



Meaningful Use and Public Health



California Department of Public Health

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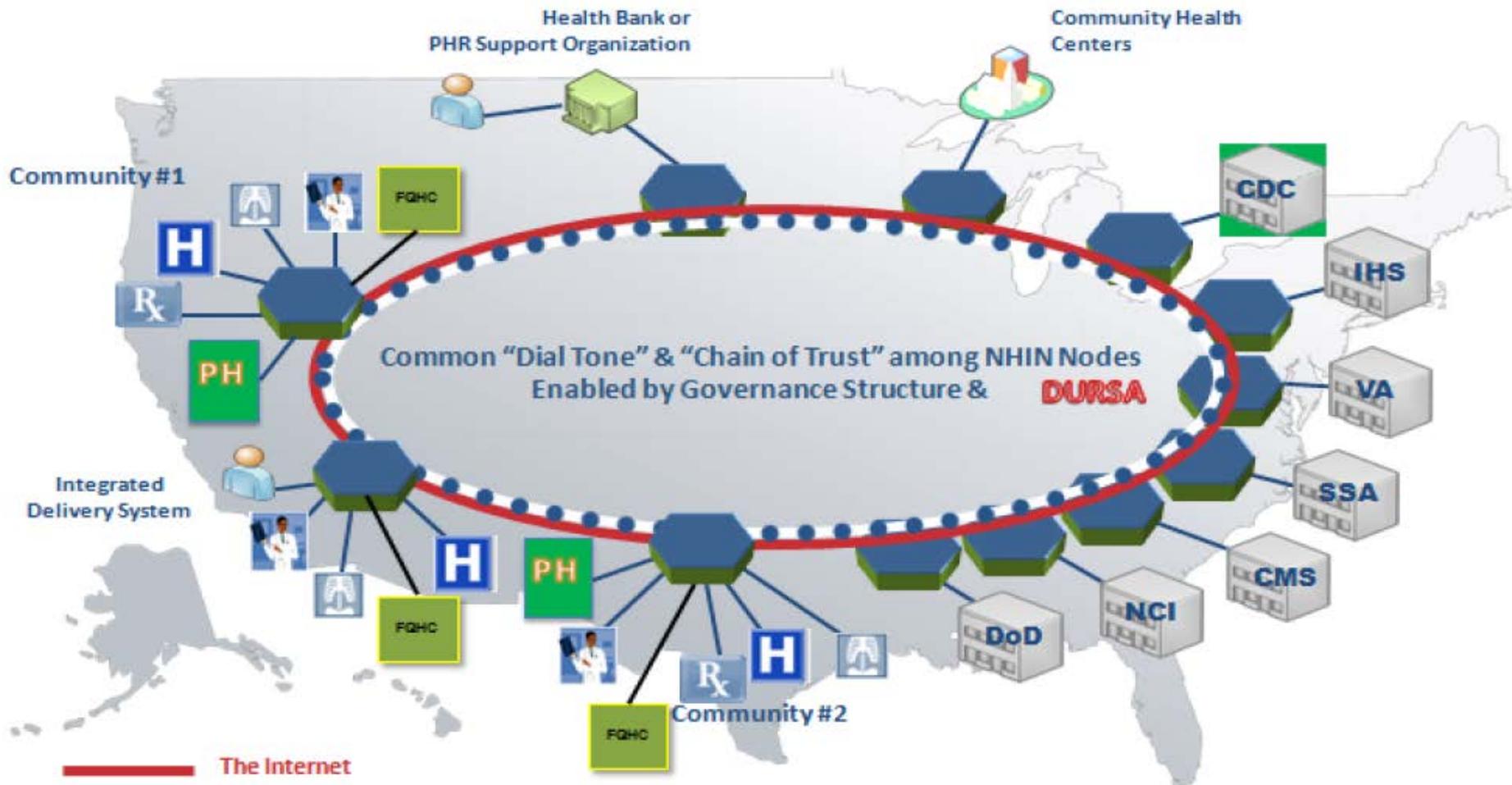
Agenda

- Overview of the Electronic Health Record (EHR) Incentive Program
- Public Health and Meaningful Use (MU)
- Health Information Exchange (HIE) and California Landscape
- Discussion and Questions



Office of National Coordinator for Health Information Technology

Nationwide Health Information Network (NHIN)



Federal Regulations

Part of the American Recovery and Reinvestment Act of 2009 (ARRA), Health Information Technology for Economic and Clinical Health Act (HITECH)

- Centers for Medicare and Medicaid Services Final Rules for the Electronic Health Records (EHR) Incentive Program – July 2010
- Office of National Coordinator Final Rules for Standards, Specifications and Certification – July 2010



What is an Electronic Health Record (EHR)?

- A longitudinal electronic record of patient health information generated by one or more encounters in any care delivery setting
- Includes patient demographics, progress notes, problems, medications, vital signs, past medical history, immunizations, laboratory data and radiology reports - *Healthcare Information Management Systems Society*
- **Electronic records that are capable of using nationally recognized interoperability standards – *Office of the National Coordinator for Health Information Technology***



EHR Incentive Program



A Conceptual Approach to Meaningful Use

STAGE 3 (expected to be implemented in 2015)

STAGE 2 (expected to be implemented in 2013)

STAGE 1
(2011 and 2012)

Data capture and sharing

Advanced clinical processes

Improved outcomes



Who can apply for the EHR Incentive Program?



Medicare	Medicaid
1. Physician (MD or OD)	1. Physician (MD or OD)
2. Dentist or Orthodontist	2. Dentist
3. Podiatrist	3. Certified Nurse Mid-wife
4. Optometrist	4. Nurse Practitioner
5. Chiropractor	5. Physician Assistant (Rural Health Clinic/ FQHC)
6. Hospitals and Critical Access Hospitals (CAH)	6. Hospitals and Critical Access Hospitals (CAH)

Timelines for EHR Incentive Program

MEANINGFUL USE STARTS NOW!

Hospitals vs. Providers:

- **October 1, 2010** – Reporting year begins for eligible hospitals and Critical Access Hospitals.
- **January 1, 2011** – Reporting year begins for eligible professionals.

Medicare Only:

- **January 3, 2011** – Registration for the Medicare EHR Incentive Program begins.
- **April 2011** – Attestation for the Medicare EHR Incentive Program begins.
- **July 3, 2011** – Last day for eligible hospitals to begin their 90-day reporting period to demonstrate meaningful use for the Medicare EHR Incentive Program.
- **May 2011** – EHR Incentive Payments expected to begin.

Medicaid Only:

- **February/March 2011** – DHCS to launch their EHR Incentive Program for providers and hospitals to enroll.
- **May 2011** – EHR Incentive Payments expected to begin.



EHR Incentive Program: Requirements of Stage 1

Basic Overview of Stage 1 Meaningful Use:

- Reporting period is 90 days for first year and 1 year subsequently
- Reporting through attestation
- Complete objectives and record Clinical Quality Measures
- Reporting may be yes/no or numerator/denominator attestation
- To meet certain objectives/measures, 80% of patients must have records in the certified EHR technology

Medicare vs. Medicaid Incentive Program (courtesy of CMS)

Medicare	Medicaid
Federal Government will implement (will be an option nationally)	Voluntary for States to implement (may not be an option in every State)
Payment reductions begin in 2015 for providers that do not demonstrate Meaningful Use	No Medicaid payment reductions
Must demonstrate MU in Year 1	A/I/U option for 1 st participation year
Maximum incentive is \$44,000 for EPs (bonus for EPs in HPSAs)	Maximum incentive is \$63,750 for EPs
MU definition is common for Medicare	States can adopt certain additional requirements for MU
Last year a provider may initiate program is 2014; Last year to register is 2016; Payment adjustments begin in 2015	Last year a provider may initiate program is 2016; Last year to register is 2016
Only physicians, subsection (d) hospitals and CAHs	5 types of EPs, acute care hospitals (including CAHs) and children's hospitals

What is Meaningful Use?

- Five Health Outcomes Priority and Policy Areas
- Meaningful Use is using certified EHR technology to
 - Improve quality, safety, efficiency, and reduce health disparities
 - Engage patients and families in their health care
 - Improve care coordination
 - **Improve population and public health**
 - All the while maintaining privacy and security

Meaningful Use mandated in law to receive incentives



Three Main Components of Meaningful Use

The CMS Final Rules specifies the following 3 components of Meaningful Use:

- Use of certified EHR in a meaningful manner (e.g., e-prescribing)
- Use of certified EHR technology for electronic exchange of health information to improve quality of health care
- Use of certified EHR technology to submit clinical quality measures (CQM) and other such measures selected by the Secretary



Stage 1 Requirements for Meaningful Use



Stage 1 Objectives and Measures Reporting

Eligible Professionals must complete:

- 15 core objectives
- 5 objectives out of 10 from menu set
- 6 total Clinical Quality Measures (3 core or alternate core, and 3 out of 38 from additional set)

Hospitals must complete:

- 14 core objectives
- 5 objectives out of 10 from menu set
- 15 Clinical Quality Measures

Meaningful Use: Public Health Measures

To improve public and population health:

- All EPs and hospitals must choose at least one of the population and public health measures to demonstrate as part of the menu set.
- Includes for eligible providers the menu set objective of reporting syndromic surveillance and immunization information.
- Hospitals must add lab reporting to syndromic surveillance and immunization information reporting.



Public Health Objective: Syndromic Surveillance Reporting

Public Health Menu Set Objective	Measure for Eligible Provider or Hospital to Receive Incentive	Electronic Health Record (EHR) Technology:		
		Messaging Standard and Implementation Guide		Message Vocabulary
Capability to submit electronic syndromic surveillance data to public health agencies and actual submission according to applicable law and practice. (eligible providers and hospitals)	Performed at least one test of certified EHR technology's capacity to provide electronic syndromic surveillance data to public health agencies and follow-up submission if the test is successful (unless none of the public health agencies to which an eligible hospital or CAH submits information has the capacity to receive the information electronically).	HL7 2.3.1	No implementation guide cited.	None cited.
		HL7 2.5.1	No implementation guide cited.	

Federal Recommendations for Syndromic Surveillance

- International Society for Syndromic Surveillance (ISDS) in conjunction with CDC
- Provides recommendations on syndromic surveillance the ONC HIT Policy Committee for Stage 2 and 3 MU
- CDPH provided comments in December 2010
- Web link:
<http://www.syndromic.org/projects/meaningful-use>

Public Health Objective: Immunization Reporting

Public Health Menu Set Objective	Measure for Eligible Provider or Hospital to Receive Incentive	Electronic Health Record (EHR) Technology:		
		Messaging Standard and Implementation Guide		Message Vocabulary
<p>Capability to submit electronic data to immunization registries or immunization information systems and actual submission according to applicable law and practice. (eligible providers and hospitals)</p>	<p>Performed at least one test of certified EHR technology's capacity to submit electronic data to immunization registries and follow up submission if the test is successful (unless none of the immunization registries to which the EP submits such information has the capacity to receive the information electronically)</p>	HL7 2.3.1	<p>Implementation Guide for Immunization Data Transactions using Version 2.3.1 of the Health Level Seven (HL7) Standard Protocol Implementation Guide Version 2.2</p> <p>http://www.cdc.gov/vaccines/programs/iis/stds/downloads/hl7guide.pdf</p>	<p>CVX (http://www.cdc.gov/vaccines/programs/iis/stds/downloads/hl7-cvx.pdf)</p>
		HL7 2.5.1	<p>HL7 Version 2.5.1 Implementation Guide for Immunization Messaging (CDC and AIRA)</p> <p>http://www.cdc.gov/vaccines/programs/iis/stds/downloads/hl7-guide2010-508.pdf</p>	

Public Health Objective: Laboratory Reporting

Public Health Menu Set Objective	Measure for Eligible Provider or Hospital to Receive Incentive	Electronic Health Record (EHR) Technology:	
		Messaging Standard and Implementation Guide	Message Vocabulary
<p>Capability to submit electronic data on reportable (as required by State or local law) lab results to public health agencies and actual submission according to applicable law and practice. (hospitals only)</p>	<p>Performed at least one test of certified EHR technology's capacity to provide electronic submission of reportable lab results to public health agencies and follow-up submission if the test is successful (unless none of the public health agencies to which an eligible hospital or CAH submits such information has the capacity to receive the information electronically)</p>	<p>HL7 2.5.1</p>	<p>HL7 Version 2.5.1 Implementation Guide: Electronic Laboratory Reporting to Public Health, Release 1 (Available for purchase at www.HL7.org)</p> <p>LOINC version 2.27 (www.loinc.org)</p>

Public Health Lab Work Group

- Established in January 2011 to assist hospitals in meeting MU and to improve interoperability between lab programs in public health
- Programs participating in conjunction with Cal eConnect: Cancer Registry, CalREDIE, Childhood Lead Poison Prevention, and Genetic Disease
- Current short-term goals:
To develop an implementation guide to assist hospitals in reporting to Public Health
- Next meeting on March 11th



MU: Core Objectives for Eligible Providers

Eligible Professionals –15 Core Objectives

1. Computerized provider order entry (CPOE)
2. E-Prescribing (eRx)
3. Report ambulatory clinical quality measures to CMS/States
4. Implement one clinical decision support rule
5. Provide patients with an electronic copy of their health information, upon request
6. Provide clinical summaries for patients for each office visit
7. Drug-drug and drug-allergy interaction checks
8. Record demographics
9. Maintain an up-to-date problem list of current and active diagnoses
10. Maintain active medication list
11. Maintain active medication allergy list
12. Record and chart changes in vital signs
13. Record smoking status for patients 13 years or older
14. Capability to exchange key clinical information among providers of care and patient-authorized entities electronically
15. Protect electronic health information

MU: Core Objectives for Eligible Hospitals and CAHs

Hospitals–14 Core Objectives

1. Computerized provider order entry (CPOE)
2. Drug-drug and drug-allergy interaction checks
3. Record demographics
4. Implement one clinical decision support rule
5. Maintain up-to-date problem list of current and active diagnoses
6. Maintain active medication list
7. Maintain active medication allergy list
8. Record and chart changes in vital signs
9. Record smoking status for patients 13 years or older
10. Report hospital clinical quality measures to CMS or States
11. Provide patients with an electronic copy of their health information, upon request
12. Provide patients with an electronic copy of their discharge instructions at time of discharge, upon request
13. Capability to exchange key clinical information among providers of care and patient-authorized entities electronically
14. Protect electronic health information



MU: Menu Objectives for Providers

Menu objectives –may defer 5 of 10

Eligible Professionals –10 Menu Objectives

1. Drug-formulary checks
2. Incorporate clinical lab test results as structured data
3. Generate lists of patients by specific conditions
4. Send reminders to patients per patient preference for preventive/follow up care
5. Provide patients with timely electronic access to their health information
6. Use certified EHR technology to identify patient-specific education resources and provide to patient, if appropriate
7. Medication reconciliation
8. Summary of care record for each transition of care/referrals
9. Capability to submit electronic data to immunization registries/systems*
10. Capability to provide electronic syndromic surveillance data to public health agencies*

* At least 1 public health objective must be selected.

MU: Menu Objectives for Hospitals

Menu objectives –may defer 5 of 10

Hospitals–10 Menu Objectives

1. Drug-formulary checks
2. Record advanced directives for patients 65 years or older
3. Incorporate clinical lab test results as structured data
4. Generate lists of patients by specific conditions
5. Use certified EHR technology to identify patient-specific education resources and provide to patient, if appropriate
6. Medication reconciliation
7. Summary of care record for each transition of care/referrals
8. Capability to submit electronic data to immunization registries/systems*
9. Capability to provide electronic submission of reportable lab results to public health agencies*
10. Capability to provide electronic syndromic surveillance data to public health agencies*

* At least 1 public health objective must be selected.

Core and Alternate Core Clinical Quality Measures (CQM) for Providers

Providers must record 6 CQM (3 must be core or alternate core below)

- Hypertension: Blood Pressure Measurement
- Preventive Care and Screening Measure Pair: a) Tobacco Use Assessment, b) Tobacco Cessation Intervention
- Adult Weight Screening and Follow-up
- Weight Assessment and Counseling for Children and Adolescents
- Preventive Care and Screening: Influenza Immunization for Patients 50 Years Old or Older
- Childhood Immunization Status

Clinical Quality Measures for Eligible Providers

Additional Set CQM–EPs must complete 3 of 38

1. Diabetes: Hemoglobin A1c Poor Control
2. Diabetes: Low Density Lipoprotein (LDL) Management and Control
3. Diabetes: Blood Pressure Management
4. Heart Failure (HF): Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) Therapy for Left Ventricular Systolic Dysfunction (LVSD)
5. Coronary Artery Disease (CAD): Beta-Blocker Therapy for CAD Patients with Prior Myocardial Infarction (MI)
6. Pneumonia Vaccination Status for Older Adults
7. Breast Cancer Screening
8. Colorectal Cancer Screening
9. Coronary Artery Disease (CAD): Oral Antiplatelet Therapy Prescribed for Patients with CAD
10. Heart Failure (HF): Beta-Blocker Therapy for Left Ventricular Systolic Dysfunction (LVSD)
11. Anti-depressant medication management: (a) Effective Acute Phase Treatment, (b) Effective Continuation Phase Treatment
12. Primary Open Angle Glaucoma (POAG): Optic Nerve Evaluation
13. Diabetic Retinopathy: Documentation of Presence or Absence of Macular Edema and Level of Severity of Retinopathy
14. Diabetic Retinopathy: Communication with the Physician Managing Ongoing Diabetes Care
15. Asthma Pharmacologic Therapy
16. Asthma Assessment
17. Appropriate Testing for Children with Pharyngitis
18. Oncology Breast Cancer: Hormonal Therapy for Stage IC-IIIC Estrogen Receptor/Progesterone Receptor (ER/PR) Positive Breast Cancer
19. Oncology Colon Cancer: Chemotherapy for Stage III Colon Cancer Patients

Clinical Quality Measures for Eligible Providers

Additional Set CQM–EPs must complete 3 of 38 (cont.)

19. Prostate Cancer: Avoidance of Overuse of Bone Scan for Staging Low Risk Prostate Cancer Patients
20. Smoking and Tobacco Use Cessation, Medical Assistance: a) Advising Smokers and Tobacco Users to Quit, b) Discussing Smoking and Tobacco Use Cessation Medications, c) Discussing Smoking and Tobacco Use Cessation Strategies
21. Diabetes: Eye Exam
22. Diabetes: Urine Screening
24. Diabetes: Foot Exam
25. Coronary Artery Disease (CAD): Drug Therapy for Lowering LDL-Cholesterol
26. Heart Failure (HF): Warfarin Therapy Patients with Atrial Fibrillation
27. Ischemic Vascular Disease (IVD): Blood Pressure Management
28. Ischemic Vascular Disease (IVD): Use of Aspirin or Another Anti thrombotic
29. Initiation and Engagement of Alcohol and Other Drug Dependence Treatment: a) Initiation, b) Engagement
30. Prenatal Care: Screening for Human Immunodeficiency Virus (HIV)
31. Prenatal Care: Anti-D Immune Globulin
32. Controlling High Blood Pressure
33. Cervical Cancer Screening
34. Chlamydia Screening for Women
35. Use of Appropriate Medications for Asthma
36. Low Back Pain: Use of Imaging Studies
37. Ischemic Vascular Disease (IVD): Complete Lipid Panel and LDL Control
38. Diabetes: Hemoglobin A1c Control (<8.0%)

Clinical Quality Measures for Hospitals

Eligible Hospitals and CAHs must complete all 15:

1. Emergency Department Throughput –admitted patients Median time from ED arrival to ED departure for admitted patients
2. Emergency Department Throughput –admitted patients –Admission decision time to ED departure time for admitted patients
3. Ischemic stroke –Discharge on anti-thrombotics
4. Ischemic stroke –Anticoagulation for A-fib/flutter
5. Ischemic stroke –Thrombolytic therapy for patients arriving within 2 hours of symptom onset
6. Ischemic or hemorrhagic stroke –Anti-thrombotic therapy by day 2
7. Ischemic stroke –Discharge on statins
8. Ischemic or hemorrhagic stroke –Stroke education
9. Ischemic or hemorrhagic stroke –Rehabilitation assessment
10. VTE prophylaxis within 24 hours of arrival
11. Intensive Care Unit VTE prophylaxis
12. Anticoagulation overlap therapy
13. Platelet monitoring on unfractionated heparin
14. VTE discharge instructions
15. Incidence of potentially preventable VTE

Federal Recommendations on Clinical Quality Measures for Stages 2 & 3

- October 2010- ONC's HITPC formed 5 work groups to recommend clinical quality measures (CQMs) in the 5 priority policy areas for Stage 2 and 3 MU
- Comments provided by 112 organizations and 22 individuals
- Work group presentation and recommendations on CQMs are now completed; posted at:

<http://healthit.hhs.gov/portal/server.pt?open=512&mode=2&objID=3079&PageID=20787>

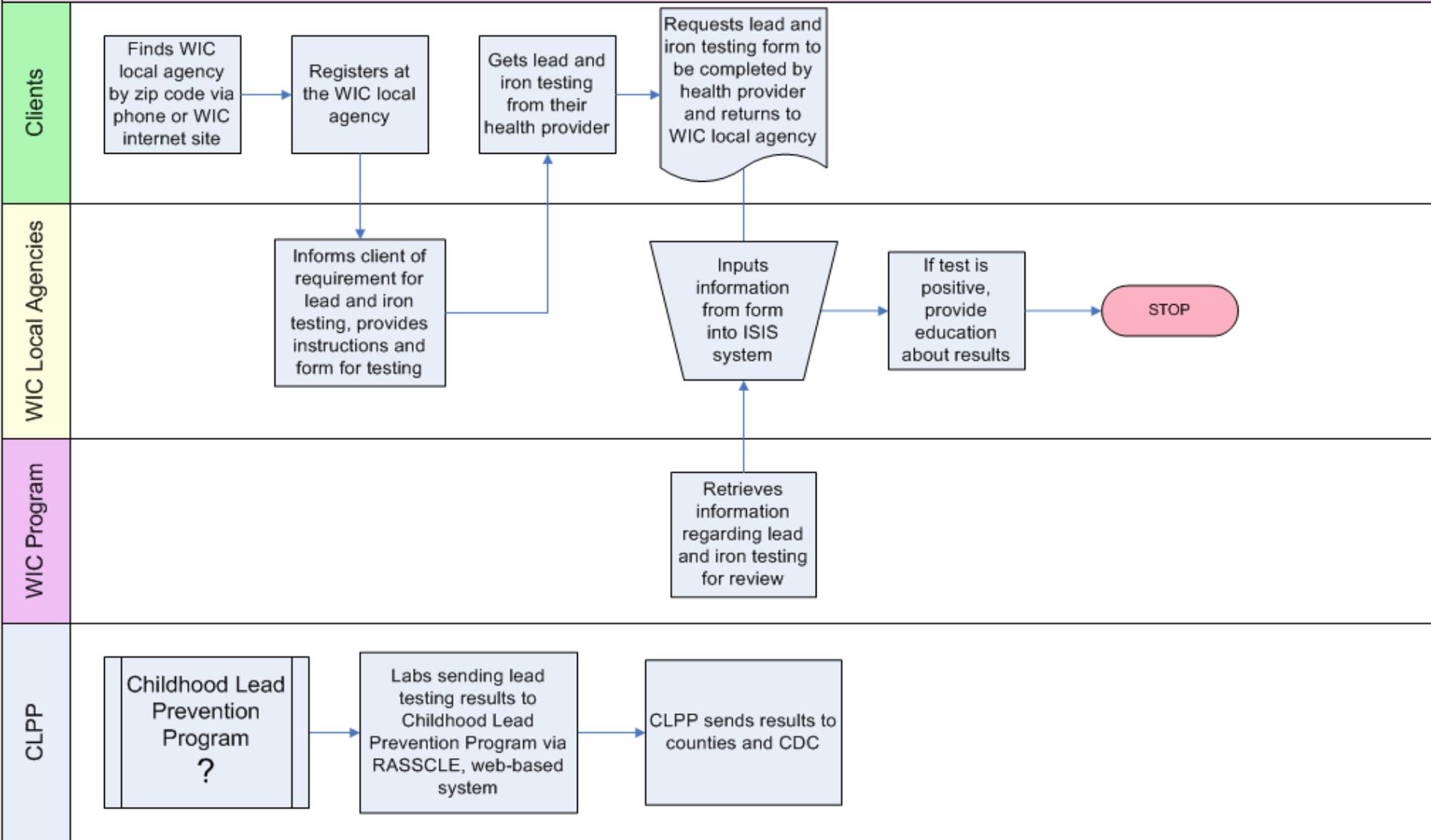
Present and Future Implications for Public Health

- How do we integrate data from EHR systems into public health?
- How do we align *federal* HIT/HIE initiatives with *state* initiatives and current public health *business processes*? (MU, HITECH, HIPAA)
- How do we work together (within the department and with other departments) to share data?
- How do we improve on our current infrastructure to meet emerging needs?
- If we have changes, how can we work together to make those changes happen?



CDPH Use Case

Women, Infants and Children Program (WIC): Childhood Lead Reporting



What changes needs to be made for HIE to happen?

- Policy
- Business Processes
- IT
- Data standards
- Our thinking



CDPH Efforts to Meet Meaningful Use

- Inform CDPH and local health department staff regarding MU
- Assess intradepartmental programs and local public health for MU impact
- Implementing strategies to meet MU
- Report to stakeholders public health readiness to meet MU
- Participate in State HIE initiative
- Keep informed at what's going on at the National Level with (CDC, ONC, and CMS)
- Participate in national work groups and provide comments to new federal regulations that impact Public Health



CDPH eHealth Website

- Web link:
<http://www.cdph.ca.gov/data/informatics/Pages/eHealth.aspx>
- Provides information about Meaningful Use and California HIE landscape
- Includes links to web pages on Public Health objectives and information on CDPH and LHD readiness
- Objectives posted so far: 1) Syndromic Surveillance, 2) Immunization, and 3) Laboratory Reporting
- More web pages to be developed that will include objectives and clinical quality measures with public health impact

en Español[» Su salud en su idioma](#)**Most Popular Links**[» Birth, Death, & Marriage Certificates](#)[» Licensing and Certification](#)[» Pertussis \(Whooping Cough\)](#)[» WIC](#)**Quick Links**[» About Us](#)[» Decisions Pending & Opportunities for Public Participation](#)[» Diseases & Conditions](#)[» Job Opportunities](#)[» Local Health Services](#)[» Multimedia](#)[» Newsroom](#)[» Public Availability of Documents](#)**Related Links**[» California Health and Human Services Agency](#)[» Department of Health Care Services \(includes Medi-Cal\)](#)[» State Agencies Directory](#)[Home](#) > [Data](#) > [Health Informatics](#) > [eHealth in Public Health](#)

eHealth in Public Health

On July 28, 2010, the Centers for Medicare and Medicaid Services (CMS) released their final rule for the Electronic Health Record (EHR) Incentive Program as a complement to the final rule on standards and certification released by the Office of National Coordinator for Health Information Technology (ONC).

As part of the Health Information Technology for Economic and Clinical Health Act of 2009, or the "HITECH Act," these final rules provide authority to establish programs to improve health care quality, safety, and efficiency of patient care through the promotion and meaningful use of health information technology (HIT), including qualified electronic health records (EHRs) and private and secure electronic health information exchange.

Meaningful Use of Health Information Technology (HIT)

Under the EHR Incentive Program, eligible providers and hospitals receive incentive payments for Stage 1 (in years 2011 and 2012) when they have shown that they are able to implement certified EHR technology and/or have demonstrated "meaningful use."

ONC Standards and Certification

EHR technology adopted by eligible providers and hospitals will need to include the required standards, implementation specifications and certification criteria established by ONC to achieve meaningful use in Stage 1.

ONC Resources

- [» The Office of National Coordinator for Health Information Technology](#)
- [» Centers for Medicare and Medicaid- EHR Incentive Program](#)
- [» Final Rule on Meaningful Use \(PDF\)](#)
- [» Final Rule on Standards & Certification \(PDF\)](#)

Meaningful Use Objectives and Measures

On This Page[Meaningful Use of HIT](#)[ONC Standards & Cert](#)[Objectives & Measures](#)[Privacy & Security](#)[California eHealth Initia](#)[National eHealth Supp](#)[Grants & Funding](#)

Public Health Readiness for Meaningful Use (MU)

- Assessment sent to CCLHO members on Jan. 19, 2011 to determine local capacity for MU
- 20 out of 61 LHDs responded
- Counties that can receive HL7 syndromic surveillance: ***Los Angeles, Stanislaus, San Diego, and Tulare***
- Counties that can receive HL7 lab results: ***Marin, Placer, Sacramento, San Diego***
- CAIR regions that can receive HL7 immunization data: ***San Diego***

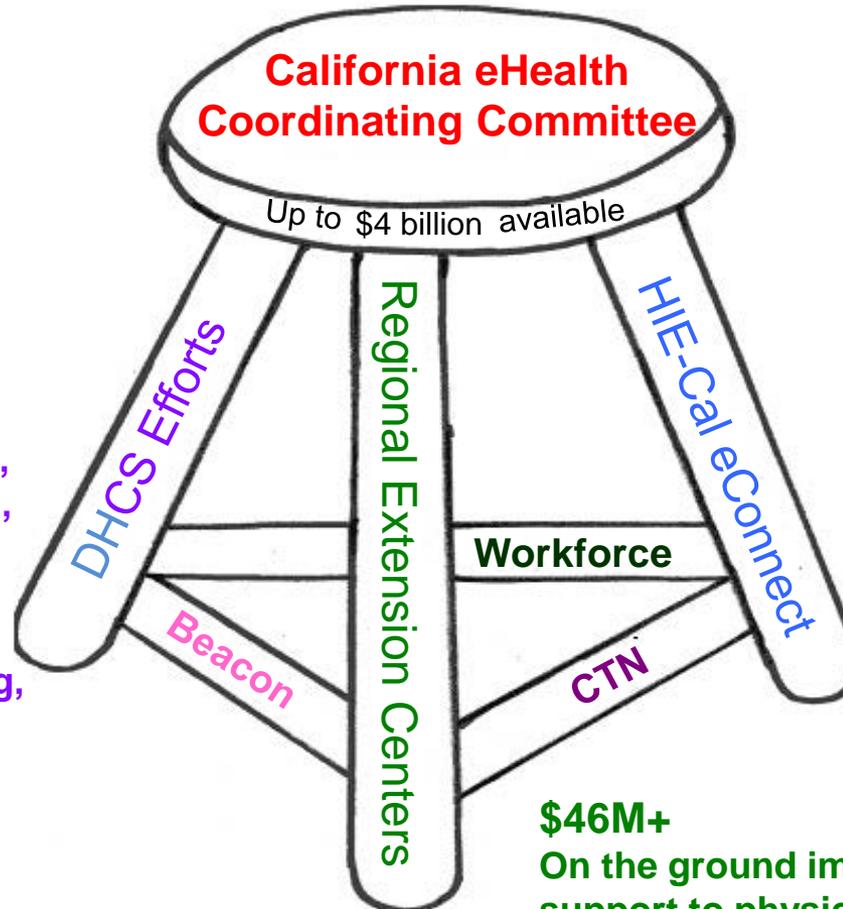


Public Health Funding Sources

- National Public Health Improvement Initiative
- HIE Cooperative Agreement
- Cal eConnect: HIE Expansion Grant Program
- CMS EHR Incentive Program

State HIE Initiative: Proving Support for Meaningful Use

\$1.4 billion in Medi-Cal EHR incentives + ~\$25-\$30M Overall EHR Medicaid admin, plan, promotion, payment, consumer education, quality reporting, oversight



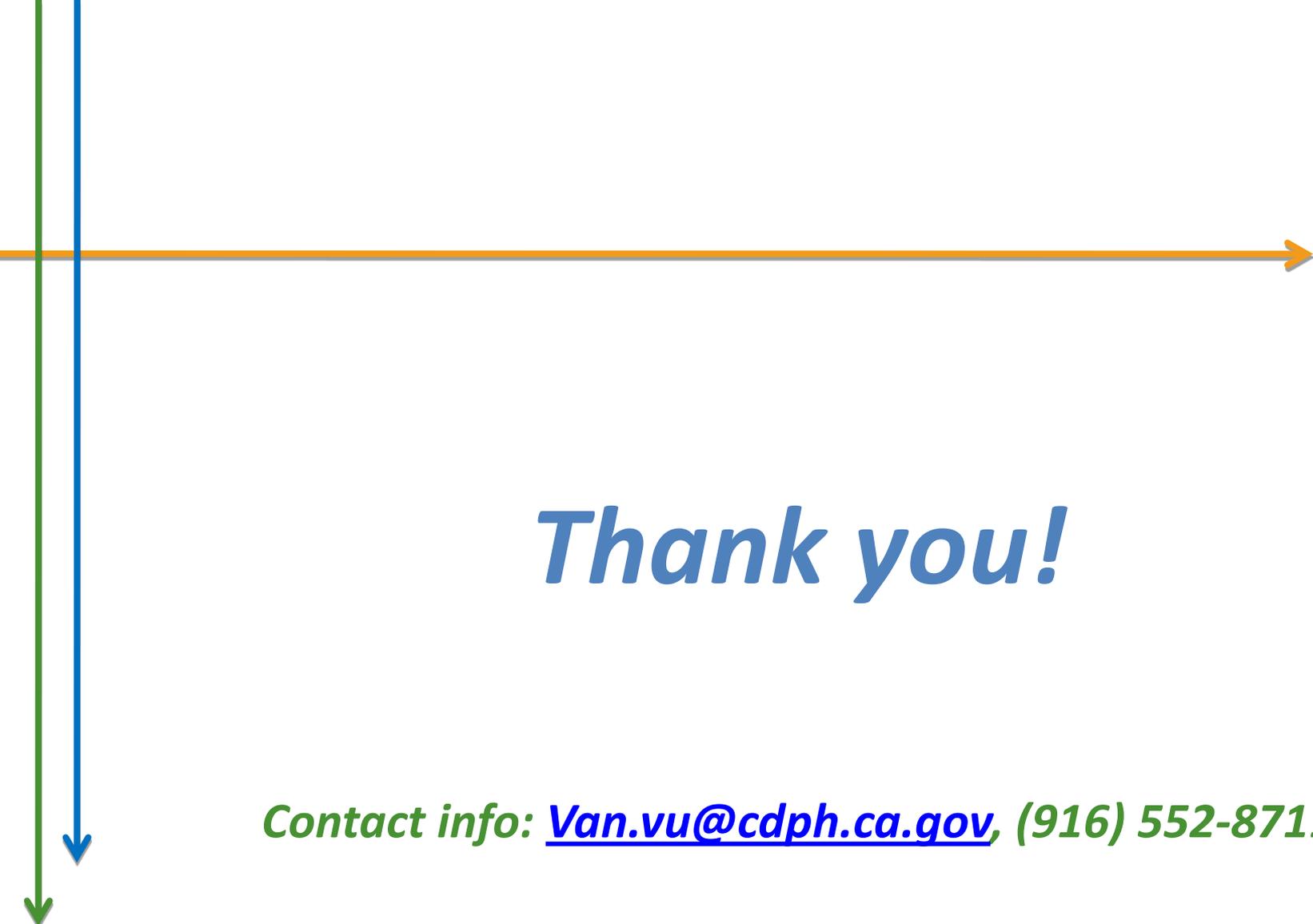
\$38.8M Support and infrastructure to make information exchange between sectors faster, more efficient and more secure

\$46M+ On the ground implementation support to physicians, hospitals and community health centers

eHealth in California Diverse Resources to Support EHR Adoption and Improve Health

- CHHS HIT Coordinator (HIE Cooperative Agreement)
- California Office of Health Information Integrity (Cal OHII)
- Medicare EHR Incentive Program (CMS)
- Medi-Cal EHR Incentive Program (DHCS)
- Public Health (CDPH and Local Health Departments)
- Cal eConnect HIE Services
- Regional Extension Centers (Cal HIPSO, COREC, HITEC-LA, CA Rural Indian Health Board (CRIHB))
- Beacon – San Diego
- Health Workforce Initiative
- California Telehealth Network





Thank you!

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