

California's Evolving Healthcare, EMS and HIE Landscape

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Presentation Objectives

- Review some basics about Health Information Exchange (HIE) and its development in California
- Overview the role of the Institute for Population Health Improvement and the California Health eQuality (ChEQ) Program in the development and of HIE
- Discuss the current status of HIE in California and how it is currently being used
- Speculate on the role of HIE in some future scenarios for EMS

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WHAT IS THE INSTITUTE FOR POPULATION HEALTH IMPROVEMENT?



Institute for Population Health Improvement

- Established as a new independent operating unit in the UC DHS with no funding and 1 FTE in mid-2011
- By Oct 2013, had developed a diverse portfolio of funded activities >\$70 M and >115 FTE and consultants
- Serves as a resource for:
 - ✓ Health care reform
 - ✓ Quality improvement (clinical and public health)
 - ✓ Health leadership development
 - ✓ Development of actionable health intelligence (clinical and population)
 - ✓ Health policy development, analysis and implementation
- To date, has primarily focused on assisting health-related government agencies and philanthropies design, implement, administer and/or evaluate programs
- Promotes understanding of the multiple determinants of health and of health outcomes being a function of the totality of one's circumstances

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Selected IPHI Activities

- Provide technical assistance and thought leadership in quality improvement to the state Department of Health Care Services for Medi-Cal (California's \$60B/yr Medicaid program)
 - ✓ Medi-Cal Quality Improvement Program
 - ✓ Evaluate CA's Delivery System Reform Incentive Payments (DSRIP) Program
 - ✓ Design the CA-specific Evaluation of the California Medicare-Medicaid Dual Eligible Demonstration Program
- Manage operations of the California Cancer Registry
- Manage the California Health eQuality (ChEQ) Program - California's ONC-funded Health Information Exchange Development Program
- Provide technical assistance and support for multiple CDPH statewide chronic disease prevention and surveillance programs
- Conduct a statewide assessment of surgical adverse events
- Conduct population health research projects
 - ✓ Approaches to prevention of prescription opioid use (with CHPR)
 - ✓ Use of the Oncotype Dx Assay in Medi-Cal beneficiaries with breast cancer

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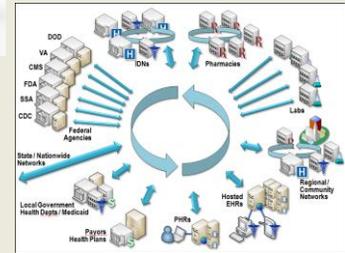
Selected IPHI Activities

- Investigated the feasibility of developing Community Paramedicine in California
- Manage the California Health Policy Forum and Sacramento Health Policy Briefings and related health policy programs
- Assist and support CDPH achieve national accreditation
- Develop a basic QI training program for all CDPH employees
- Support California Health & Human Services Agency in developing a CMMI-funded Payment Reform Model for the California
 - ✓ \$2.3M 6-month planning grant received in Mar 2013
 - ✓ Anticipate submitting a \$60M 3-year implementation proposal in early 2014
- IPHI asked to join the hACT for the new \$1B HHS/CMS Health FFRDC managed by MITRE
- Established a Center for Veterans and Military Health
- Others

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What is Health Information Exchange?

- Health information exchange (HIE) is the electronic movement of information among health-related organizations and providers according to nationally recognized standards
- The purpose of HIE is to facilitate access to (increase the mobility of) health-related information to improve the coordination and delivery of health care services
- HIE is a basic building block of the health information technology (HIT) infrastructure under development in California and the nation
- HIE technology must ensure that transfer of data is reliable and secure
- HIE utilization is very much a work in progress



THE EVOLUTION OF HEALTH INFORMATION EXCHANGE UTILIZATION

Broad use of Health Information Technology catalyzed by....

2004 - Presidential Executive Order 13335



...an electronic health record for every American that wants one by 2014.

- Created the Office of the National Coordinator for Health Information Technology.
- Started the Nationwide Health Information Network.

...and further stimulated by the Health Information Technology for Economic and Clinical Health (HITECH) Act



American Recovery and Reinvestment Act of 2009...

- Established ONC permanently.
- Created incentive program (~\$18B) for adoption and meaningful use of EHR technology for eligible providers and hospitals.
- Created statewide HIE initiatives (~\$500M).
- Otherwise promoted the development of HIT (e.g., RECs, workforce, Beacons).

Meaningful Use



Meaningful Use and EHR certification are driving the industry today.

- Driving common functionality in EHR systems.
- Increasing adoption through incentives.
- Creating the electronic information for HIE to exchange.

Meaningful Use

- Stage 1 → capture structured information in EHRs
- Stage 2 → exchange structured information among providers and patients
- Stage 3 → improve outcomes through analytics



The Requirements for Meaningful Use

1. Computerized provider order entry
2. e-Prescribing
3. Record demographics
4. Record vitals
5. Record smoking status
6. Use clinical decision support
7. Patients view, download, transmit
8. Clinical summaries to patients
9. Protect electronic health information
10. Incorporate lab results
11. Generate patient lists
12. Reminders for follow-up care
13. Patient educational resources
14. Medication reconciliation
15. Transmit care summaries for transitions of care
16. Report immunizations
17. Secure messaging with patients
- ...plus menu items...
18. Report syndromic data
19. Record electronic notes
20. Imaging results
21. Record family history
22. Report cancer cases
23. Report other registry cases

The “Meaningful Use Cases” for HIE

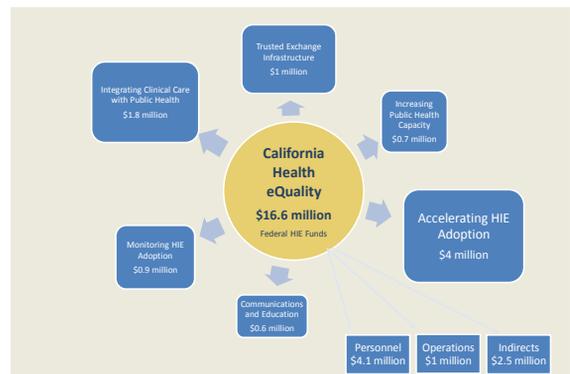
- Electronic ordering and results delivery
- Care coordination and transitions of care
- Public health and other reporting
- Electronic information for patients

Evolution of HIE Development in California

- 2007 - Governor’s EO S-06-07 called for statewide HIT adoption and 100% electronic health data exchange with 10 years
- 2009 - CHHS submits HIE Strategic and Operational Plan to ONC and awarded \$38.8M Cooperative Agreement
- 2010 – Cal-eConnect established (per legislation) to implement the ONC Cooperative Agreement
- 2012 - CHHS transfers remaining Cooperative Agreement funds to IPHI’s California Health eQuality (CHeQ) Program in 2012
- 2012 – Governor’s EO calls for “Let’s Get Health California” Task Force and 10-year population health improvement plan
- 2013 - ONC Cooperative Agreement funding ends

CHeQ Mission and Goals

- **Mission**
 - Promote coordinated care for Californians by catalyzing health information exchange
- **Goals**
 - Improve health outcomes and integration of care by mobilizing information needed for health-related decision making
 - Demonstrate measurable impact within the ARRA funding period while laying a foundation for future growth and sustainability
 - Create a trusted environment for clinicians to exchange information supporting local autonomy
 - Integrate HIE with similarly aimed initiatives



**Community Paramedicine:
A Promising Model for Integrating Emergency
and Primary Care**

AN 114488
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Types of CP Programs

1. Transport patients with specified conditions to non-ED ("alternate") locations after determining ED care is not needed
2. Assess, treat and refer or release an individual at the scene of an emergency response rather than transport them to a hospital ED
3. Connect frequent 911 callers or ED visitors with primary care and/or social services
4. Provide support for persons recently discharged from the hospital and at substantial risk of a return visit to the ED or readmission
5. Provide support for community residents with chronic conditions by making periodic checks and providing education about how to proactively manage the condition(s)
6. Partner with community health workers to provide disease prevention care



Summary and Future Directions

- HIE is a basic building block of the information and communications technology (ICT) infrastructure that is rapidly developing in California to support 21st Century healthcare
- HIE implementation in California is still very much a work in progress
- HIE is used relatively little by EMS in California today, but will be increasingly used in the future
- HIE will be essential to the development of Community Paramedicine and other models of community-based care



QUESTIONS ??

