



The Hawai'i Health Information Exchange

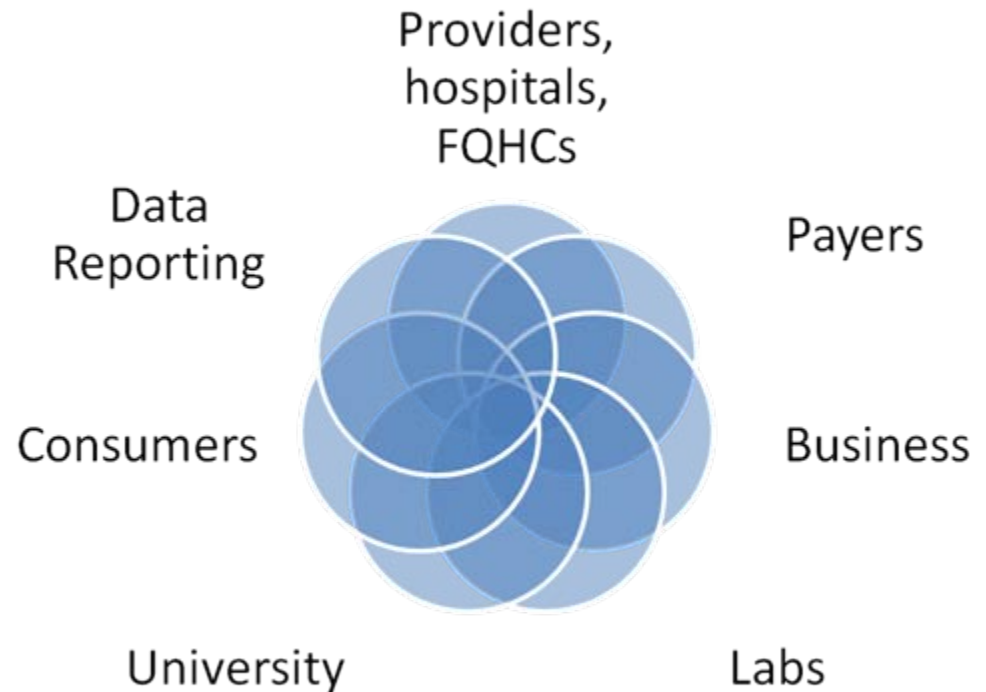
Mission



- To facilitate the exchange of health information that enables high quality and affordable health care statewide
- Core Values & Guiding Principles:
 - Inclusivity
 - Quality
 - Transparency
 - Privacy
 - Sustainability

What Is Hawai'i HIE?

- 21 member BoD
- Extensive HIT experience
- Broad community support
- A non-profit 501(c)(3)
- Became the State Designated Entity in Sept. 2009



Hawai'i HIE

Board of Directors



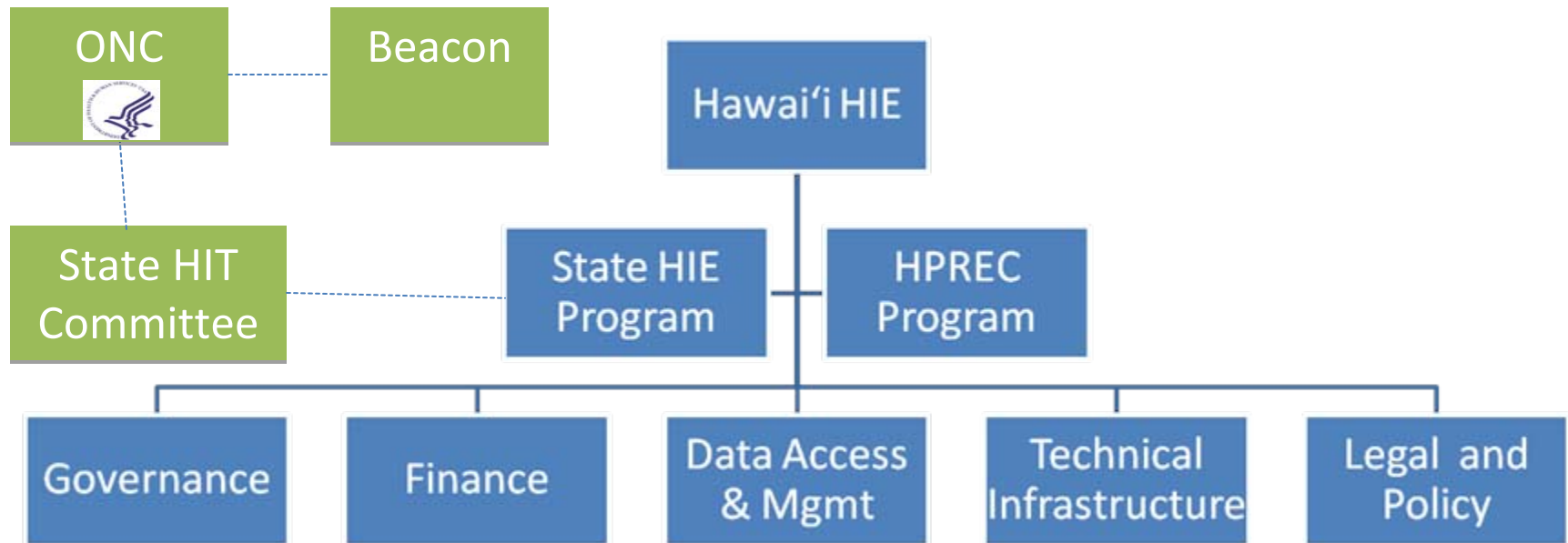
- *Money Atwal* - CIO/CFO, HHSC East Region, Hilo Medical Center
- *Francis Chan* - CIO, Clinical Laboratories of Hawai'i, LLC
- *Jennifer Diesman* - Vice President, Hawai'i Medical Service Association
- *Susan Forbes* - DrPH, Ret. CEO, Hawai'i Health Information Corporation
- *Beth Giesting* - CEO, Hawai'i Primary Care Association
- *Bruce "Skip" Keane* - Community Member
- *Emmanuel Kintu* - Exec. Director, Kalihi Pālama Health Center
- *Janet Liang* - President, Kaiser Hawai'i
- *Wesley Lo* - CEO, Maui Memorial Medical Center
- *Roy Magnusson, M.D.* - Assoc. Dean, John A Burns School of Medicine
- *John McComas* - CEO, AlohaCare
- *Gary Okamoto, M.D.* Past President - Hawai'i Medical Association
- *Kevin Roberts* - President, Castle Medical Center
- *Steve Robertson* - Exec. Vice President, Hawai'i Pacific Health
- *David Saito, M.D.* - Officer, Hawai'i Independent Physician's Association
- *Barbara Kim Stanton* - Exec. Director, AARP
- *Jim Tollefson* - President/CEO, Chamber of Commerce
- *Lisa Wong* - Member, Society of Human Resource Managers
- *Raymond Yeung* - Vice President, Diagnostic Laboratory Services, Inc.
- *Jeffrey Yu, M.D.* - CTO, The Queen's Health Systems

A Working Board

Governing Committees:

1. Governance – development of a governance model
2. Finance - development of a sustainable business model
3. Technical Infrastructure - development of the IT infrastructure
4. Data Access and Management- identification and agreement on the data elements
5. Legal and Policy - identification of legal barriers for privacy and security
6. Audit – 501(c)(3) compliance

Programmatic Organizational Chart



Overview of the State HIE Plan

- The State Designated Entity
- Grantor: Office of the National Coordinator for HIT (ONC)
- Purpose: develop and implement a state HIE plan
- Federal Budget: \$5.6M
- Timeframe: Feb 2010 – Feb 2014
- State match required and is being supplied from the private sector

15 Beacon Communities

Extend advanced health IT and exchange infrastructure



Leverage data to inform specific delivery system and payment strategies



Demonstrate a vision of the future where:

- Hospitals, clinicians and patients are meaningful users of health IT, and
- Communities achieve measurable & sustainable improvements in health care quality, safety, efficiency, and population health

Project Timeline

- Sept. 2009 – became the SDE
- Sept. 2009 – submitted grant application
- Feb. 2010 – awarded
- Mar. 2010 – planning process approved
- Mar.-July 2010 – develop draft plan
- August 17th – Board approved Plan
- August 30th – State Coordinating Committee for HIT approved Plan
- August 30th – ONC received Plan from HHIE
- Sept. 10th – HHIE reviewed initial feedback from ONC
 - ONC project officer review (complete)
 - ONC review (9/17)
 - ONC provides written feedback to HHIE (10/8)
 - HHIE submits written feedback to ONC (10/22)
- Oct. 22nd – ONC-HHIE approval phase of plan
- November 2010 – begin implementation

Over the next 4 years, we will oversee the development of a statewide HIE to improve the quality of health in Hawai'i.

2-Year Technical Requirements



HIE in an Emergency

George is vacationing in Kona on the Big Island of Hawaii. One night while driving downtown, a pedestrian begins to cross the street in front of him. Attempting to avoid the pedestrian, he swerves to the left and hits a telephone pole.

George is in critical condition and is taken to the closest hospital ER. Dr. Lee brings George into the emergency room and provides the nurse with George's driver's license in order to identify him.

Fortunately, Dr. Lee is able to access George's electronic health records through the health information exchange and is alerted to George's allergy to penicillin. Dr. Lee is able to treat him quickly and efficiently, without causing any additional problems, and update his records with details from the accident.



HITECH Vision

- Furnish tools to begin a major transformation in American health care
- Provide best opportunity for each patient to receive optimal care through nationwide health information exchange
- Address the most pressing obstacles to adoption and meaningful use of electronic health records (EHR) through programs and regulations

Meaningful Use in Hawai'i



Plumeria



Plumeria Lei

Meaningful Use in Hawai'i



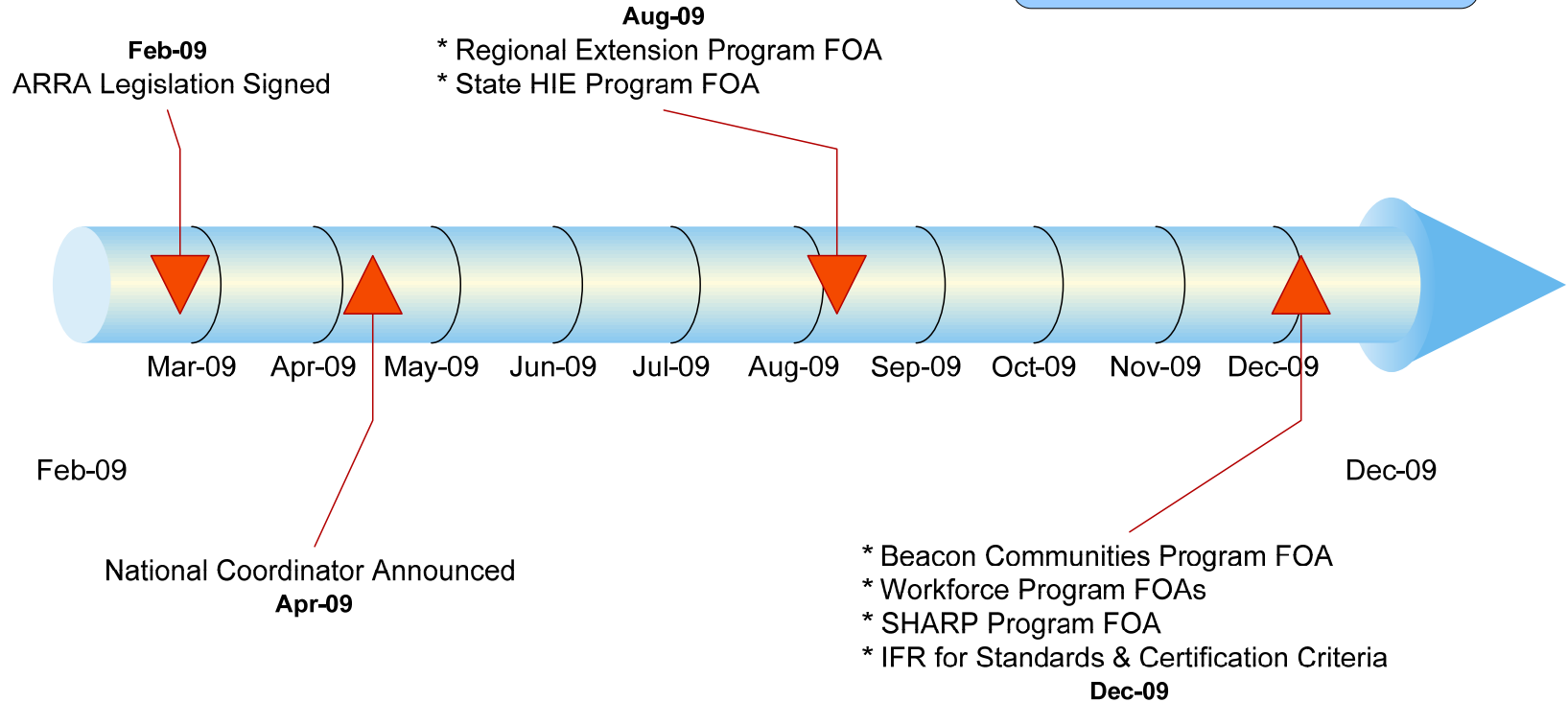
Sand



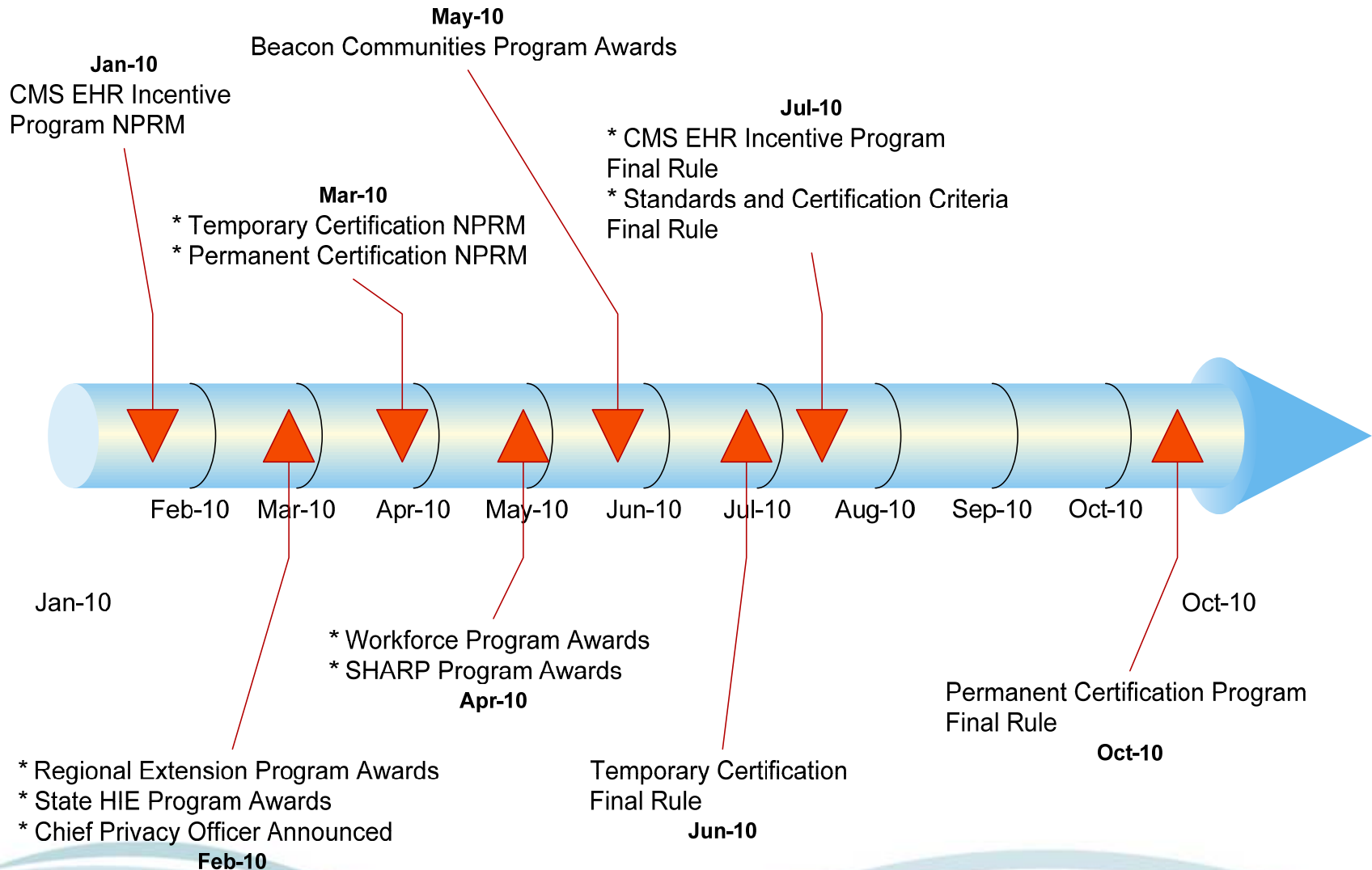
Meaningful Use of Sand

HITECH Timeline

HITECH Program Funding Totals:
- \$693m Regional Extension Program
- \$564m State HIE Program
- \$235m Beacon Communities Program
- \$118m Workforce Program
- \$60m SHARP Program
- \$330m Other



HITECH Timeline (continued)



Hawai'i Pacific Regional Extension Center (HPREC)

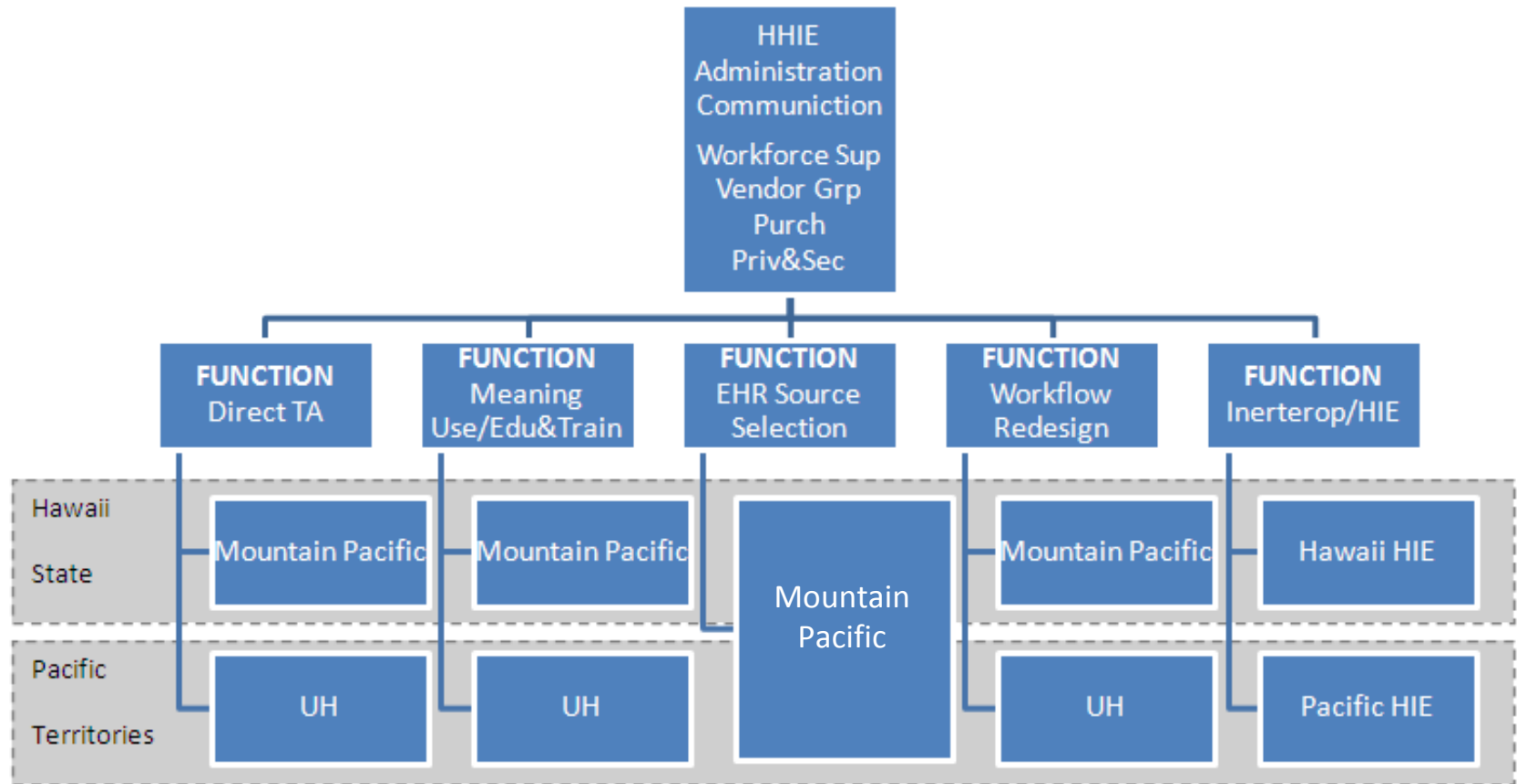
Overview of the REC Program

- Health Information Technology Act (HITECH) of 2009 established the Health Information Technology Extension Program
- Grantor: Office of the National Coordinator for HIT (ONC)
- Purpose: Help Priority PCPs implement EHRs and meet the CMS 'Meaningful Use' requirements
- Hawai'i Pacific REC is one of 60 Regional Extension Centers across the country

Background Information

- Federal law requires RECs to be affiliated with a U.S. based, non-profit organization
- State match required and is being supplied from the private sector
- Hawai'i Pacific REC operates under the oversight, guidance and supervision of Hawai'i Health Information Exchange
- Federal Budget: \$5.8M
- Timeframe: April 2010 – April 2012
- Key partners:
 - Mountain Pacific Quality Health Foundation
 - Telecommunications Information & Policy Group, UH

Hawai'i Pacific REC Service Chart



Who Is the Hawai'i Pacific Regional Extension Center (HPREC)?



HPREC is an organization whose mission is to support providers in the adoption of electronic health records (EHRs) and assist them with their progress toward achieving Meaningful Use.

HPREC Is Focused on

Providing Technical Assistance to:

- Physicians, physician assistants, and nurse practitioners furnishing primary care
- Clinicians with the least resources and the lowest rates of EHR adoption
- Medically underserved communities
- Critical Access Hospitals (CAH), Community Health Centers (CHC), Federally Qualified Health Centers (FQHC) and other settings
- Individual and small group practices (fewer than 10)
- Underserved and underinsured areas

Service Areas

EHR Technical Assistance & Training to Priority Primary Care Providers

- Supporting Providers with Individualized and On-site Technical Assistance
- EHR Vendor Selection & Group Purchasing
- Effective Implementation of a Certified EHR
- Clinical and Administrative Workflow Redesign
- Functional Interoperability and HIE
- Privacy and Security Best Practices
- Support in becoming eligible for the incentives offered by CMS for achieving Meaningful Use
- Local Workforce Support

By Successfully Implementing an EHR System and Achieving Meaningful Use, Providers Can:

- Improve patient care
- Improve operational efficiency
- Reduce operating costs
- Receive financial incentives
- Become part of a state-wide information network for the exchange of electronic health records

EHR—Safe Storage

Dr. Roberts, a doctor of internal medicine, has a small practice in Maui County. He recently transferred all of his patients' records from paper to electronic.

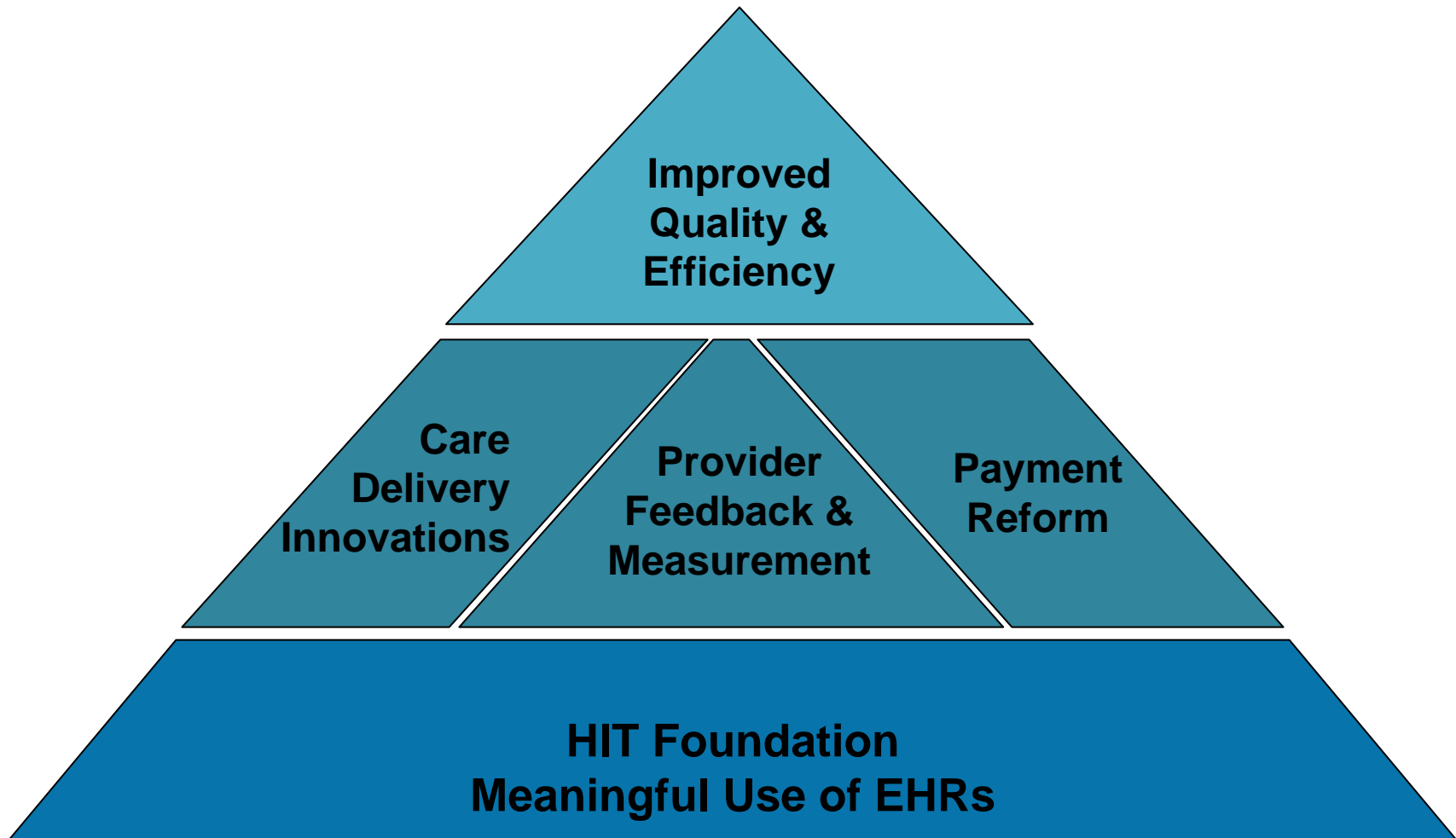
Due to a heavy rainstorm later in the year, his practice is flooded and many paper documents are damaged or destroyed. Once his office is cleaned, however, Dr. Roberts is still able to treat his patients by accessing their electronic health records.

He does not have to put his appointments on hold or ask his patients to update their information. Most importantly, Dr. Roberts still has all of the records containing the lists of medication he has prescribed to his patients.



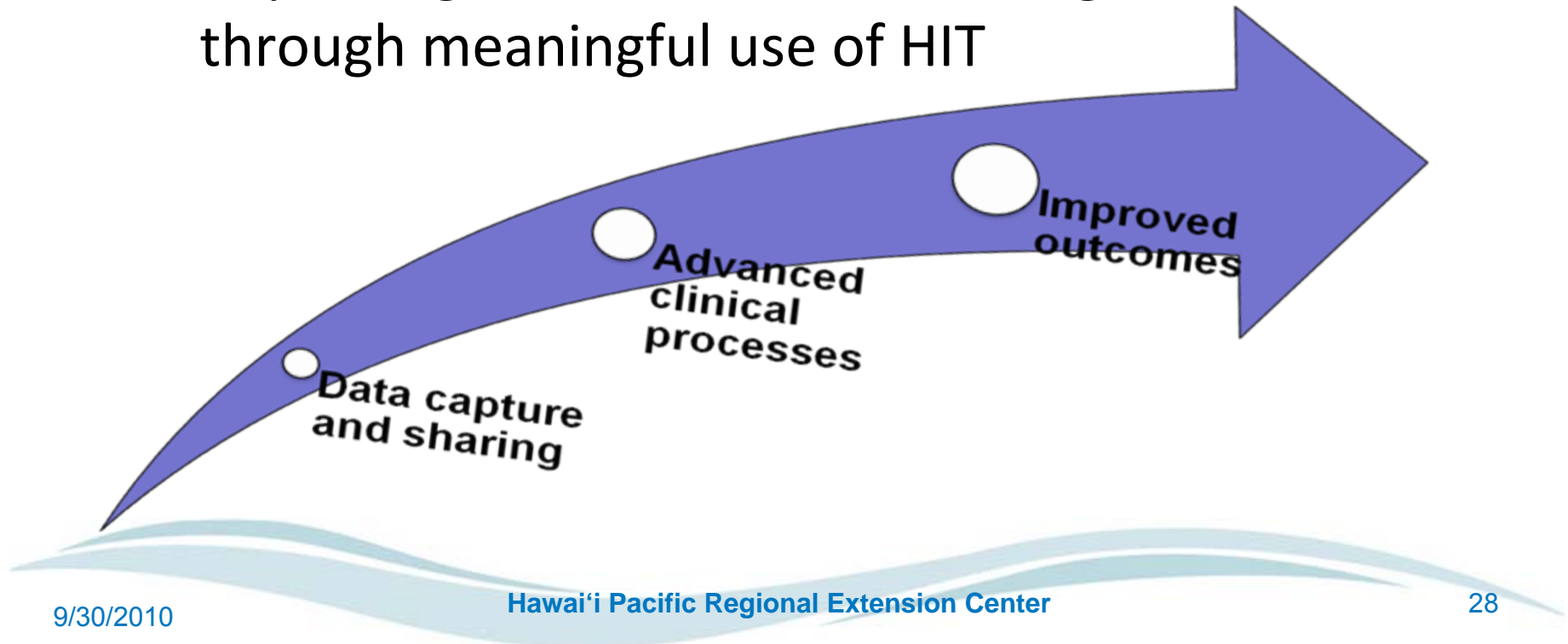
Meaningful Use and EHR Incentive Payments

HIT as a Tool and Foundation for Delivery System Improvement

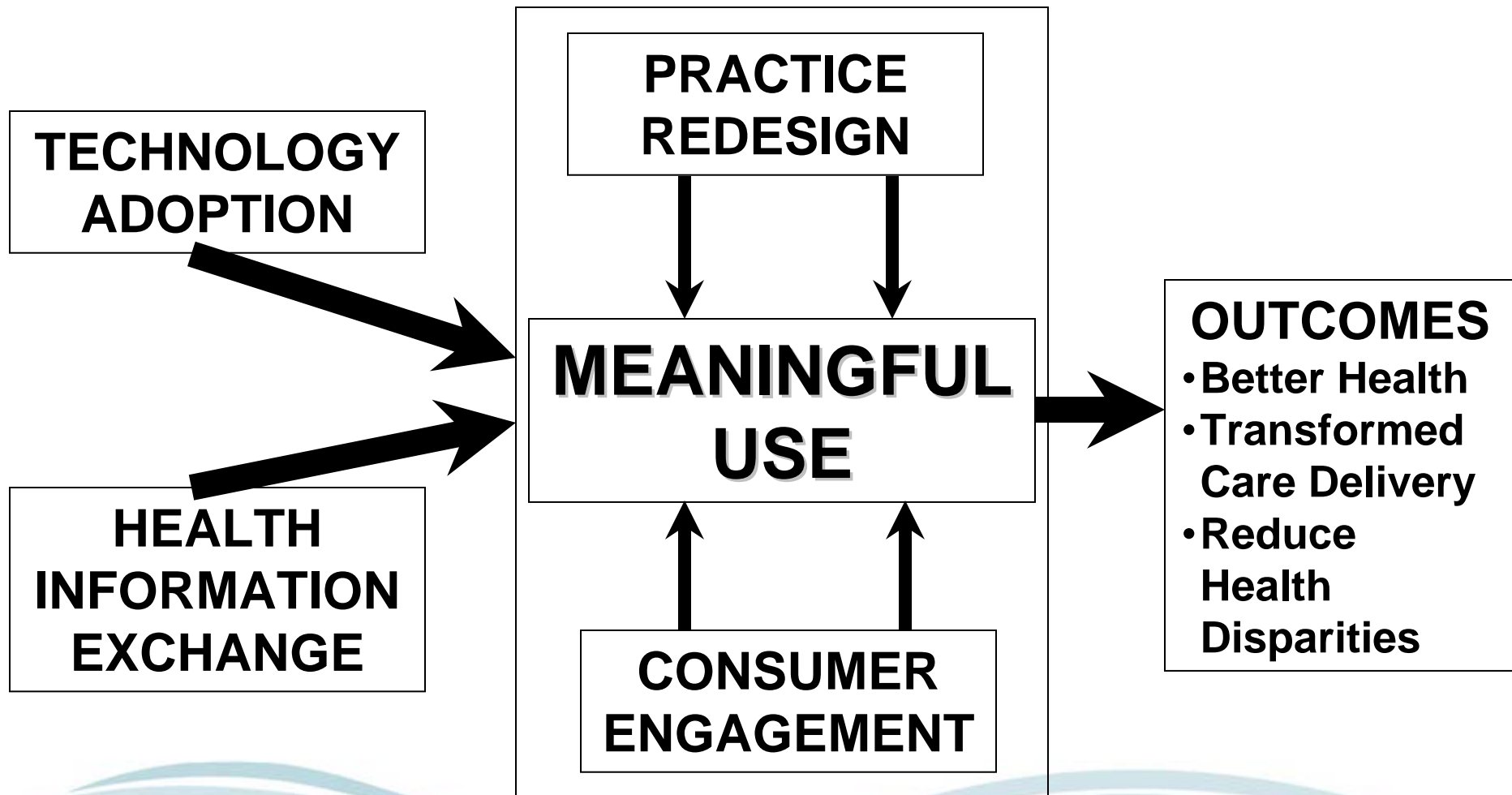


Making Meaning of “Meaningful Use”

- HITECH goals
 - Not about technology
 - Improving health and transforming health care through meaningful use of HIT



Getting to Meaningful Use to Improve Health & Health Care



What makes someone a meaningful user of EHRs?

- ARRA specifies the following 3 criteria for being a meaningful user of (EHRs):
 - Use of certified EHR technology in a meaningful manner (ex: E-prescribing)
 - Use of certified EHR technology to submit clinical quality reporting and other measures
 - Use of certified EHR technology for electronic exchange of health information to improve quality of health care

Who Is a Medicare Eligible Provider?

Eligible Providers in Medicare FFS

Eligible Professionals (EPs)

Doctor of Medicine or Osteopathy

Doctor of Dental Surgery or Dental Medicine

Doctor of Podiatric Medicine

Doctor of Optometry

Chiropractor

Eligible Hospitals

Acute Care Hospitals*

Critical Access Hospitals (CAHs)

*Subsection (d) hospitals that are paid under the PPS and are located in the 50 States or Washington, DC (including Maryland)

Who is a Medicaid Eligible Provider?

Eligible Providers in Medicaid

Eligible Professionals (EPs)

Physicians

Nurse Practitioners (NPs)

Certified Nurse Midwives (CNMs)

Dentists

Physician Assistants (PAs) working in a Federally Qualified Health Center (FQHC) or rural health clinic (RHC) that is so led by a PA

Eligible Hospitals

Acute Care Hospitals (now including CAHs)

Children's Hospitals

Notable Differences Between the Medicare & Medicaid EHR Programs

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 1st 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

For Medicaid, there are patient volume requirements to qualify:

Entity	Minimum Medicaid Patient Volume Threshold
For Eligible Professionals (EPs)	
Physicians	30%
-Pediatricians	20%
Dentists	30%
CNMs	30%
PAs when practicing at an FQHC/RHC that is so led by a PA	30%
NPs	30%
**Or the Medicaid EP practices predominantly in an FQHC or RHC—30% needy individual patient volume threshold	
For Eligible Hospitals	
Acute care hospitals	10%
Children's hospitals	No requirement

Adopt / Implement / Upgrade (A/I/U)

- **Adopted** – Acquired and Installed
 - Ex: Evidence of installation prior to incentive
- **Implemented** – Commenced Utilization of
 - Ex: Staff training, data entry of patient demographic information into EHR
- **Upgraded** – Expanded
 - Upgraded to certified EHR technology or added new functionality to meet the definition of certified EHR technology

Qualifying for Incentive Payments: EPs

Eligible Professionals (EPs) must:

- Meet 15 Meaningful Use core requirements + 5 menu requirements from a list of 10 set objectives
- Report on 3 required core Clinical Quality Measures (CQMs), and if the denominator of 1 or more of the required core measures is 0, then EPs are required to report results for up to 3 alternate core measures.
- Select 3 additional CQMs from a set of 38 CQMs. It is acceptable to have a '0' denominator provided the EP does not have an applicable population.

Qualifying for Incentive Payments: Hospitals

Eligible Hospitals must:

- Meet 14 Meaningful Use core requirements + 5 menu requirements from a list of 10 set objectives.
- Eligible hospitals and CAHs must report all 15 Clinical Quality Measures (CQMs).

Incentive Payments for Medicare EPs

First Calendar Year (CY) for which the EP Receives an Incentive Payment

	CY 2011	CY 2012	CY 2013	CY2014	CY 2015 and later
CY 2011	\$18,000				
CY 2012	\$12,000	\$18,000			
CY 2013	\$8,000	\$12,000	\$15,000		
CY 2014	\$4,000	\$8,000	\$12,000	\$12,000	
CY 2015	\$2,000	\$4,000	\$8,000	\$8,000	\$0
CY 2016		\$2,000	\$4,000	\$4,000	\$0
TOTAL	\$44,000	\$44,000	\$39,000	\$24,000	\$0

Additional Incentive Payments for Medicare EPs Practicing in HPSAs

First Calendar Year (CY) for which the EP Receives an Incentive Payment

	CY 2011	CY 2012	CY 2013	CY2014	CY 2015 and later
CY 2011	\$1,800				
CY 2012	\$1,200	\$1,800			
CY 2013	\$800	\$1,200	\$1,500		
CY 2014	\$400	\$800	\$1,200	\$12,000	
CY 2015	\$200	\$400	\$800	\$8,000	\$0
CY 2016		\$200	\$400	\$4,000	\$0
TOTAL	\$4,400	\$4,400	\$3,900	\$2,400	\$0

Incentive Payments for Medicaid EPs

First Calendar Year (CY) for which the EP Receives Incentive Payment

	CY 2011	CY 2012	CY 2013	CY 2014	CY 2015	CY 2016
CY 2011	\$21,250					
CY 2012	\$8,500	\$21,250				
CY 2013	\$8,500	\$8,500	\$21,250			
CY 2014	\$8,500	\$8,500	\$8,500	\$21,250		
CY 2015	\$8,500	\$8,500	\$8,500	\$8,500	\$21,250	
CY 2016	\$8,500	\$8,500	\$8,500	\$8,500	\$8,500	\$21,250
CY 2017		\$8,500	\$8,500	\$8,500	\$8,500	\$8,500
CY 2018			\$8,500	\$8,500	\$8,500	\$8,500
CY 2019				\$8,500	\$8,500	\$8,500
CY 2020					\$8,500	\$8,500
CY 2021						\$8,500
TOTAL	\$63,750	\$63,750	\$63,750	\$63,750	\$63,750	\$63,750

Registration: Requirements

1. Name of the EP, eligible hospital or qualifying CAH
2. National Provider Identifier (NPI)
3. Business address and business phone
4. Taxpayer Identification Number (TIN) to which the provider would like their incentive payment made
5. CMS Certification Number (CCN) for eligible hospitals
6. Medicare or Medicaid program selection (may only switch once after receiving an incentive payment before 2015) for EPs
7. State selection for Medicaid providers

Registration: Medicaid

- States will connect to the EHR Incentive Program website to verify provider eligibility and prevent duplicate payments
- States will ask providers for additional information in order to make accurate and timely payments
 - Patient Volume
 - Licensure
 - A/I/U or Meaningful Use
 - Certified EHR Technology

Summary

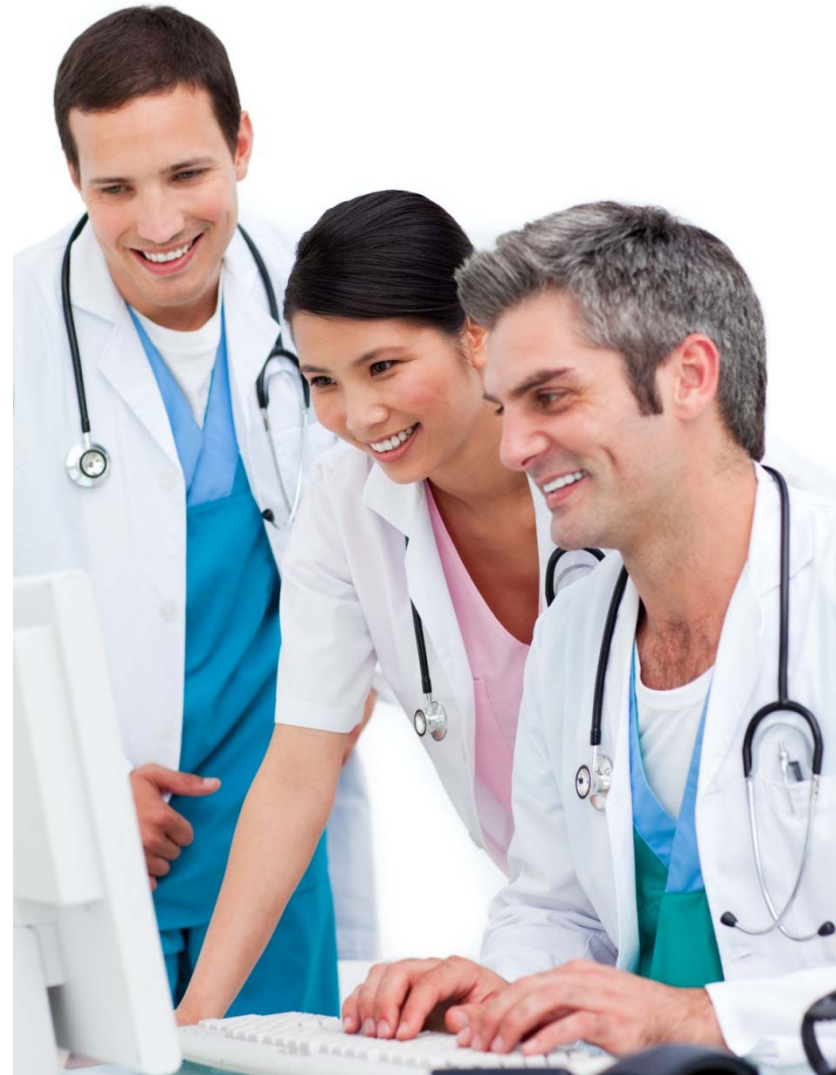
- EHR is a valuable tool to improve patient outcomes
- EHR helps to deal with complexity of decisions being made under time constraints
- EHR can help reduce medical errors
- EHR can help reduce liability risk
- Providers achieving Meaningful Use of EHR are eligible for incentives

HPREC can help providers plan for a successful transition from paper records to EHRs and assist providers in achieving Meaningful Use!

How do providers enroll?

Contact Tom Cannon
at 808-440-6024 or
tcannon@mpqhf.org.

Or visit www.hawaiihiie.org/rec
for more information.



MEANINGFUL USE – STAGE 1 CORE

Health Outcomes Policy Priority	Stage 1 Objective	Stage 1 Measure
Improving quality, safety, efficiency, and reducing health disparities	Use CPOE for medication orders directly entered by any licensed healthcare professional who can enter orders into the medical record per state, local, and professional guidelines	More than 30% of unique patients with at least one medication in their medication list seen by the EP or admitted to the eligible hospital or CAH have at least one medication entered using CPOE
	Implement drug-drug and drug-allergy interaction checks	The EP/eligible hospital/CAH has enabled this functionality for the entire EHR reporting period
	EP Only: Generate and transmit permissible prescriptions electronically (eRx)	More than 40% of all permissible prescriptions written by the EP are transmitted electronically using certified EHR technology
	Record demographics: preferred language, gender, race, ethnicity, date of birth, and date and preliminary cause of death in the event of mortality in the eligible hospital or CAH	More than 50% of all unique patients seen by the EP or admitted to the eligible hospital or CAH have demographics as recorded structured data
	Maintain up-to-date problem list of current and active diagnoses	More than 80% of all unique patients seen by the EP or admitted to the eligible hospital or CAH have at least one entry or an indication that no problems are known for the patient recorded as structured data

MEANINGFUL USE – STAGE 1 CORE SET

Health Outcomes Policy Priority	Stage 1 Objective	Stage 1 Measure
Improving quality, safety, efficiency, and reducing health disparities	Maintain active medication list	More than 80% of all unique patients seen by the EP or admitted to the eligible hospital or CAH have at least one entry (or an indication that the patient is not currently prescribed any medication) recorded as structured data
	Maintain active medication allergy list	More than 80% of all unique patients seen by the EP or admitted to the eligible hospital or CAH have at least one entry (or an indication that the patient has no known medication allergies) recorded as structured data
	Record and chart vital signs: height, weight, blood pressure, calculate and display BMI, plot and display growth charts for children 2-20 years, including BMI	For more than 50% of all unique patients age 2 and over seen by the EP or admitted to the eligible hospital or CAH, height, weight, and blood pressure are recorded as structured data
	Record smoking status for patients 13 years old or older	More than 50% of all unique patients 13 years or older seen by the EP or admitted to the eligible hospital or CAH have smoking status recorded as structured data
	Implement one clinical decision support rule and the ability to track compliance with the rule	Implement one clinical decision support rule
	Report clinical quality measures to CMS or the States	For 2011, provide aggregate numerator, denominator, and exclusions through attestation; For 2012, electronically submit clinical quality measures

MEANINGFUL USE – STAGE 1 CORE SET

Health Outcomes Policy Priority	Stage 1 Objective	Stage 1 Measure
Engage patients and families in their healthcare	Provide patients with an electronic copy of their health information (including diagnostic test results, problem list, medication lists, medication allergies, discharge summary, procedures), upon request	More than 50% of all unique patients of the EP, eligible hospital or CAH who request an electronic copy of their health information are provided it within 3 business days
	Hospitals Only: Provide patients with an electronic copy of their discharge instructions at time of discharge, upon request	More than 50% of all patients who are discharged from an eligible hospital or CAH who request an electronic copy of their discharge instructions are provided it
	EPs Only: Provide clinical summaries for each office visit	Clinical summaries provided to patients for more than 50% of all office visits within 3 business days
Improve care coordination	Capability to exchange key clinical information (ex: problem list, medication list, medication allergies, diagnostic test results), among providers of care and patient authorized entities electronically	Performed at least one test of the certified EHR technology's capacity to electronically exchange key clinical information
Ensure adequate privacy and security protections for personal health information	Protect electronic health information created or maintained by certified EHR technology through the implementation of appropriate technical capabilities	Conduct or review a security risk analysis per 45 CFR 164.308(a)(1) and implement updates as necessary and correct identified security deficiencies as part of the EP's, eligible hospital's or CAH's risk management process

MEANINGFUL USE – STAGE 1

Health Outcomes Policy Priority	Stage 1 Objective	Stage 1 Measure
Improving quality, safety, efficiency, and reducing health disparities	Implement drug-formulary checks	The EP/eligible hospital/CAH has enabled this functionality and has access to at least one internal or external drug formulary for the entire EHR reporting period
	Hospitals Only: Record advance directives for patients 65 years old or older	More than 50% of all unique patients 65 years old or older admitted to the eligible hospital or CAH have an indication of an advance directive status recorded
	Incorporate clinical lab-test results into certified EHR technology as structured data	More than 40% of all clinical lab test results ordered by the EP, or an authorized provider of the eligible hospital or CAH, for patients admitted during the EHR reporting period whose results are either in a positive/negative or numerical format are incorporated in certified EHR technology as structured data
	Generate lists of patients by specific conditions to use for quality improvement, reduction of disparities, research or outreach	Generate at least one report listing patients of the EP, eligible hospital or CAH with a specific condition
	EPs Only: Send reminders to patients per patient preference for preventive/follow-up care	More than 20% of all unique patients 65 years or older or 5 years old or younger were sent an appropriate reminder during the EHR reporting period

MEANINGFUL USE – STAGE 1 MENU SET

Health Outcomes Policy Priority	Stage 1 Objective	Stage 1 Measure
Engage patients and families in their health care	EPs Only: Provide patients with timely electronic access to their health information (including lab results, problem list, medication lists, medication allergies) within 4 business days of the information being available to the EP	More than 10% of all unique patients seen by the EP are provided timely (available to the patient within 4 business days of being updated in the certified EHR technology) electronic access to their health information subject to the EP's discretion to withhold certain information
	Use certified EHR technology to identify patient-specific education resources and provide those resources to the patient, if appropriate	More than 10% of all unique patients seen by the EP or admitted to the eligible hospital or CAH are provided patient-specific education resources
Improve care coordination	The EP, eligible hospital or CAH who receives a patient from another setting of care or provider of care or believes an encounter is relevant should perform medication reconciliation	The EP, eligible hospital or CAH performs medication reconciliation for more than 50% of transitions of care in which the patient is transitioned into the care of the EP or admitted to the eligible hospital or CAH
	The EP, eligible hospital or CAH who receives a patient from another setting of care or provider of care or refers their patient to another provider of care should provide a summary of care record for each transition of care or referral	The EP, eligible hospital or CAH who transitions or refers their patient to another setting of care or provider of care provides a summary of care record for more than 50% of transitions of care and referrals

MEANINGFUL USE – STAGE 1 MENU SET

Health Outcomes Policy Priority	Stage 1 Objective	Stage 1 Measure
<p>Improve population and public health¹</p>	<p>Capability to submit electronic data to immunization registries or Immunization Information Systems and actual submission in accordance with applicable law and practice</p>	<p>Performed at least one test of the 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, eligible hospital or CAH submits such information have the capacity to receive such information electronically)</p>
	<p>Hospitals Only: Capability to submit electronic data on reportable (as required by state or local law) lab results to public health agencies and actual submission in accordance with applicable law and practice</p>	<p>Performed at least one test of certified EHR technology's capacity to provide 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 the EP, eligible hospital or CAH submits such information have the capacity to receive such information electronically)</p>
	<p>Capability to submit electronic syndromic surveillance data to public health agencies and actual submission in accordance with applicable law and practice</p>	<p>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 the EP, eligible hospital or CAH submits such information have the capacity to receive such information electronically)</p>

¹Unless an EP, eligible hospital or CAH has an exception for all of these objectives and measures they must complete at least one as part of their demonstration of the menu set in order to be a meaningful EHR user.

Meaningful Use: Applicability of Objectives and Measures

- Some MU objectives are not applicable to every provider's clinical practice, thus they would not have any eligible patients or actions for the measure denominator.
- In these cases, the EP, eligible hospital or CAH would be excluded from having to meet that measure
 - Ex: Dentists who do not perform immunizations; Chiropractors do not e-prescribe

Clinical Quality Measures (CQM) Overview

- 2011 – EPs, eligible hospitals and CAHs seeking to demonstrate Meaningful Use are required to submit aggregate CQM numerator, denominator, and exclusion data to CMS or the States by attestation
- 2012 – EPs, eligible hospitals and CAHs seeking to demonstrate Meaningful Use are required to electronically submit aggregate CQM numerator, denominator, and exclusion data to CMS or the States

CQM: Eligible Professionals

- Core, Alternate Core, and Additional CQM sets for EPs
 - EPs must report on 3 required core CQM, and if the denominator of 1 or more of the required core measures is 0, then EPs are required to report results for up to 3 alternate core measures
 - EPs also must select 3 additional CQM from a set of 38 CQM (other than the core/alternate core measures)
 - In sum, EPs must report on 6 total measures: 3 required core measures (substituting alternate core measures where necessary) and 3 additional measures

States' Flexibility to Revise Meaningful Use

- States can seek CMS prior approval to require 4 MU objectives be core for their Medicaid providers:
 - Generate lists of patients by specific conditions for quality improvement, reduction of disparities, research or outreach (can specify particular conditions)
 - Reporting to immunization registries, reportable lab results and syndromic surveillance (can specify for their providers how to test the data submission and to which specific destination)