <li>•Silos of HIE activity with possibly some cross-over</li> <li>•No coordinated statewide activity</li> </ul>	<ul style="list-style-type: none"> <li>•Either legislation passed or an executive order issued</li> <li>•Statewide planning initiative being formulated</li> </ul>

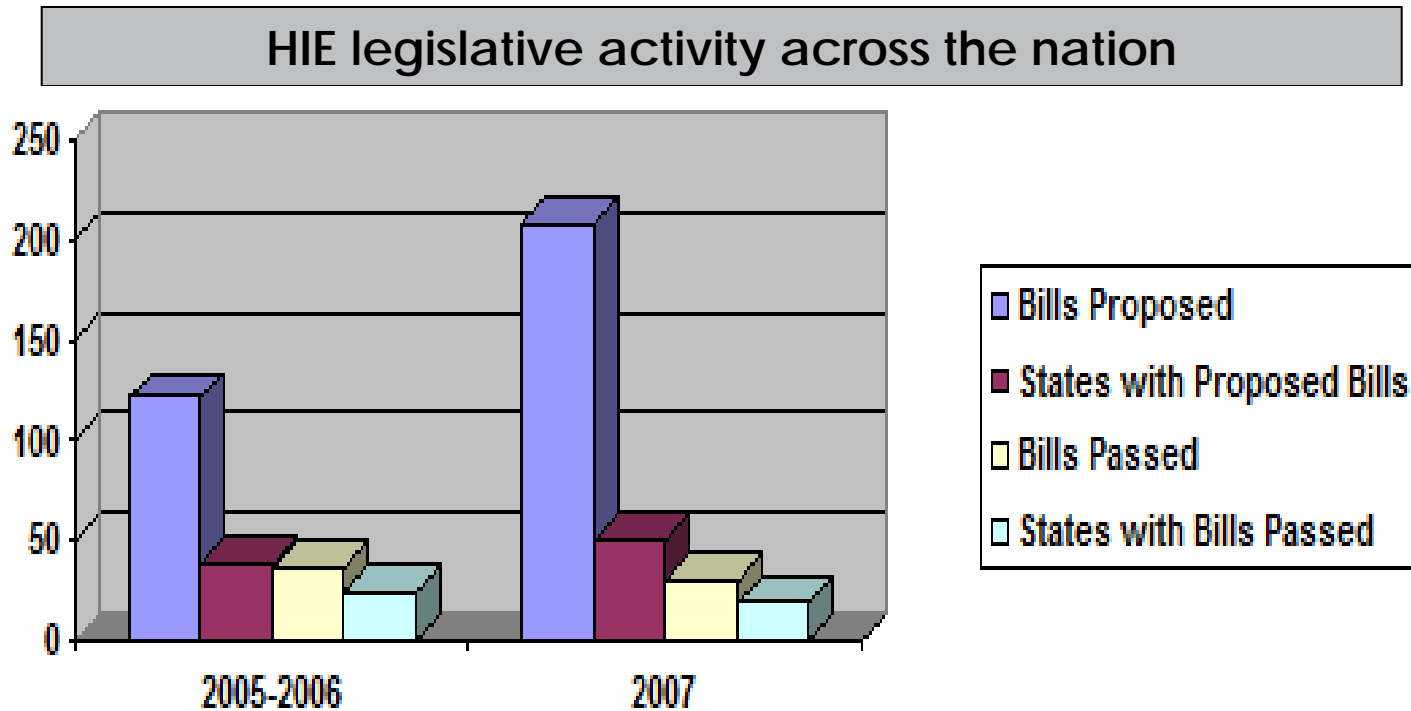
## Gov. Schwarzenegger issued executive order to convene CA e-Health Action Forum

- Implementation of public/private financing
- Devise financing strategies for \$200M investment and \$40M grant monies – but no budget as yet

## Recruitment in progress for a state cabinet-level position: Deputy Secretary of the Office of Health Information Exchange

- Coordinate the development, application and use of HIE including technical policy/programs
- Remove barriers to implementation via development of policy, statutory, and regulatory changes
- Ensure interoperability across HIT systems
- Ensure HIPAA compliance

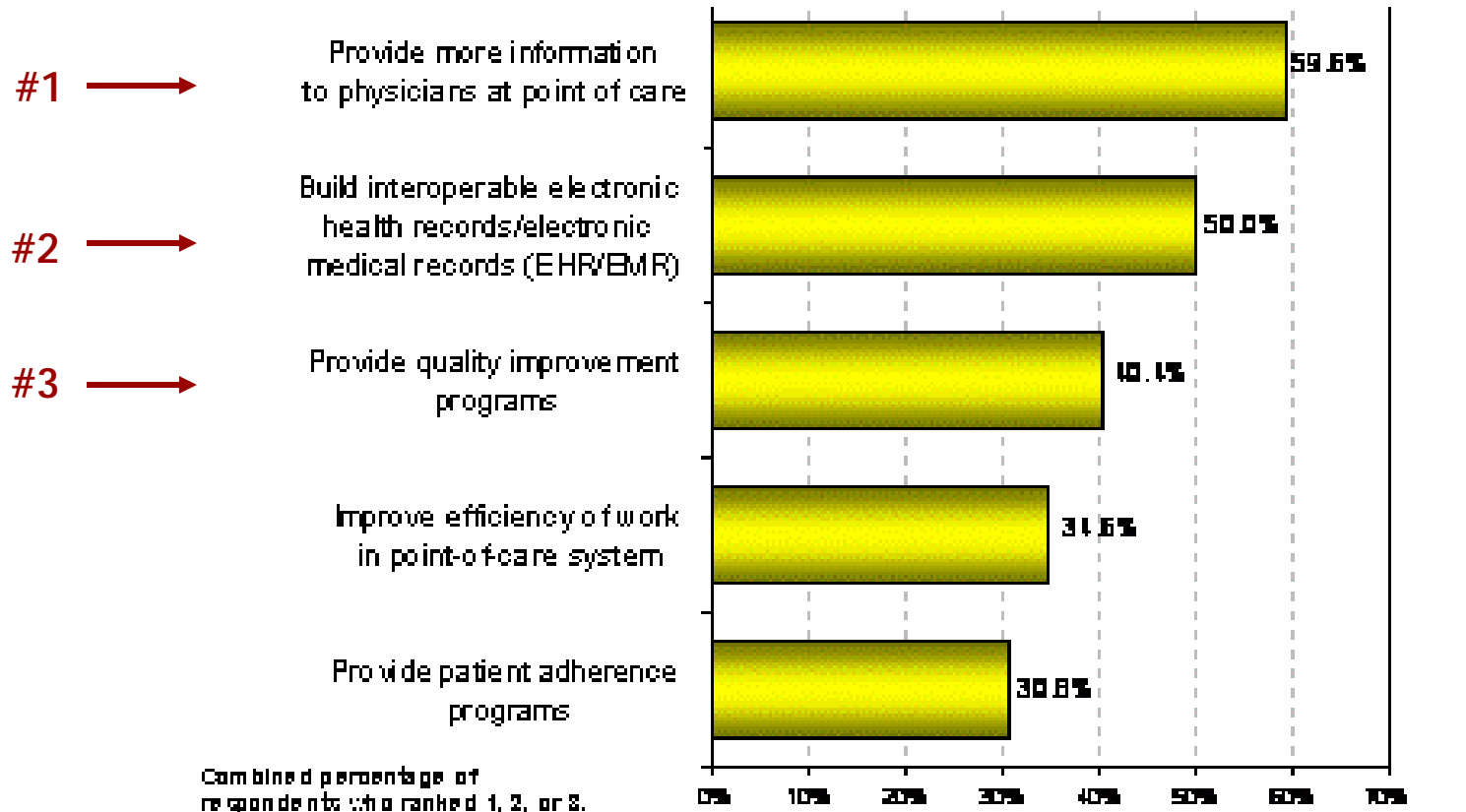
# Increasing legislative activity indicates a belief that HIE can improve healthcare



State legislation focuses in four areas: improving health care costs, building statewide capacity, planning and interoperability.

Source: Fourth Annual Survey of Health Information Exchange at the State, Regional and Community Levels, health Initiative. (Dec 2007. [http://www.ehealthinitiative.org/2007HIESurvey/State\\_of\\_the\\_Field.asp#1](http://www.ehealthinitiative.org/2007HIESurvey/State_of_the_Field.asp#1), accessed Feb. 26, 2008)

# Health Plans weighed in on the most important accomplishments of HIEs...



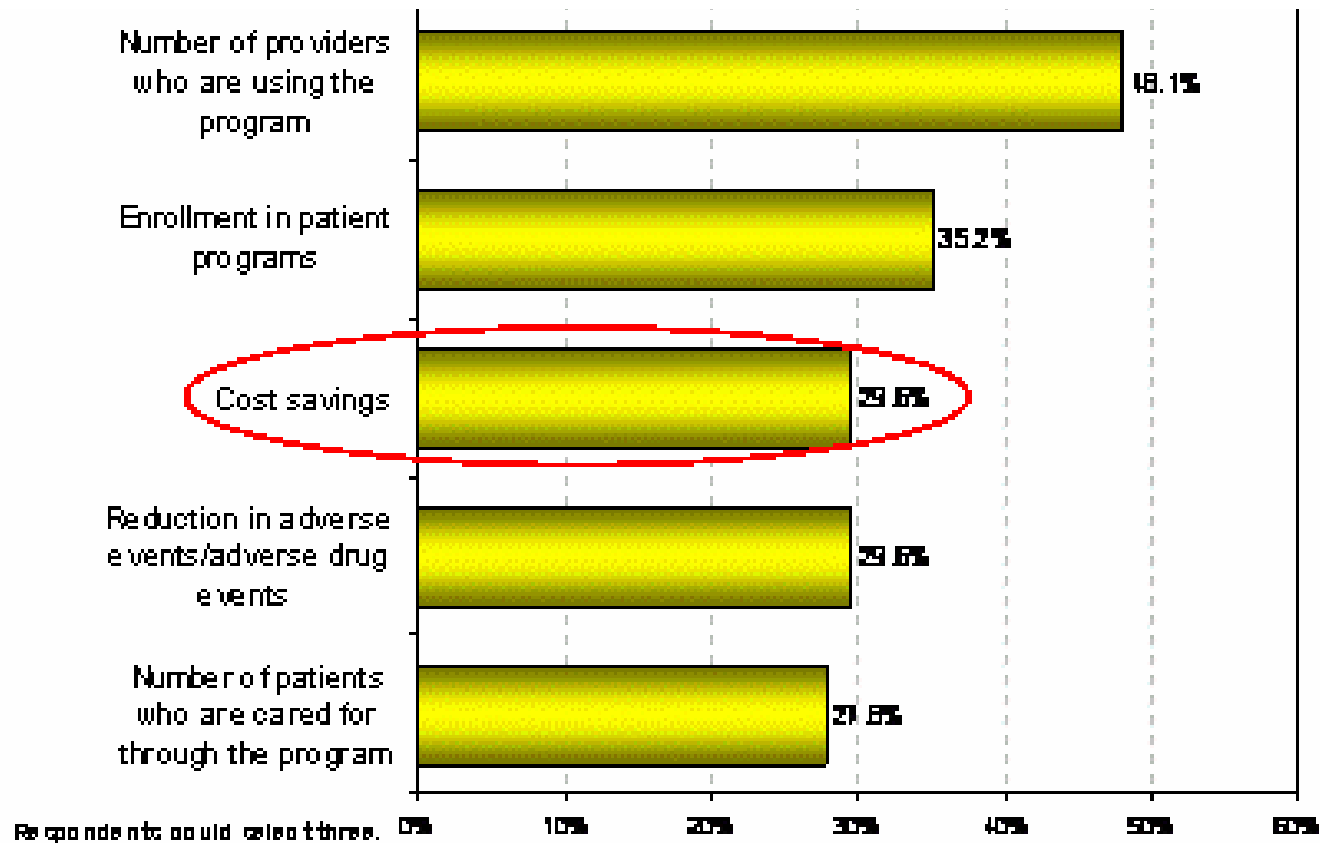
Combined percentage of respondents who ranked 1, 2, or 3.

Q5: Please select the three most important things you expect your organization's eHIT initiatives to accomplish.  
n=52



Emerging Trends - AHP 2007

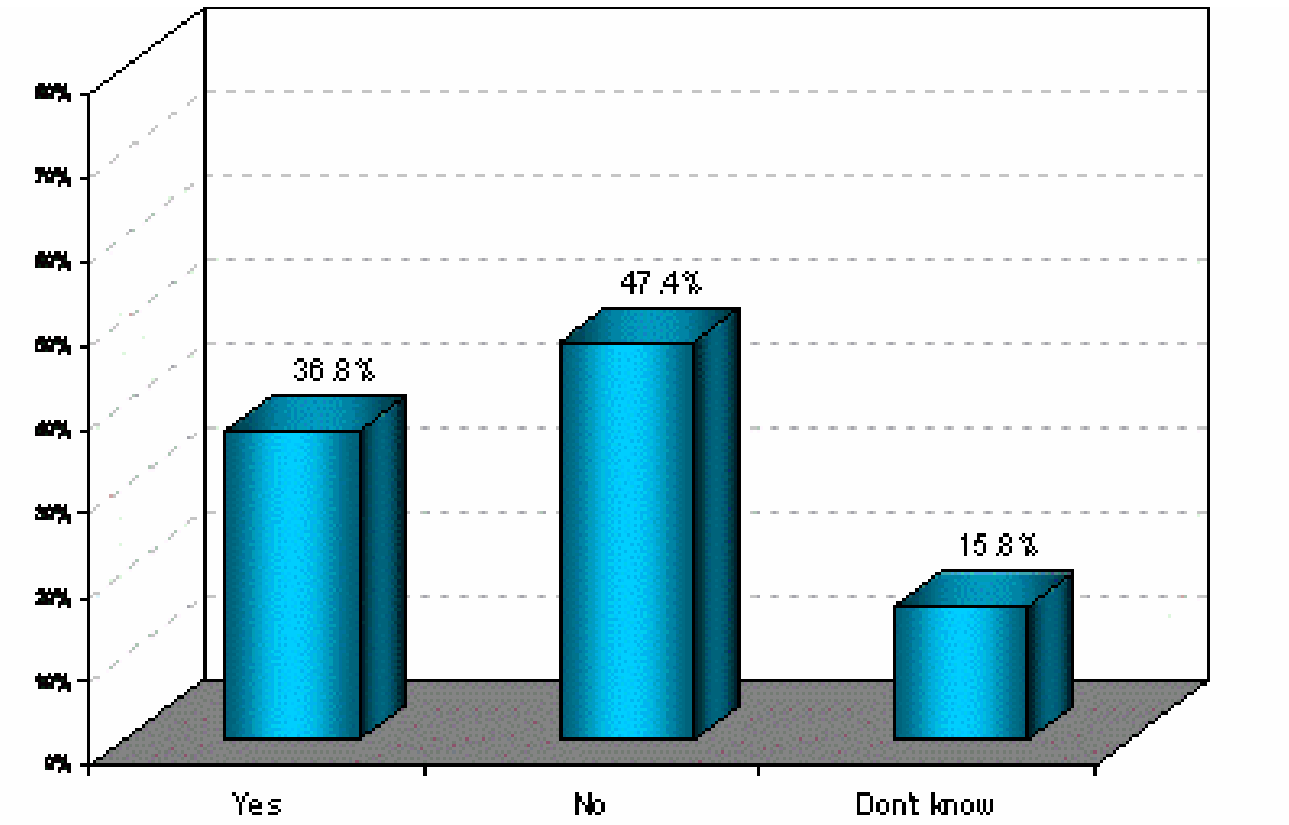
# ...and the most important evaluation measures for HIEs



Respondents could select three.  
Q36: In your opinion, what are the three most important measures to evaluate the success of eHIT initiatives in your organization? n=54



# Health Plans: Over one-third participate in a RHIO

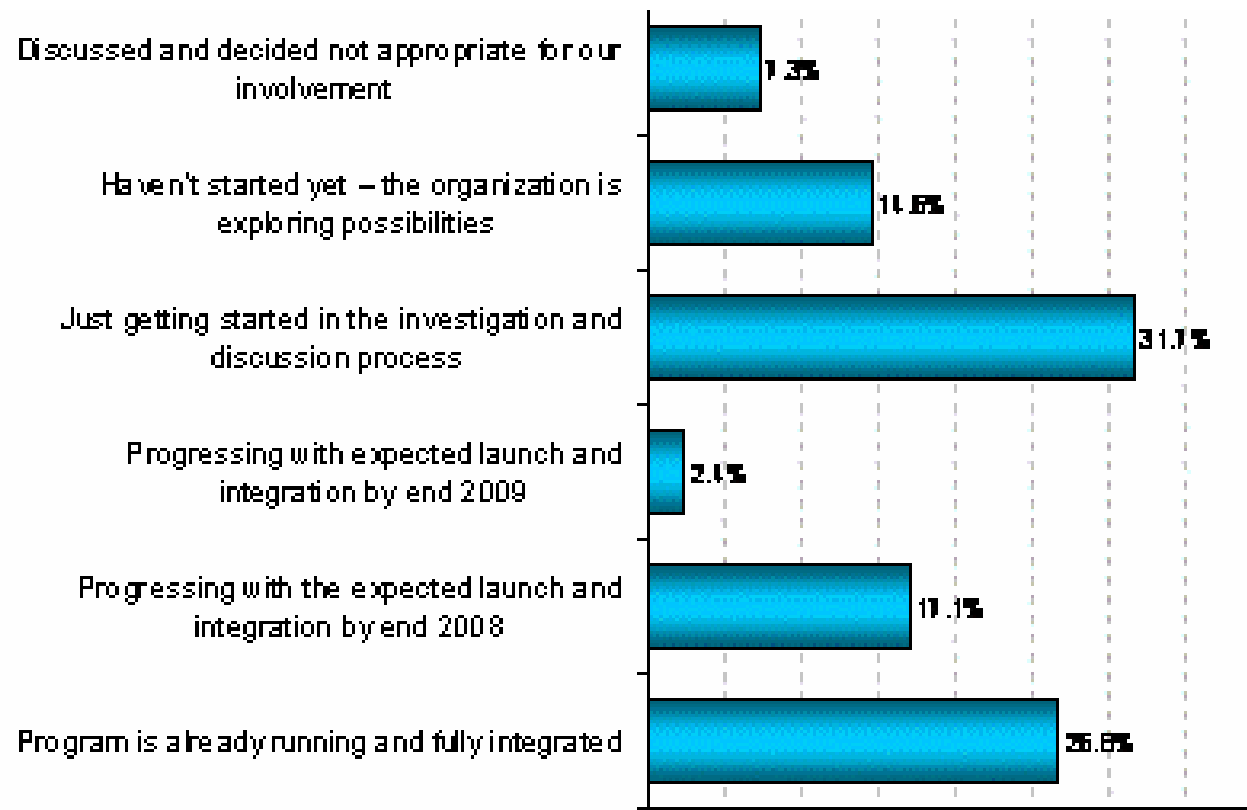


Q44: Is your organization participating with or part of a RHIO (regional health information organization)?

n=38



# Close to half of the plans will have an e-prescribing program by year-end 2008



Q45: How far along in the implementation of ePrescribing do you consider your organization to be?  
n=41



# Hospitals and healthcare systems are also getting on board

Q3, 2007  Q1, 2008

## According to hospital CEOs:

- 15% of hospitals are participating in an HIE; 35% are in active discussions
- 22.7% of healthcare systems are participating in an HIE; 18.2% expect to participate within one year; 27.3% are evaluating HIE participation

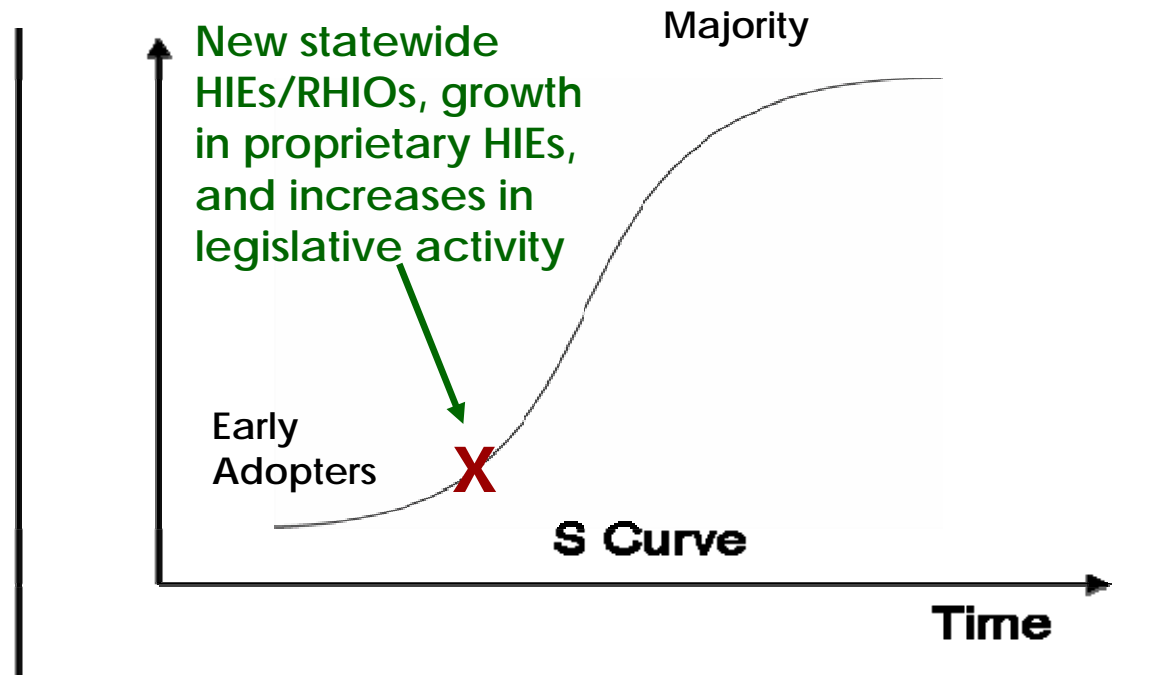
Source: IDC-HII's Leading Indicators Survey Q3 2007

## According to hospital CIOs

- 33% are participating in a proprietary HIE that is part of an integrated delivery network or closely tied to a sponsor
- 25% expect to participate in a proprietary HIE within one year

IDC-HII straw poll of community hospital CIOs, Q1, 2008

# Activity over the past year places HIEs at the ascent of the innovation curve



Innovation in HIE is primarily new organizational, business, financial, legal, and process models among community stakeholders.... not necessarily technology

Source: [http://en.wikipedia.org/wiki/Diffusion\\_of\\_innovations](http://en.wikipedia.org/wiki/Diffusion_of_innovations)

# Wheels of progress are turning...slowly

## National developments

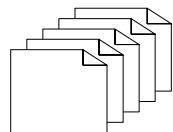
- State-sponsored models are showing significant progress
  - Delaware
  - Pennsylvania
  - Tennessee
  - Rhode Island
  - Vermont
  - New York
  - Florida
  - Washington State
- Proprietary HIEs are blooming

## Predictions

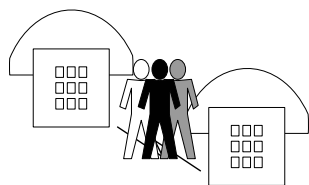
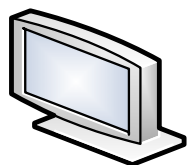
- Improved coordination of federal and state initiatives
- Widespread use of HIE will be a reality within two years
- Interconnection of community-based HIEs/RHIOs and proprietary HIEs into statewide information exchanges run as quasi-public entity
- Entities will consolidate clinical data exchange and the myriad of other administrative data exchanges (claims processing, disease registries, public health, and quality reporting, etc)

Source: IDC Health Industry Insights, 2008

# Documents, phone interviews and an online survey were reviewed for each HIE project



- Review of project documents to understand scope and goals
- Online survey to understand progress towards interoperability
  - National messaging & communication standards
  - National terminology & clinical vocabulary standards
  - Privacy and security policies
  - Uni-directional vs. bi-directional exchange
  - HIE technical architectural model
  - Skill sets available in-house vs. outsource
- Telephone interview to understand the grantees perspective
  - Stage of HIE development
  - Technical and operational infrastructure
  - Business case
  - Plans for and progress towards financial sustainability
  - Governance and leadership
  - Progress towards stated grant objectives
  - Lessons learned
  - Suggestions to BSCF for future grant funding and project support



# Stakeholders in grantee HIEs differ from national

## **Grantees have hospital, clinic and public health participation**

- National: 58% of hospitals are already involved in HIEs/RHIOs or plan to be this year
- Grantees: 10 of 13 have hospital participation

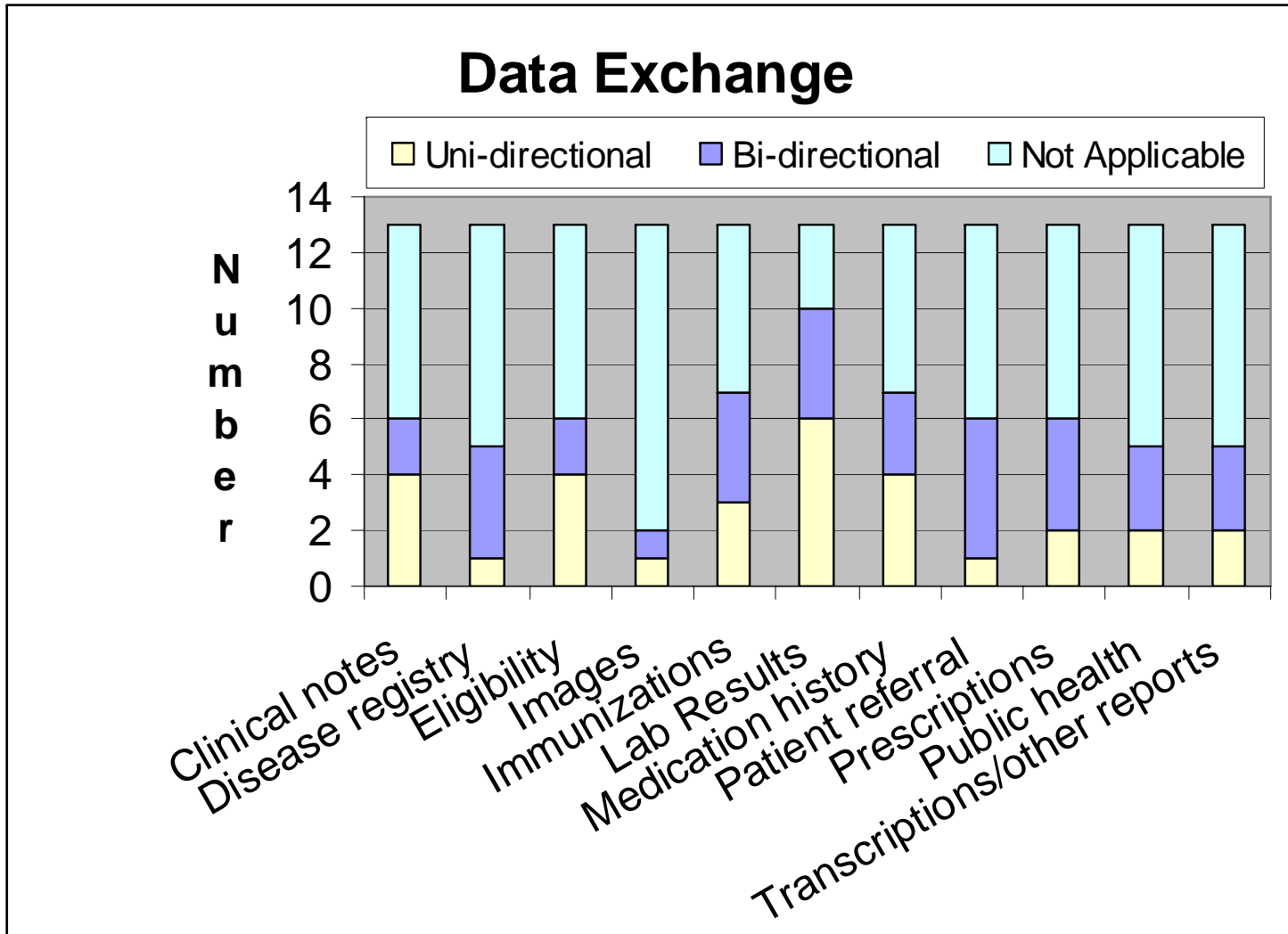
## **Health plans are not active**

- National: 1/3 of health plans participate in a RHIO or HIE
- Grantees: 1 of 13 have payer participation

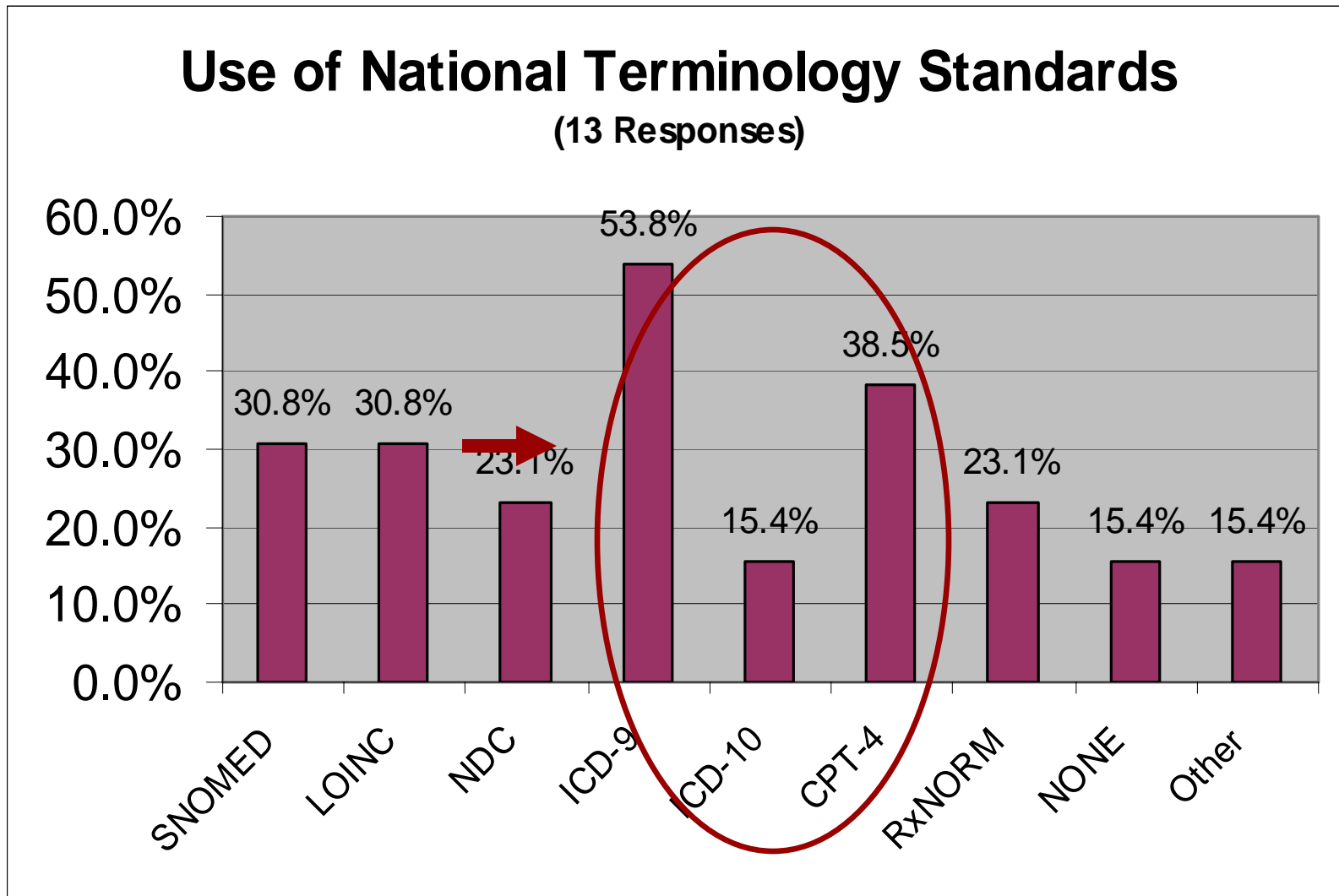
# Grantee activities match health plan priorities

National Payer Priorities for HIE	Grantee Most Common Activities (Current and Planned)			
	#1: EMR (10 of 13)	#2: Clinical notes (9 of 13)	#3: Delivery of test results (8 of 13)	#4: Medication history & e-prescribing (7 of 13)
#1: Information to physicians at point of care	Yes	Yes	Yes	Yes
#2 : Interoperable electronic health records	Yes	Supports	Supports	Supports
#3: Provide quality improvement programs	Supports	Supports	Supports	Supports

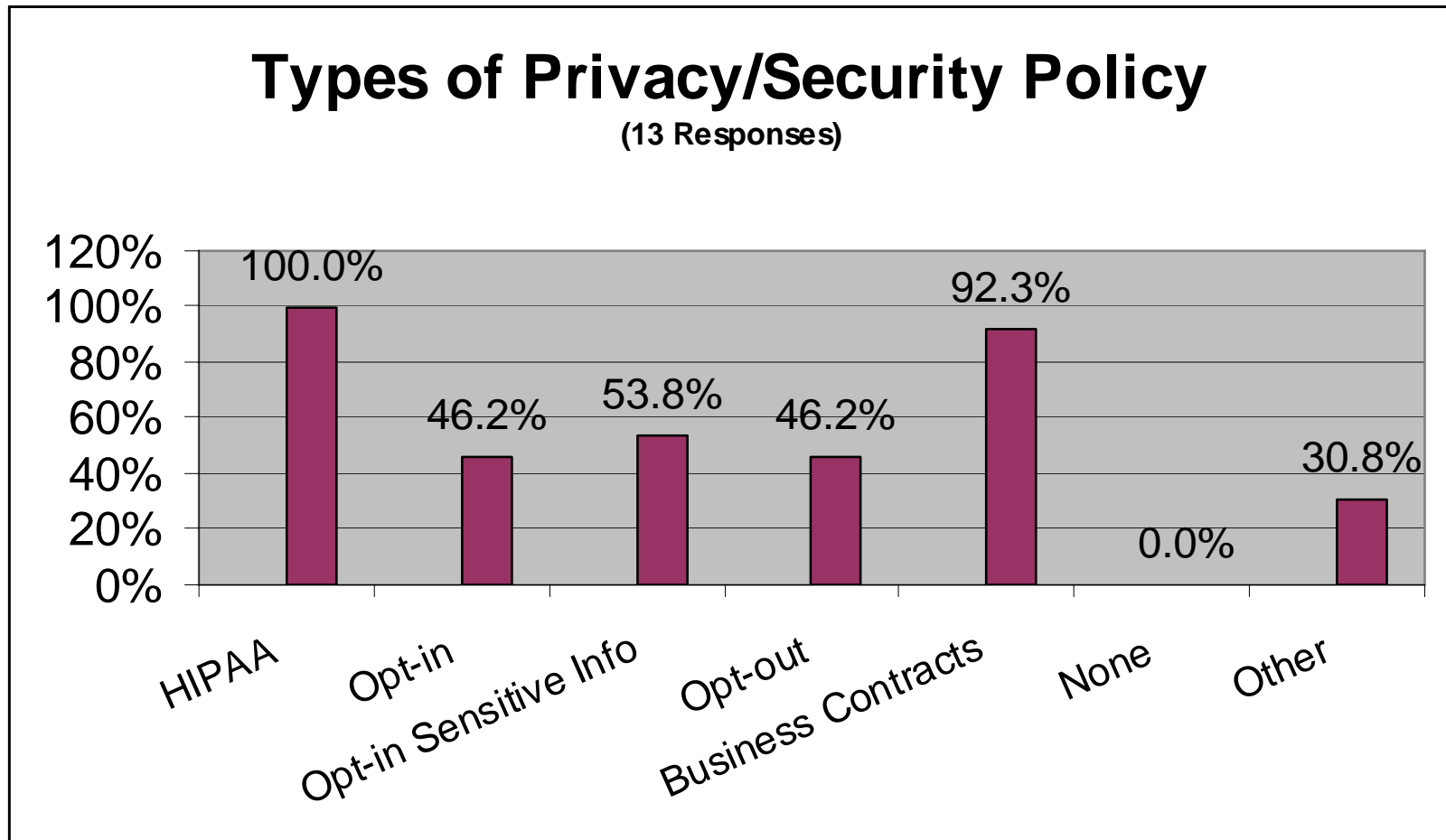
# Interoperability in progress



There is a critical mass of users for HL7 and billing-related terminology standards



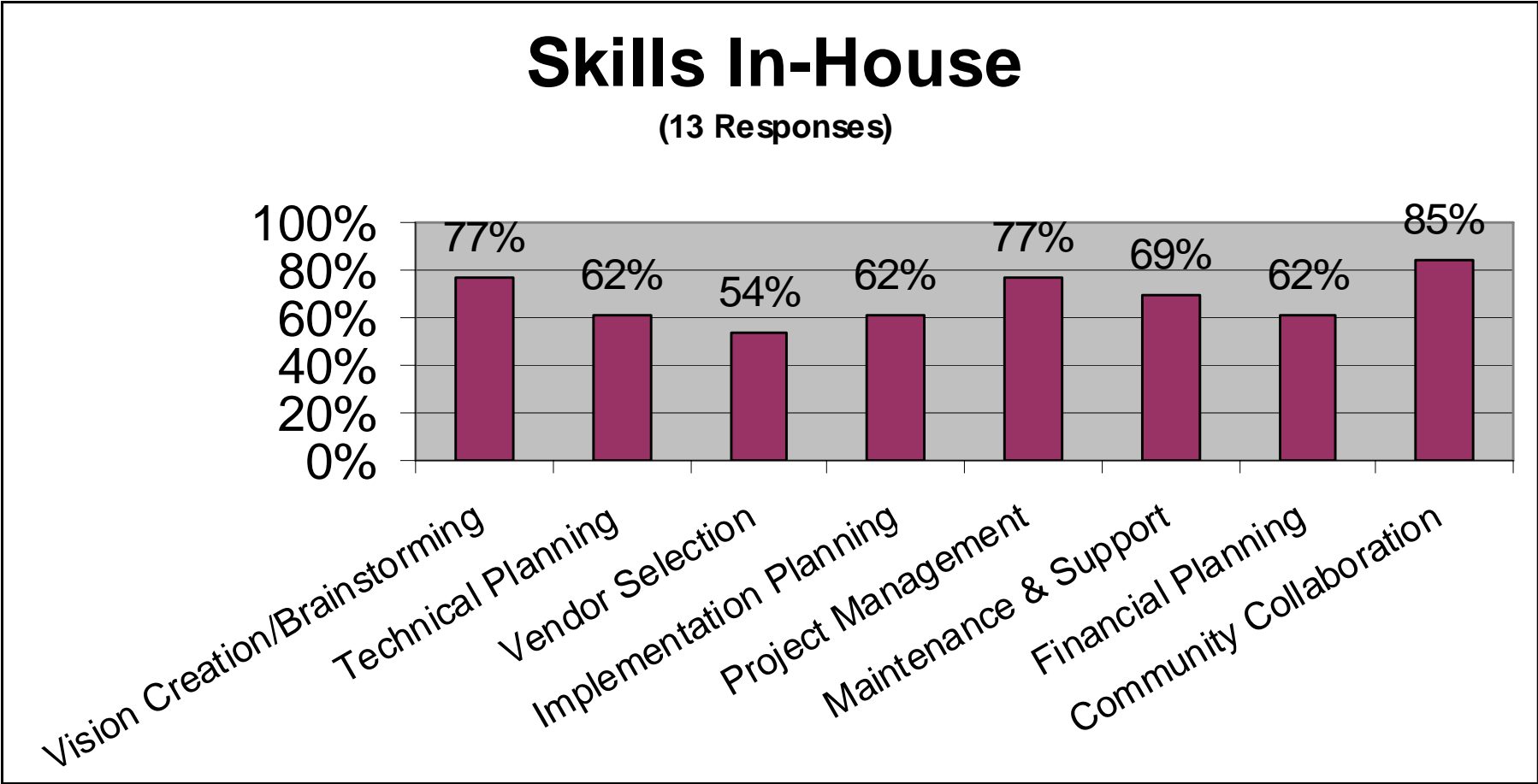
# Grantees are aware of and working on privacy and security



# Grantees display strengths

- Entrepreneurial spirit and passion
- Vision
- Patient centered
- Political savvy
- Physician championship

They are testing the boundaries of current skill sets and knowledge...



# Additional challenges

## External Challenges

- Grant funding drying up
- Ongoing operational funding, reimbursement model for HIE
- Disillusionment by some of HIE/RHIO
- Responsiveness from lab companies
- Participation of payers and employers
- Understanding of major tech vendors of smaller organization needs

## Internal Challenges

- Collaboration and trust among organizations
- Competing priorities
- Reliance on vendors for technical knowledge
  - Early technology decisions have hampered growth
- Access to expertise in financial analysis, implementation planning and operational process development
- Understanding and implementing privacy and security

# Grantees display promising practices

## Collaboration

- Governance charter
- MOU among partners
- Countywide Notice of Patient Privacy agreed upon by all stakeholders

## Change management

- Detailed readiness assessment
- Individualized engagement for key partners (public health, influential physicians)
- Incentives

## Planning

- Subject matter experts/coaches provided by funder/sponsor
- Engagement of payors during HIE/RHIO planning phase on the design
- Increasing FQHC cost basis for technology

## Operations

- Process mapping of clinical and administrative workflows
- Ongoing computer training
- Open source technology
- Alliance among stakeholders for vendor contracting

# Summary Impressions

- Recognize that HIEs are in the early stage of adoption
- Grantees are passionate entrepreneurs who work very hard
- HIEs are making progress and showing promise
- Need to move toward quantifiable measures of outcome and demonstrable measures of impact
- Roadmap to sustainability is a key concern and particularly critical for those on the verge of maturity
- HIEs face tension between following the money and focusing on the vision
- HIEs should coordinate an effort to engage health plans and employers
- HIEs should coordinate a relationship with lab and technology vendors
- Access to subject matter experts and coaching is vital to develop internal capacity
  - Assessment and planning at each stage of development
  - Change management
  - Financial analysis
  - Tools and frameworks
- Create a forum for ongoing networking/shared learning among California HIEs

# Innovation = entrepreneurship... and suffers the inherent risks

- Mid-stage maturity using the eHealth Initiative framework model (Stages 4-6) is high risk for execution, management and finances
- Compared to the failure rate of new businesses in the U.S., Rhio's and HIEs fair reasonably well
  - Phillips and Kirchhoff (1989) found that 76% of new firms (all sectors) were open after 2 years, 47% after 4 years and 38% after 6 years
  - Adler-Milstein et. al. found that 26% of 138 RHIOs identified in 2006 were closed by 2007. Thirteen of the 20 larger RHIOs have a business model that does not rely solely on grants.
- How fast HIEs move up the "s" curve depends on multiple factors including value created, new models of care developed, funding (will non-traditional funders enter the space?), legislation, progress towards networks, other forms of expansion and interoperability, etc.

# BSCF is a partner and collaborator



Next steps:

- Strengthen existing HIEs
- Let some matters declare themselves
- Reach out to non-traditional funders

