Agenda

- Context
- California’s Strategy for HIE
- Impact on Meaningful Use
- What this all means to you...
In the beginning...

**2004 Presidential order:**

... 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 then along came HITECH**

American Recovery and Reinvestment Act of 2009...

- Establishes ONC permanently.
- Creates *incentive program* (~$18B) for *adoption and meaningful use of EHR technology* for eligible providers and hospitals.
- Creates *statewide HIE initiatives* (~$500M).
- Other stuff (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
“PIN” Priorities

- e-Prescribing
- Electronic lab results delivery
- Care summary exchange

...and for Public health reporting...
- Immunizations
- Reportable conditions
- Syndromic surveillance

As appropriate on a per-state basis...

Instruction from ONC
So what about California?
California’s strategy...

- Promote community / enterprise activities.
- Promote exchange among communities / enterprises.
- Make centralized infrastructure as lightweight as possible.
- Support access to government systems.
- Support access to national networks.
Emerging models for HIE

**Directed**

- **Direct (secure email)**
  - Provider → Hub(s) → Provider
  - For the provider that has nothing...

- **Results Delivery (HL7 messages)**
  - Lab → Hub → Provider
  - For the provider with an EHR...

**Centralized (community record)**

- **Provider** → **Data** → **Provider**
  - For providers in a community...

**Longitudinal Record**

- **Federated (virtual record)**
  - Provider → Data → RLS → Provider
  - For providers that want to “own” the infrastructure...
Emerging shift in service delivery

*From...*

- HIOs which provide governance for exchange activities and technology to accomplish exchange.

*...to a mix of...*

- HIOs that may or may not provide technology, and
- HIE Service Providers that provide the technology alone.
## The real 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
18. Report syndromic data
19. Record electronic notes
20. Imaging results
21. Record family history
22. Report cancer cases
23. Report other registry cases

...plus menu items...
# The real HIE requirements for Meaningful Use

1. Computerized provider order entry  
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...plus menu items...
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
Expansion and Acceleration

Creating HIE options for providers.

- Planning for new HIOs
- Expansion of existing HIE infrastructure
- New interfaces to labs, radiology, etc.
- Conversion of lab data to LOINC terminology
- New interfaces for public health reporting
- New services for rural providers
Trust Framework

*Breaking down the walls between systems.*
*Reducing the cost to join.*

- Supporting development of model agreements
- Creating communities of trust
- Creating provider directories
Expanding Public Health Capacity

Reading public health for Meaningful Use.
Making public health data accessible.
Improving population health.

- Creating gateways to register, validate, and submit public health data
- Creating a home for data on high-impact conditions, special populations
So what does this mean for you?
There are options
2. HIE Ready

There are EHRs that are better prepared for HIE.

- It is easier to determine which EHRs support HIE.
- It is easier to order interoperability.

See [http://www.ucdmc.ucdavis.edu/iphi/Programs/cheq/HIEready.html](http://www.ucdmc.ucdavis.edu/iphi/Programs/cheq/HIEready.html) for more information.
3. Immunization Gateway Service

The California Immunization Registry is ready to receive your data.

- You can now register and send data compliant with MU.

There are now options for providers in rural California.

- Identified 5 service providers with varying offerings.
- Subsidizing 65% of the cost of getting connected.

See [http://www.ucdmc.ucdavis.edu/iphii/Programs/cheq/cheqrural.html](http://www.ucdmc.ucdavis.edu/iphii/Programs/cheq/cheqrural.html) for more information.
Questions
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