

**Health Information Technology Oversight Council**  
**September 12, 2013, 1:00 – 4:30 pm**  
**Oregon State Library, Room 103**  
**250 Winter Street, Salem, OR**

**Meeting Objectives**

- Updates on EHR incentive Program, CareAccord, and O-HITEC
- Phase 1.5
- Discuss Health IT Task Force

<b>Time</b>	<b>Topic and Lead</b>	<b>Action</b>	<b>Materials</b>
<b>1:00 pm</b>	<b>Welcome, Opening Comments, Approve Minutes</b> – Greg Fraser		1. Agenda 2. May 2, 2013, minutes 3. July 11, 2013, minutes
<b>1:10 pm</b>	<b>Updates</b> – Karen Hale, Sharon Wentz and Kim Klupenger <ul style="list-style-type: none"> <li>• EHR Incentive Program</li> <li>• CareAccord®</li> <li>• O-HITEC Update</li> </ul>	Information Discussion	4. EHR Chart Pack
<b>2:00 pm</b>	<b>State Near-Term HIT/HIE Development Strategy (“Phase 1.5”)</b> – Susan Otter and Patricia MacTaggart	Information Discussion	5. State Near-Term HIT/HIE Development Strategy (“Phase 1.5”)
<b>3:00 pm</b>	<b>Break</b>		
<b>3:15 pm</b>	<b>HIT Task Force Update</b> – Susan Otter and Patricia MacTaggart <ul style="list-style-type: none"> <li>• Charter</li> <li>• Update from first meeting discussion</li> </ul>	Information Discussion	6. Task Force Member List 7. Task Force Charter
<b>4:15 pm</b>	<b>Public Comment</b>	Information Discussion	
<b>4:25 pm</b>	<b>Closing Comments</b> –Greg Fraser	Information Discussion	

**Next Meeting:**            **Thursday, November 7, 1:00 pm – 4:30 pm**  
**Portland State Office Building, Room 1E**  
**800 NE Oregon Blvd, Portland, OR**

# State Near-Term HIT/HIE Development Strategy (2013-2015)

August 2013

Oregon Health Authority (OHA) staff reviewed the foundational work of the Oregon Health Information Technology Oversight Council (HITOC) and met with key stakeholders in Spring/Summer 2013 to identify the right next steps for Health Information Technology (HIT) and Health Information Exchange (HIE) needed to support Oregon's Health System Transformation efforts. As a result of that work, OHA will pursue the next steps of development of a set of near-term HIT/HIE strategies, described in this document.

**2013-2015, "Phase 1.5": HIT/HIE foundational and high-priority initial services to support Oregon's health system transformation:** This phase of HIT/HIE services will build a foundation for future statewide interoperability and HIE, while supporting immediate coordination between providers seeking to exchange patient information and the incremental use of aggregated clinical data to improve the delivery of care. "Phase 1.5" includes six elements (which are underlined below, also see Appendix B):

- Building blocks of identifying to whom, by whom, and where care is delivered to facilitate exchange of patient information and analysis of aggregated data
  - State-level provider directory
  - Incremental development of a state-level patient index
- High value services that fill information gaps around expensive transitions of care
  - Statewide hospital notifications to providers, health plans, CCOs and health systems when their patients are seen in the Emergency Department, are admitted to inpatient care, or discharged from the hospital
- Electronic connectivity of all members of the care team across organizational and technological boundaries ("push" first, build towards query/"pull" in Phase 2)
  - Statewide Direct secure messaging<sup>1</sup> augments local capabilities to view or share information (where they exist) by bringing new members to the electronic care coordination circle, such as LTC and emergency medical services. Statewide Direct secure messaging also extends electronic communication to providers and communities with no local capabilities in place. Statewide connection of Direct secure messaging service providers (HISPs) will allow providers to meet federal requirements and connect from their EHRs to any other Direct user in the state.
- Reliable, actionable information created from aggregated clinical quality data to support quality reporting and quality improvement efforts, and enhance health plan and CCO abilities around population management, targeting of care coordination resources, and the development of new methodologies to pay for outcomes
  - Statewide clinical quality data registry to collect and aggregate key clinical quality data, develop benchmarks and other quality improvement reporting, collect and calculate CCO clinical incentive metrics and meet federal

---

<sup>1</sup> Direct secure messaging provides a HIPAA-compliant way to encrypt and send any attachment of patient information electronically, for example, shared care plans, patient histories, and more sophisticated attachments such as x-rays and echocardiograms. As EHRs evolve in 2014 to meet federal Meaningful Use requirements, Direct secure messaging will be a core service within each EHR and national standards will support interoperability between Direct secure messaging providers (HISPs).

requirements for Meaningful Use incentive payments to providers. Health plans and CCOs can leverage state infrastructure to meet reporting requirements to OHA and receive collected clinical data for their members for analytics/quality improvement.

- Technical assistance to providers to help providers meet their Meaningful Use requirements while ensuring that clinical data for metrics captured in EHRs are accurate and complete. Technical assistance can improve credibility of EHR data underlying clinical quality measures, bolstering provider confidence in metrics.

#### Overall approach and relationship to existing efforts:

- Create a statewide resource that supports providers, health plans and CCOs at different ends of the technology spectrum.
  - Statewide services would augment and support existing services, including local health information exchange organizations (HIOs) and community-based health records, as well as health plans and CCOs with more sophisticated HIT and analytics capabilities. Statewide services will “wrap-around” existing ones.
  - Statewide services would also serve providers, health plans and CCOs with little or no HIT/analytic capabilities with some foundational and high-value services
- Future financial sustainability and the approach to governance/operations of statewide services will be addressed by OHA’s HIT Task Force, with options such as 2015 legislation related to financial sustainability, charging subscription fees for value-added services, and moving operations of statewide HIE services to a non-State entity.
- Providers, CCOs, health plans, and health systems also need guidance on laws and policies related to sharing of health information. OHA efforts to provide clarity in this area will be important for the success of any infrastructure in improving care delivery.

### **2015 and beyond, “Phase 2.0”: Vision for Oregon’s HIT/HIE shared information infrastructure to support health system transformation:**

In 2015 and beyond, Oregon’s statewide HIT/HIE efforts will be expanded to provide or support robust, interoperable health information exchange that supports both data “push” as well as data “query” (following the evolution of national standards) and more robust data aggregation. The OHA HIT Task Force will be charged with developing the Phase 2 business plan framework.

#### Vision for a shared information infrastructure:

- Reduce gaps in patient information and create an even playing field ensuring each provider has relevant, actionable information at the time of care. To reduce gaps in patient information, every provider in the state must have access to the information they need to deliver high quality, person-centered care.
- Unify data collection and transparency to assure the health system (state, health plans, CCOs, health systems, payers and providers) is paying for value and health outcomes and not visits. Leverage aggregated data (utilization, cost, clinical, etc.) to identify individuals who can be helped by better care coordination and providers, clinics, and communities who can benefit from interventions, resources, and incentives.
- Improve understanding and engagement of patients in their health care and outcomes through access to their complete health record, including treatments and goals.

# Oregon HIT/HIE Priorities to Support Health System Transformation

(draft 8/13/13)

**Timeline: Today**  
**Phase 1 Current Policy and Technology:** Setting the initial direction and initiating electronic communication.

\* Continue: Direct Secure Messaging & Interstate efforts

**Timeline: 2013-2015**

**Phase 1.5 Policy and Technology:** Services, standards and policies to initially focus on CCOs and their providers' needs to support local care coordination, clinical quality reporting, and aggregation for performance metrics and analytics.

\* Foundational: provider directory, incremental development of patient index, Direct secure messaging and HIE web portal

\* High priority services: statewide hospital notifications/alerts, clinical quality data registry, technical assistance to providers

**Timeline: 2015 Forward**

**Phase 2 Policy and Technology:** Goal of shared information infrastructure that supports health system transformation.

\* More robust HIT/ HIE: Support query, data aggregation, analytics.

**Phase 1 Governance:** OHA and HITOC

**Phase 1.5 Governance:** OHA with Technical Advisory Group, and HITOC

**Phase 2 Governance:** Goal of Task Force approved model for governance

**Phase 1 Financing:** ONC Cooperative Agreement

**Phase 1.5 Financing:** Medicaid/state match, ONC Cooperative Agreement & other investors

**Phase 2 Financing:** Goal of Long Term Sustainability



## Benefits from Proposed Phase 1.5 HIT/HIE Investments

Areas of need	Near term benefits	Longer term benefits
<b><i>Hospital readmissions/high utilizers</i></b>	<p>Statewide Hospital Notifications:</p> <ul style="list-style-type: none"> <li>○ Providers, health systems, CCOs and health plans and know when their patients/members have a hospital event anywhere in Oregon</li> <li>○ Improve follow-up and care coordination during/immediately following acute health care events.</li> <li>○ Health Plans, CCOs, health systems and providers can track high-utilizers of hospital services and divert to outpatient care when appropriate.</li> </ul> <p>Direct Secure Messaging:</p> <ul style="list-style-type: none"> <li>○ Can support sending hospital notifications and other information between the state/statewide HIE and providers, health systems, CCOs and health plans</li> </ul> <p>State-level Patient Index:</p> <ul style="list-style-type: none"> <li>○ Foundational for statewide hospital notifications. Would be incrementally developed from patient information submitted by providers, health systems, CCOs and health plans for notifications purposes</li> <li>○ Can support health plan and CCO operations and targeting care coordination to identify providers treating specific patients</li> </ul>	<p>Statewide Notifications:</p> <ul style="list-style-type: none"> <li>○ Continue to bring hospital event information to providers and CCOs/health plans</li> <li>○ Can be expanded to include other types of information, such as when individuals enter/change LTC settings, when developmental screenings occur, etc.</li> </ul> <p>State-level Patient Index:</p> <ul style="list-style-type: none"> <li>○ As more patient data added for notifications, usefulness increases for local and state-level health information exchange efforts and analytics.</li> </ul> <p>Clinical Quality Data Registry:</p> <ul style="list-style-type: none"> <li>○ Can support analyzing aggregated data, which allows for better targeting of high-risk, high-utilizer patients.</li> </ul>
<b><i>Care coordination</i></b>	<p>Direct Secure Messaging:</p> <ul style="list-style-type: none"> <li>○ Augments local capabilities to view or share information (where they exist) by bringing new members to the electronic care coordination circle, such as LTC and emergency medical services. Statewide Direct secure messaging also extends electronic communication to providers and communities with no local capabilities in place.</li> <li>○ Provides a means for adding key providers, such as LTC and emergency medical services, to the electronic care team that supports whole-person care. Provider care teams can communicate with each other and other entities (including</li> </ul>	<p>Direct Secure Messaging:</p> <ul style="list-style-type: none"> <li>○ Will be a core service within each EHR as EHRs evolve in 2014 to meet federal Meaningful Use requirements.</li> <li>○ Statewide connection of Direct secure messaging providers (HISPs) will allow providers to meet federal requirements and connect from their EHRs to any other Direct user in the state.</li> </ul>

Areas of need	Near term benefits	Longer term benefits
	<p>those without EHRs) that impact the health of their enrollees.</p> <ul style="list-style-type: none"> <li>○ Used to send attachments that may be consumed into a recipient’s EHR, such as shared care plans, patient histories, and more sophisticated attachments such as x-rays and echocardiograms.</li> <li>○ Providers use to meet federal requirements, access federal meaningful use incentives, and accelerate Stage 2 meaningful use capabilities in EHRs.</li> <li>○ Health plans, CCOs and health systems can, if needed, send protected health information to clinics for operations and care management.</li> <li>○ Key method for providers, health systems, CCOs, health plans and local data intermediaries to send information to the state for state-level quality reporting (e.g., CCO clinical metrics).</li> </ul> <p>State-level Provider Directory:</p> <ul style="list-style-type: none"> <li>○ Foundational for statewide Direct secure messaging and local or state-level HIE efforts.</li> </ul> <p>Technical Assistance to Providers:</p> <ul style="list-style-type: none"> <li>○ Can assist providers in improving their workflow to incorporate information shared via local HIE or statewide Direct secure messaging more efficiently into their delivery of care.</li> </ul>	<p>State-level Provider Directory:</p> <ul style="list-style-type: none"> <li>○ Can be leveraged by providers for referrals, notifications and care management.</li> <li>○ Necessary for local or state-level query-based health information exchange.</li> </ul> <p>Technical Assistance to Providers:</p> <ul style="list-style-type: none"> <li>○ Can enable providers to use their EHRs to support efficient, coordinated care.</li> </ul>
<p><b><i>Performance metrics and analytics</i></b></p>	<p>Clinical Quality Data Registry:</p> <ul style="list-style-type: none"> <li>○ Collects and aggregate key clinical quality data, develop benchmarks and other quality improvement reporting, collect and calculate clinical incentive metrics and meet federal requirements for Meaningful Use incentive payments to providers.</li> <li>○ Health plans and CCOs can leverage state infrastructure to meet reporting requirements and receive collected clinical data for their members for analytics/quality improvement.</li> <li>○ Enhances health plans and CCOs abilities around population management, targeting of care coordination resources, and the development of new methodologies to pay for outcomes</li> </ul>	<p>Clinical Quality Data Registry:</p> <ul style="list-style-type: none"> <li>○ Supports analyzing aggregated data, which allows for development of dashboards and benchmarks.</li> </ul> <p>State-level Provider Directory and Patient Index:</p> <ul style="list-style-type: none"> <li>○ Can create efficiencies for operations, analytics, oversight and quality reporting.</li> <li>○ Can support analytics that rely on attributing providers to clinics and patient outcomes to provider team.</li> </ul>

Areas of need	Near term benefits	Longer term benefits
	<p>State-level Provider Directory and Patient Index:</p> <ul style="list-style-type: none"> <li>○ Foundational for state level clinical quality data registry and local/CCO/health plan analytics.</li> <li>○ Can improve CCO incentive metric calculation (e.g., attributing EHR incentives to CCO providers, etc.).</li> </ul> <p>Technical Assistance to Providers:</p> <ul style="list-style-type: none"> <li>○ Can improve quality and credibility of EHR data underlying clinical quality measures</li> </ul>	<p>Technical Assistance to Providers</p> <ul style="list-style-type: none"> <li>○ Can enable providers to increase confidence in correctly capturing data for performance metrics.</li> </ul>
<p><b><i>Alternative payment models/ payment reform</i></b></p>	<p>Clinical Quality Data Registry:</p> <ul style="list-style-type: none"> <li>○ Health plans and CCOs can leverage state infrastructure to meet reporting requirements and receive collected clinical data for their members for analytics/quality improvement.</li> <li>○ Enhances health plan and CCO abilities around population management, targeting of care coordination resources, and the development of new methodologies to pay for outcomes</li> </ul> <p>Technical Assistance to Providers:</p> <ul style="list-style-type: none"> <li>○ Can assist providers improve the quality and credibility of EHR data underlying clinical quality measures.</li> </ul>	<p>Clinical Quality Data Registry:</p> <ul style="list-style-type: none"> <li>○ Supports analyzing aggregated data, which allows for ability to develop new care models and alternative payment arrangements.</li> </ul> <p>Provider Directory:</p> <ul style="list-style-type: none"> <li>○ Can support development of new models of care and payment that rely on attributing patient outcomes to provider team.</li> </ul> <p>Technical Assistance to Providers:</p> <ul style="list-style-type: none"> <li>○ Can support clinical outcomes data, which can become the basis for alternative payment methodologies, and ultimately replace claims and other administrative data as a measure of quality of care.</li> </ul>
<p><b><i>Leveraging existing investments</i></b></p>	<p>Overall, statewide services “wrap-around” existing ones:</p> <ul style="list-style-type: none"> <li>○ Augment and support existing services, including local health information exchange organizations (HIOs) and community-based health records, as well as CCOs/health plans with more sophisticated HIT and analytics capabilities.</li> </ul> <p>Statewide Hospital Notifications:</p> <ul style="list-style-type: none"> <li>○ Make information from all hospitals in the state available to</li> </ul>	<p>Statewide Services:</p> <ul style="list-style-type: none"> <li>○ Support more robust query-based HIE statewide and more robust data aggregation, continuing to provide value back to local infrastructure.</li> </ul> <p>Technical Assistance to Providers:</p> <ul style="list-style-type: none"> <li>○ Can help providers maximize the</li> </ul>

Areas of need	Near term benefits	Longer term benefits
	<p>local notification programs to disperse to their subscribers or to stand-alone providers/systems and plans where no notification programs exist.</p> <ul style="list-style-type: none"> <li>○ Oregon stakeholders are exploring an Emergency Department information exchange (EDIE) product, which brings critical patient information to ED providers. Statewide hospital notifications would complement this effort and complete the circle by bringing hospital information back to the community providers, health systems, CCOs and health plans.</li> </ul> <p>Clinical Quality Data Registry:</p> <ul style="list-style-type: none"> <li>○ Where health plans, CCOs and local entities have current or planned investments in clinical data aggregation, local aggregators (“data intermediaries”) submit data to the statewide registry and receive data from the registry as appropriate.</li> </ul> <p>State-level Provider Directory:</p> <ul style="list-style-type: none"> <li>○ OHA’s common credentialing efforts may leverage some of the statewide provider directory’s technology infrastructure, and common credentialing efforts can provide an excellent data source for the provider directory.</li> </ul> <p>Technical Assistance to Providers:</p> <ul style="list-style-type: none"> <li>○ Can help providers maximize the value of their investments in EHRs, including bolstering their use of local and statewide HIE and use of clinical quality metrics to improve delivery of care.</li> </ul>	<p>value of their investments in EHRs, including bolstering their use of local and statewide HIE and use of clinical quality metrics to improve delivery of care.</p>

## Appendix B: “Phase 1.5” HIT/HIE Elements

### 1. **State-level provider directory: capturing key provider information and attributing providers to their clinics, plans, hospitals, etc.**

- **Foundational:** Important for health information exchange, data aggregation and analytics including the All Payer All Claims program, quality reporting, health plan and CCO operations, etc.
- **Approach:** Develop state-level provider directory that leverages existing directories, adds key provider information such as licensing, and completes missing information in current directories (such as providers attributed to clinics). Develop program to maintain accuracy of information. Provide access to provider directory data to health plans, CCOs, health systems, providers, state programs, etc.
- **Near term uses:** Improve incentive metric calculation (e.g., attributing EHR incentives to providers, etc.). Foundational for hospital notifications (see #3), HIE including statewide Direct secure messaging (#4), clinical quality data registry (#5), etc.
- **Longer term uses:** Create efficiencies for operations, analytics, oversight, quality reporting, and supports alternative payment models. Can be leveraged by providers for referrals, notifications and care management.
- **Related efforts:** OHA’s common credentialing efforts may leverage some of the statewide provider directory’s technology infrastructure, and common credentialing efforts can provide an excellent data source for the provider directory.

### 2. **Incremental development of state-level patient index, attributing patients to providers**

- **Foundational:** Needed for query-based health information exchange, data aggregation and analytics, quality reporting, health plan and CCO operations, etc.
- **Approach:** Incremental development beginning with information submitted by providers, health systems, CCOs and health plans as part of their subscription to the statewide hospital notifications program (see #3). As providers, health systems, CCOs and health plans submit lists of their patients/members, the lists form a state-level patient index that identifies key patient information as well as their primary care provider or clinic and covered CCO or health plan.
- **Near term uses:** Hospital notifications (see #3), CCO and health plan operations and targeting care coordination to identify providers treating specific patients.
- **Longer term uses:** Analytics and development of new models of care and payment that rely on attributing patient outcomes to their provider team. Necessary for query-based health information exchange.

### 3. **Statewide notifications of emergency department visits, hospital admissions and discharges**

- **Priority, high-value service around transitions of care:** Ensuring CCOs and health plans, health systems, primary care providers, and care teams have near-real time information on hospital use so they can take action around transitions of care.

Effective notifications can reduce costs with improved hospital/ED follow up, reduced readmissions.

- **Approach:** Technology infrastructure and program staff/contract for statewide electronic notifications to subscribers (CCOs, health plans, health systems, primary care providers and health care “team”) when patients enter/leave the hospital (ED, inpatient, discharge). Gathers HL7/ADT feeds from each hospital in the state, matches patient identifying data to patient lists submitted by subscribers, and sends a notification to all subscribers affiliated with the patient seen in the hospital. Subscribers can customize their notifications to meet their preferences (frequency, content of notifications).
- **Near term uses:** Improve follow-up and care coordination during/immediately following acute health care events. Track high-utilizers of hospital services and divert to outpatient care when appropriate.
- **Longer term uses:** Notifications can be expanded to include other types of information, including when individuals enter/change LTC settings, when developmental screenings occur, etc.
- **Related efforts:**
  - In some areas, health systems, providers and health information exchange organizations have built hospital notifications programs connecting to their local hospitals and, in some cases, to OHSU. Statewide notifications would make information from all hospitals in the state available to these local notification programs to disperse to their subscribers, or to stand alone providers/systems and plans where no notification programs exist.
  - Oregon stakeholders are exploring an Emergency Department information exchange (EDIE) product, which offers ED providers access to key information on high-risk, high-utilizing patients. Statewide notifications would complement the EDIE work, by providing all types of hospital event information (ED, admit, discharge) back to the community providers, health systems, CCOs and health plans.

#### **4. *Statewide Direct secure messaging***

- **Priority, high value service:** Electronically bringing all members of a care team together for exchanging information across organizational and technological boundaries. Statewide Direct secure messaging adds new members to the electronic care coordination circle, such as LTC and emergency medical services. Also, as EHRs evolve in 2014 to meet federal Meaningful Use requirements, Direct secure messaging will be a core service within each EHR and national standards will support interoperability between Direct secure messaging providers (HISPs). Statewide connection of Direct secure messaging service providers (HISPs) will allow providers to meet federal requirements and connect from their EHRs to any other Direct user in the state.
- **Approach:** Continue and expand state offering of Direct secure messaging for entities that need it (particularly those without EHRs, including long term care, social services, etc.). Includes contracted and state staff to establish, facilitate, and ensure

connections between Direct secure messaging vendors (including those supporting EHRs) via “Trust communities,” so messages can be sent seamlessly across the state.

- **Near term uses:**
  - Providers need Direct secure messaging to meet federal requirements.
  - Provider care teams can communicate with each other and other entities (including those without EHRs) that impact the health of their enrollees.
  - Adding key providers, such as LTC and emergency medical services, to the electronic care team supports whole-person care.
  - CCOs and health plans can also use Direct secure messaging if they need a way to send protected health information to clinics for operations and care management.
  - Direct secure messaging will be a key method for sending hospital notifications and other information between the state/statewide HIE and providers, health systems, CCOs and health plans (e.g., provider directory flat files).
  - For state-level quality reporting (e.g., CCO clinical metrics), Direct secure messaging will be a key method for providers, health systems, CCOs, health plans and local data intermediaries to send information to the state (see #5).
- **Longer term uses:** Connecting all members of a care team leads to improved quality of care through visibility into relevant patient information. As EHRs evolve to meet federal requirements, Direct secure messaging will continue to become more tightly integrated into EHRs.
- **Related efforts:** Providers implementing/upgrading EHRs to meet Stage 2 Meaningful Use requirement will be able to communicate with providers using Oregon’s statewide Direct secure messaging. Local HIEs with Direct secure messaging can communicate outside their HIE expanding their value to the community, health plans, CCOs, health systems, and providers.

#### **5. *Statewide clinical quality data registry***

- **Foundational:** Provides transparency of health system performance, population management and targeting care coordination resources, robust analytical capabilities, and the ability to develop new methodologies to pay for outcomes by aggregating clinical data.
- **Approach:** State-level infrastructure, including system, interfaces and some analytic tools necessary to submit to the State and internally utilize aggregated clinical data (starting with the 3 EHR-based metrics of depression screening, poor diabetes A1c control, hypertension) for tracking CCO incentive metrics, provider performance, and analytic purposes.
- **Near term uses:** collection and calculation of CCO clinical incentive metrics and meeting federal requirements for Meaningful Use incentive payments to providers. CCOs and health plans can leverage state infrastructure to meet reporting requirements and access/analyze aggregated clinical data on their providers’ performance and their members’ health outcomes.

- Longer term uses: Analyzing aggregated data allows for better targeting of patients, development of dashboards and benchmarks, and ability to develop new care models and alternative payment arrangements.
- Related efforts: Some CCOs, health plans and local entities have current or planned investments in clinical data aggregation. These local aggregators (“data intermediaries”) would submit data to the statewide registry and could receive data from the registry as appropriate. Entities without local data aggregation capability would be able to have providers submit data to the registry, and receive data from the registry related to their members and providers.

#### **6. Technical assistance to providers**

- Foundational: Ensures that providers are effectively using their EHR technology and that clinical data extracted from EHRs are reliable. Unless the EHR data underlying clinical quality metrics are credible to providers, providers will be reluctant to make the investment in substantive practice changes based on their performance.
- Approach: Technical assistance through contracted consultants working with practices/clinics, for using electronic health records (EHRs) and meeting Meaningful Use requirements.
- Near term uses:
  - More providers access federal meaningful use incentives, accelerate Stage 2 meaningful use capabilities in EHRs.
  - Improve quality and credibility of EHR data underlying clinical quality measures.
  - Providers improve workflow to incorporate EHRs more efficiently into their practice.
- Longer term uses:
  - Support efficient, coordinated care and confidence in performance metrics.
  - Clinical outcomes can become the basis for alternative payment methodologies, and ultimately replace claims and other administrative data as a measure of quality of care.

**HIT/HIE Business Plan Framework**  
**September 4 Task Force and Listening Sessions Summary**  
 Patricia MacTaggart, George Washington University, Consultant to OHA

**Charge**

1. What is overall approach as a state?
2. What is the role of the state within the overall approach?
3. Whether a statewide endeavor is within or outside state government, what is the governance structure?
4. How to make a financially sustainable infrastructure?

**Key Uses/Needs of Health Information**

Category	Task Force	Listening Session
<i>“Whole Person” Care Coordination</i>	Change care. Get better care. Avoid the avoidable and intervene where appropriate. Integration of behavioral health – oral health – long term care- jails - other social services. “Closed loop” for referral coordination of care.	Support patient-centered, integrated, “whole person,” care coordination. Support patient information sharing within the physical health care system (labs, radiology, problem lists/allergies, medication lists, referrals, etc.) and across care teams (long term care, behavioral health, social services, criminal justice, etc.) for <ul style="list-style-type: none"> <li>• Care coordination</li> <li>• To avoid duplication of services.</li> </ul>
<i>Alternative Payment Mechanisms</i>	Validate the care given. “Doesn’t make you have better care but allows you to document and demonstrate that you are doing better care”. Avoid duplication cost driver	Ability for purchasers, providers and health care systems to fully benefit from alternative payment mechanisms.
<i>Clinical Quality</i>	Quality metrics	Quality improvement, quality reporting, accountability and alternative payment through aggregation of clinical data and linkages with payment and administrative data.
<i>Public Health/ Population Health</i>	Balance of information for care management and information for population management.	Meeting public health and population health objectives met through leveraging data and information used for management and oversight

## Overarching considerations for state supported and/or statewide HIT

Category	Task Force	Listening Sessions
<i>Public Good</i>	<p>Transparency</p> <p>Care transformation</p>	Public good met
<i>Information Highway</i>	<p>Connect providers who are not a part of the “normal” health system. Not get stuck in the electronic medical record state of mind. There is care delivered outside the “health system” such as Zoomcare, shots at Walgreens, BP at gym.</p> <p>Member focused - patients bring information to the system.</p> <p>Localness of health care</p> <p>Building pockets and trying to figure out how to connect – from an EHR to an HIE and from a regional HIE to a bigger HIE</p>	<p>Infrastructure to support the intrastate and interstate exchange of health information through leveraging local/regional efforts where they exist and filling gaps where local capacities do not exist.</p>
<i>Privacy and Legal</i>	<p>Tons of privacy issues and in some uncharted waters.</p> <p>My organization is small and doesn’t have the resources to understand the legalities.</p> <p>We need a common approach to legal and privacy issues, the state could provide direction on HIPAA, etc.</p> <p>The workflow environment has not accommodated behavioral health. If we don’t have addiction records included, we can’t get our hands on the “whole person”.</p>	Clarification of policy
<i>Standardization</i>	<p>We need a common approach to how we’re approaching things.</p> <p>Authoritative directory of licensed physicians... we are all trying to manage and keep up to date independently</p> <p>We need to replicate and standardize and replicate.</p> <p>State role to provide standards, local role to provide innovation.</p>	<p>Standards to assure the quality of the data and resulting information collected, used and/or disseminated through the infrastructure.</p>
<i>Value - ROI</i>	<p>Everyone has to see value for themselves. Needs to be value and needs driven – people have to see the value</p> <p>Never ask anyone to put information in the system that isn’t of value to them. Capture information once and capture information that they see has value.</p>	<p>Maximizing the value of any HIT/HIE infrastructure resulting from:</p> <ol style="list-style-type: none"> <li>1. Reduced cost (a direct benefit to</li> </ol>

Category	Task Force	Listening Sessions
	<p>Use existing HIT and connect current services together.</p> <p>State role could be to buy in bulk for the local systems</p> <p>Focus on High-utilizers. They drive costs and represent the use cases for total population.</p>	<p>purchasers/payers),</p> <ol style="list-style-type: none"> <li>2. Improved quality (direct benefit to purchasers/consumers),</li> <li>3. Improved patient experience of care and outcomes (direct benefit to patients and purchasers)</li> <li>4. Economies of scale where public/private entities can come to consensus around a mutual need</li> </ol>
<i>Scope</i>	<p>Need to identify what we can't solve.</p> <p>Need use cases.</p> <p>Define the deliverables. What is a business plan framework? An overall approach?</p>	<p>"Avoid scope creep."</p> <p>"Manage scope."</p>

## Parameters

Category	Task Force	Listening Session
<i>Overarching</i>	<p>Need to start "yesterday".</p> <p>Need to think differently.</p> <p>Relentless incrementalism.</p> <p>Don't get our scope too big – let's get something done.</p> <p>Guiding principle that "good" is good.</p> <p>Make sure no one is disenfranchised.</p> <p>Make sure every citizen in Oregon can exchange information.</p> <p>Need to get concrete on requirements.</p> <p>Taxonomy on opportunities or challenges: centralizing, standardizing and aligning</p>	<p>"Don't build HIE on 'yester-care'".</p> <p>"I don't want to know how to build the car – I just want to drive it".</p> <p>"Keep it simple."</p> <p>"The technology is relatively easy. It's the culture, training, workflow that is the hard part."</p> <p>"In the middle of the blizzard going the safe route is best – need to create the safe route."</p>
<i>Technology</i>	<p>Direct messaging – linking all entities through messaging. Secure messaging can provide a path for a cultural shift.</p> <p>Secure messaging is a utility that has to</p>	<p>Secure and easy to use</p> <p>Connect to other Health Information Exchanges, where they existed, and other providers outside their geographic area as well as providers within</p>

Category	Task Force	Listening Session
	<p>be in place. Direct is a step but not sufficient in itself to transform care.</p>	<p>their own where infrastructure does not exist</p> <p>“It (Direct secure messaging) has an important role for Directed exchange. Although Directed exchange is not enough, it is a critical piece for planned care, such as referrals.”</p> <p>Avoid “alert fatigue”.</p> <p>Some participants were interested in the state advancing toward providing the exchange of health information when entities are not known (query/pull); however, others felt it was better to wait because of the instability and evolving nature of query technology.</p>
<p><i>Date Warehouse and Analytics</i></p>		<p>Collection, aggregation, analysis, use and dissemination of data that creates actionable information.</p> <p>Longer term, aggregation of clinical, administrative and claims data.</p>
<p><i>TA, Policy Clarification, Convening</i></p>	<p>Need to lay out a path and keep meeting those milestones</p> <p>Figure out the training and implementation. Need to fit this into workflow that makes it actionable information and workable to improve patient care.</p> <p>Technology assistance and policy guidance.</p>	<p>An identified pathway to go from concept to operations.</p> <p>Adequate timing of policies and specifications, particularly those with financial implications such as quality metrics.</p> <p>Knowledge and tools leveraged to avoid duplications and reduce complexity.</p> <p>Common understanding of privacy, security and consent legal and operational requirements, chiefly related to behavioral health</p>
<p><i>Finance</i></p>	<p>3 kinds of sustainability needed: political, financial, leadership</p>	<p>Financial sustainability for implementation and operations, including role of Medicaid funding opportunities for HIT/HIE services and limitations and opportunities of “fair share” in financing.</p>

## Listening Session Top Priority Business Information Needs and Related Response Options

Business Information Need	Information Highway Technology		Guidance, Standards, Policies and Technical Assistance (TA) Ensure Trust and Public Needs Met
	1.5: Now-2014	2: 2015 Forward	
<i>Patient-centered, integrated, “whole person,” care coordination</i>	<p>Create key foundational components (building blocks) and high value services for a trusted, supported statewide information highway, including:</p> <ul style="list-style-type: none"> <li>• Electronic connectivity through continuation of secure messaging.</li> <li>• Capacity for automated alerts/notifications when patients are admitted, discharged or transferred (ADT) to the emergency department or hospital to help providers with follow-up and the facilitation of critical transitions.</li> <li>• Provide a state level provider directory and patient index.</li> </ul>	<p>Trusted and supported information technology to support the electronic exchange of health information that allows for the sharing of a care plan that addresses prevention, treatments, transitions of care, and follow-up amongst all members of a care team.</p> <p>Provide an information highway that is a hub for regional HIEs and HISPs for exchange when entities are known (Direct) and when entities are not known (query).</p> <p>Consumer mediated exchange: “eventually record really needs to belong to patient.”</p>	<p>Convene and provide TA to support providers in using health information in a meaningful way, including workflow re-engineering to integrate EHR/shared information, make data actionable and useable.</p> <p>Remove or clarify policy/legal barriers and “rules of engagement” to sharing information, including privacy, security, and consent policy for the exchange of health information</p> <p>Establish state standards using national standards where exist; Industry standards or best practices where national standards are maturing</p> <p>Convene for collaboration and economies of scale in areas of major concern.</p> <p>Provide guidance and “Guide Rails” to facilitate best practices.</p> <p>Ensure HIE/HIT infrastructure is properly operated and meets public need.</p> <p>Convene stakeholders to define the core elements of a shared care plan tool (data elements, definitions, specifications, etc.)</p>
<i>Quality improvement, quality reporting, accountability and alternative payment model use</i>	<p>Technology to support collection, aggregation, analysis, use and dissemination of clinical data to create actionable information.</p> <p>Technology to provide access to state data that can be useful to</p>	<p>Technology to support collection, aggregation, analysis, use and dissemination of clinical data linked with payment and administrative data.</p>	<p>Provide TA to ensure quality/completeness of clinical data and attribution of patients to the CCOs and health plans.</p> <p>Provide TA to providers to help providers meet their Meaningful Use requirements.</p> <p>Longer term, aggregation of clinical, administrative and claims data.</p>

Business Information Need	Information Highway Technology		Guidance, Standards, Policies and Technical Assistance (TA) Ensure Trust and Public Needs Met
	1.5: Now-2014	2: 2015 Forward	
	the CCOs and providers such as public health, foster care and prescription drug monitoring program information		Supporting the development of a data dictionary, linkage of mother and newborn, and utilization of vital statistics information.
<i>Public health and population health</i>	<p>Leverage data and information infrastructure used for management and oversight to support</p> <ul style="list-style-type: none"> <li>• Requirements for public health reporting,</li> <li>• Meeting public health meaningful use objectives</li> <li>• Public health efforts to exchange information with and alert providers, etc.</li> </ul>	<p>Create a statewide resource that supports providers, health plans and CCOs at different ends of the technology spectrum.</p> <p>Capacity to collect and aggregate screening-related performance metrics, such as screening registries for SBIRT, depression, developmental screening, etc.</p>	<p>TA and guidance to promote activities at the individual and population levels that move towards a community rather than medical approach.</p> <p>Improve understanding and engagement of patients in their health care and outcomes through access to their complete health record, including treatments and goals.</p> <p>Guidance regarding and access to data for secondary public/population health purposes.</p>
<i>Clarity on the Path toward Transformation</i>			Provide clarity and information on the state strategy and roadmap, federal requirements and standards as they evolve, and evolving technology and promising approaches (e.g., mobile devices).
<i>Financial capacity and governance structure to sustain the electronic exchange of health information to support health system transformation.</i>			<p>Financing plans must be equitable and use available federal/state dollars in conjunction with financial participation by stakeholders.</p> <p>Minimize expenses and maximize benefit through economies of scale.</p>

## LISTENING SESSION INTERVIEWEES

<b>Payers</b>	<b>Hospitals/Health systems/Providers</b>
Kaiser	OHSU
Providence	Tuality
Regence	Asante Health System
PacificSource	Salem Health
ODS	Chuck Hoffman
CareOregon	<b>Local HIEs:</b>
<b>CCOs</b>	Bay Area Community Informatics Agency (BACIA)
AllCare	Jefferson HIE
HealthShare	Central Oregon HIE
Trillium	Gorge Health Connect HIE
WOAH	<b>Other Key Partners</b>
WVCH	OCHIN
PacificSource	Quality Corporation
Columbia Pacific CCO	Oregon Healthcare Leadership Council
Eastern Oregon CCO	Oregon Public Employees Benefit Board
FamilyCare	Cover Oregon
Intercommunity Health Network	Oregon's HIT Oversight Council (HITOC)
Jackson County CCO	<b>Associations</b>
Primary Health of Josephine County	Association of Oregon Community Mental Health Programs
Umpqua	Oregon Association of Hospitals and Health Systems
Yamhill County	Oregon Medical Association
	Oregon Primary Care Association

## Value Propositions and Potential HIT/HIE Return on Investment

### Draft value statements:

- Enable the delivery of the highest quality care and by ensuring providers have relevant, actionable information, reducing costs and improving outcomes.
  - Transform the way care is coordinated by sharing information across physical health, behavioral, dental, and other settings.
  - Improve communication during transitions of care and thereby reduce wasteful spending and improve patient experience and outcomes.
  - Deliver whole person care by adding critical pieces of the care management puzzle, including long term care, social services, education, and other sectors.
- Improve patient outcomes related to patient safety, such as avoided drug interactions and other medical errors and missed opportunities
- Improve patient education, engagement and health outcomes through improving patient communications, including test results and appointment scheduling
- Improve quality of care by using comparative data on provider performance and patient outcomes, and provide the basis for new payment models to buy health and not visits
- Reduce costs by preventing duplicative services and other avoidable costs by providing timely access to previous care information.

### Considerations needed to realize value of HIT/HIE:

- Building HIT/HIE infrastructure is not enough to realize savings. Technical assistance is a key component to ensure that systems fit into providers' workflows and are used effectively.
- The value of HIE can be expected to increase as critical mass is reached and more information flows.
- Avoiding "scope creep" is necessary to prevent cost overruns and enable timely implementation.

### ***Enable the delivery of the highest quality care and by ensuring providers have relevant, actionable information, reducing costs and improving outcomes.***

National studies show duplicate services, inefficiencies in health care delivery:

- The Institute of Medicine<sup>1</sup> reported on surveys showing that:
  - Roughly 25% of patients noted that a test had to be repeated, often because the results had not been shared by another provider.
  - Almost 20% of patients reported that test results or medical records were not transferred from another provider or a laboratory in time for an appointment.
- Poor communication of information between primary care providers and specialists is all too common<sup>2</sup>:

---

<sup>1</sup> IOM, Best Care at Lower Cost.

- 68% of specialists receive no information from the referring PCP prior to referral visits,
- 25% of PCPs do not receive timely post-referral information from specialists.
- Often communication breakdowns occur during care transitions.
  - Almost half of health care-related communication errors occur during such handoffs between care providers.<sup>3</sup>
  - A study of handoffs from ICUs to inpatient wards found that only 26% of receiving physicians communicated verbally with sending physicians during the transfer.<sup>4</sup>
  - A study investigating the adequacy of discharge summaries found that they mentioned only 16% of tests with pending results and failed to document follow-up providers' information 33% of the time. This communication gap makes it difficult for patients' primary care providers and other members of their care team to remain informed of their condition and to guide their care successfully going forward.<sup>5</sup>
- In Oregon, Jefferson HIE found that Referral Loop efficiencies result in specialty clinic savings between \$150K and \$250K per year.<sup>6</sup>

***Improve patient outcomes related to evidence based care and patient safety, including avoided drug interactions and other medical errors and missed opportunities***

- Errors and adverse events are often linked to poor communication between providers. According to a recent study<sup>7</sup>,
  - Poor care coordination increases the chance that a patient will suffer from a medication error or other health care mistake by 140%.
  - Communication failures between providers contribute to nearly 70% of medical errors and adverse events in health care.
- Use of HIT/HIE tools can reduce adverse events, promote evidence based practices, and improve outcomes. Institute of Medicine analysis<sup>8</sup> reported:
  - One study identified a 41% reduction in potential adverse drug events following the implementation of a computerized patient management system (computerized physician order entry, or CPOE); another study estimated that overall medication error rates dropped by 81%.
  - Technological tools, such as decision support tools that can be broadly embedded in electronic health records, hold promise for improving the application of evidence. One study found that digital decision support tools helped clinicians apply clinical guidelines, improving health outcomes for diabetics by 15%.

---

<sup>2</sup> [http://statehierresources.org/wp-content/uploads/2013/01/Bright-Spots-Synthesis\\_Care-Coordination-Part-I\\_Final\\_012813.pdf](http://statehierresources.org/wp-content/uploads/2013/01/Bright-Spots-Synthesis_Care-Coordination-Part-I_Final_012813.pdf)

<sup>3</sup> [http://statehierresources.org/wp-content/uploads/2013/01/Bright-Spots-Synthesis\\_Care-Coordination-Part-I\\_Final\\_012813.pdf](http://statehierresources.org/wp-content/uploads/2013/01/Bright-Spots-Synthesis_Care-Coordination-Part-I_Final_012813.pdf)

<sup>4</sup> IOM, Best Care at Lower Cost

<sup>5</sup> IOM, Best Care at Lower Cost.

<sup>6</sup> Jefferson HIE presentation to OHA, May 2013.

<sup>7</sup> [http://statehierresources.org/wp-content/uploads/2013/01/Bright-Spots-Synthesis\\_Care-Coordination-Part-I\\_Final\\_012813.pdf](http://statehierresources.org/wp-content/uploads/2013/01/Bright-Spots-Synthesis_Care-Coordination-Part-I_Final_012813.pdf)

<sup>8</sup> IOM, Best Care at Lower Cost.

***Improve patient education, engagement and health outcomes through improving patient communications, including test results and appointment scheduling***

Significant gaps in patient-provider communications exist.

- One study found that for 1 of every 14 tests, either the patient was not informed of a clinically significant abnormal test result, or the clinician failed to record reporting the result to the patient.<sup>9</sup>
- A 2012 survey of primary care and specialist physicians found fairly low rates of electronic communication with patients. 33% of U.S. physicians say they have the ability to communicate with patients via email or text messages. 24% say they provide consumers with Web-based tools to schedule appointments or access test results, 19% say they provide consumers with online tools to order prescription refills, 15% say they have the ability to provide telehealth-based consultations for follow-up or diagnostic visits and 4% say they provide consumers with online information about prices for routine medical services.<sup>10</sup>

Opportunities to improve patient engagement through allowing patients electronic access to health information.

- Technology offers opportunities for clinicians to engage patients by meeting with them where they are. These opportunities include improving communications outside of traditional clinical visits by providing new venues for care; assisting patients in managing their own health; and explaining options for shared clinical decisions, a capability that highlights health professionals' need to assume new roles in partnering with patients in the use of reliable online sources of health information.<sup>11</sup>
- Eighty percent of Internet users now look for health information online, making this the third most popular Internet activity. Patients also are increasingly interested in finding information that is customized to their particular circumstances and that relates to the experiences of similar patients.<sup>12</sup>
- A physician's office typically has a 10% no-show rate for patient appointments. With appointments booked online, that percentage dropped to 2%. Patient satisfaction also goes up at practices that offer online access to appointments, lab results and other information, and patients are less likely to leave for a new practice. Those trends hold true even for longtime patients of a doctor whose practice adds these tools.<sup>13</sup>
- Research links patient-centered care to better health outcomes, lower costs, an enhanced care experience, better quality of life, and other benefits. Patient and family involvement in health care decisions has been associated in primary care settings with reduced pain and discomfort, faster recovery in physical health, and improvements in emotional health. Well-informed patients also often choose less aggressive and costly therapies. For example, it has been reported that informed patients are up to 20% less likely than other patients to choose elective surgery. Similarly, patient-centered

---

<sup>9</sup> IOM, Best Care at Lower Cost

<sup>10</sup> <http://www.ihealthbeat.org/data-points/2013/what-types-of-online-tools-and-services-do-health-care-providers-offer-to-their-patients.aspx#ixzz2WVE03hrL>

<sup>11</sup> IOM, Best Care at Lower Cost

<sup>12</sup> IOM, Best Care at Lower Cost.

<sup>13</sup> <http://www.informationweek.com/global-cio/interviews/digital-business-requires-dose-of-humili/240156596>

communication in primary care visits has been correlated with fewer diagnostic tests and referrals, as well as with annual charges in the range of 33% lower.<sup>14</sup>

- Patient-centered communication and engagement also have a positive impact on self-management and behavior change, which research has shown has direct impact on health outcomes. Well-informed and engaged patients carry out more health-related behavior changes, such as those related to exercise, smoking cessation, and dietary modification. Information and interactive tools support consumer education and engagement and play a critical role in supporting prevention, wellness and management of chronic conditions.<sup>15</sup>
- In one organization, office visits fell by 9% after the implementation of electronic health records that facilitated effective patient-clinician communication via telephone.<sup>16</sup>
- Reviews of patient education and reminder interventions for chronic disease management have found that such interventions are associated with improved health outcomes.<sup>17</sup>

***Improve quality of care by using comparative data on provider performance and patient outcomes, and provide the basis for new payment models to buy health and not visits***

- Several transparency initiatives have been correlated both with improving performance on those measures reported and with encouraging organizations to undertake improvement activities.
  - Following public reporting of pneumonia care measures, rates of compliance with the measures rose from 72% to 95% in 8 years.
  - Results from another initiative showed that providing financial incentives together with helping clinicians monitor their practice patterns against those of others decreased spending by 2% per quarter while improving the overall quality of care.<sup>18</sup>
- Computational capabilities hold promise for identifying important new insights from the care experience. A comprehensive disease registry for heart attack patients in Sweden, for example, has contributed to a 65% reduction in 30-day mortality and a 49% decrease in 1-year mortality from heart attacks.<sup>19</sup>

***Reduce duplicate services and other avoidable costs by providing timely access to previous care information.***

Potential savings in Oregon:

- A 2010 study for HITOC<sup>20</sup> estimated
  - Widespread use of HIE services in Oregon could result in savings of \$55.7 to \$90.7 million per year through avoided services (laboratory and imaging services,

---

<sup>14</sup> IOM, Best Care at Lower Cost

<sup>15</sup> [http://bipartisanpolicy.org/sites/default/files/BPC\\_Engaging\\_Consumers\\_Using\\_Electronic\\_Tools.pdf](http://bipartisanpolicy.org/sites/default/files/BPC_Engaging_Consumers_Using_Electronic_Tools.pdf)

<sup>16</sup> IOM, Best Care at Lower Cost

<sup>17</sup> IOM, Best Care at Lower Cost

<sup>18</sup> IOM, Best Care at Lower Cost

<sup>19</sup> IOM, Best Care at Lower Cost

<sup>20</sup> <http://www.oregon.gov/oha/OHPR/HITOC/Documents/ORSavingsPotential.pdf>

- ambulatory visits and hospital admissions from the emergency room) resulting from providers having timely access to information.
- An estimated \$33.3 million annual savings through productivity gains could result from not having to spend time collecting and reconciling information or recreating existing information.
- Jefferson HIE estimates:<sup>21</sup>
  - More than \$2 million savings on the average cost to send results using traditional methods of fax and mail;
  - 30% reduction in duplicative lab tests from HIE;
  - 30% fewer radiology exams and 33% fewer lab results over 2 years attributed to patient search (community health record);
  - Single EHR interface to HIE (rather than with each hospital/lab) realizes implementation cost savings of between \$18,500 and \$28,500 per practice.

Other state/local savings identified:

- Maine's statewide HIE: HealthInfoNet study found<sup>22</sup>:
  - Participating providers are likely to realize between 37% and 44% of the total savings as a result of improved productivity and avoided services provided to the uninsured and underinsured. Provider and provider organization savings estimates range from \$4.6 million annually in phase 1, up to \$7.6 million annually by phase 3.
  - Maine commercial payers will likely realize 30% to 33% of total savings, ranging from a low of \$3.5 million annually in phase 1, up to \$6.2 million annually by phase 3 from avoided services.
- Geisinger implemented a series of health IT initiatives to improve quality and enhance efficiency, such as electronic health records; a health information exchange; e-prescribing modules; a data warehouse; and comprehensive document management.
  - Over 5 years, Geisinger realized savings of \$1.7 million from reduced chart pulls; more than \$600,000 from reduced printing and faxing; more than \$500,000 per year from reduced nursing staff time through e-prescribing; and more than \$1 million from reduced transcription.<sup>23</sup>
- The Indiana Health Information Exchange, which began with the Indiana Network for Patient Care in 1993, has 280 data sources from an entire region that flow via Health Level Seven into a queue and a database with over 600 million observations.
  - Among the services, clinical messaging saves \$30 million per year with 150,000 messages per day. One ten-doctor practice saved \$160,000 per year in physician and staff time.<sup>24</sup>

Studies reflect national savings: A 2005 cost-benefit analysis found a potential national annual net value of \$77.8 billion to providers, payers, other organizations.<sup>25</sup>

---

<sup>21</sup> Jefferson HIE presentation to OHA, May 2013

<sup>22</sup> <http://www.maine.gov/hit/sustainability/HINValuation11-19.pdf>

<sup>23</sup> IOM, Best Care at Lower Cost

<sup>24</sup> <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2140082/#!po=81.2500>

<sup>25</sup> <http://content.healthaffairs.org/content/early/2005/01/19/hlthaff.w5.10.full.pdf>

- Upon achieving a steady state in which machine-interpretable data is exchanged with all systems using the same formats and vocabularies, the following national cost savings would be realized each year:
  - Providers would achieve an annual net value of \$33.7 billion when considering the costs and benefits of connectivity.
    - Savings associated with connectivity for providers with other providers (\$12.2 billion), radiology centers (\$8.82 billion), payers (\$10.3 billion), and laboratories (\$13.9 billion).
    - Providers lose money from connectivity to pharmacies (−\$0.037 billion) and public health departments (−\$0.98 billion), effectively subsidizing those connections.
    - Providers incur annual costs of \$10.5 billion to run the systems required.
  - Payers realize net value from improved efficiency of provider transactions (\$9.84 billion), and from avoided lab (\$3.76 billion) and radiology (\$8.04 billion) tests.
  - Other organizations realize net value from improved efficiency of provider transactions (laboratories, \$13.1 billion; radiology centers, \$8.17 billion; pharmacies, \$1.29 billion; and public health departments, \$0.094 billion).
  - The total annual net value to these stakeholders is \$77.8 billion (rounded).
- Connectivity between radiology centers and ambulatory practices would reduce redundant tests and would save time and costs associated with paper- and film-based processes.
  - The study projected annual national savings from avoided tests and improved efficiencies of \$8.34 billion to \$26.2 billion, depending on the level of automation achieved.
  - Although not modeled in the study, interoperability could also improve ordering by giving radiologists access to relevant clinical information, thereby enabling them to recommend optimal testing; improve patient safety by alerting both the provider and the radiologist to test contraindications; facilitate coordination of care and help prevent errors of omission by enabling automated reminders when follow-up studies are indicated; and lessen adverse environmental impacts by reducing the use of chemicals and paper in film processing.
- Provider-provider connectivity would save time associated with handling chart requests and referrals.
  - Projected annual national benefits from these time savings are \$2.92 billion to \$13.2 billion, depending on the level of automation achieved.
  - Moreover, connectivity would reduce fragmentation of care from scattered records and improve referral processes.

---

# Health Information Technology Oversight Council

September 12, 2013



---

# Agenda

1:00- **Welcome, Opening, Minutes** Greg Fraser

1:10- **Updates** Karen Hale, Sharon Wentz, Kim Klupenger

2:00- **State Near-Term HIT/HIE Development Strategy (“Phase 1.5”)** Susan Otter

3:00- **Break**

3:15- **HIT Task Force Update** Susan Otter, Patricia MacTaggart

4:15- **Public Comment**

4:25- **Closing Comments** Greg Fraser

---

# Meeting Objectives

- Updates on EHR incentive program, CareAccord and O-HITEC
- State Near-Term HIT/HIE Development Efforts
- HIT Task Force Update and Discussion

---

# EHR Update

September 12, 2013



# Electronic Health Records (EHRs) in Oregon

## Current EHR landscape

- Oregon providers have been early adopters of EHR technology
- In 2009, Oregon had 65% adoption of any EHR with 32% being fully functional
- These numbers don't include BH or LTC

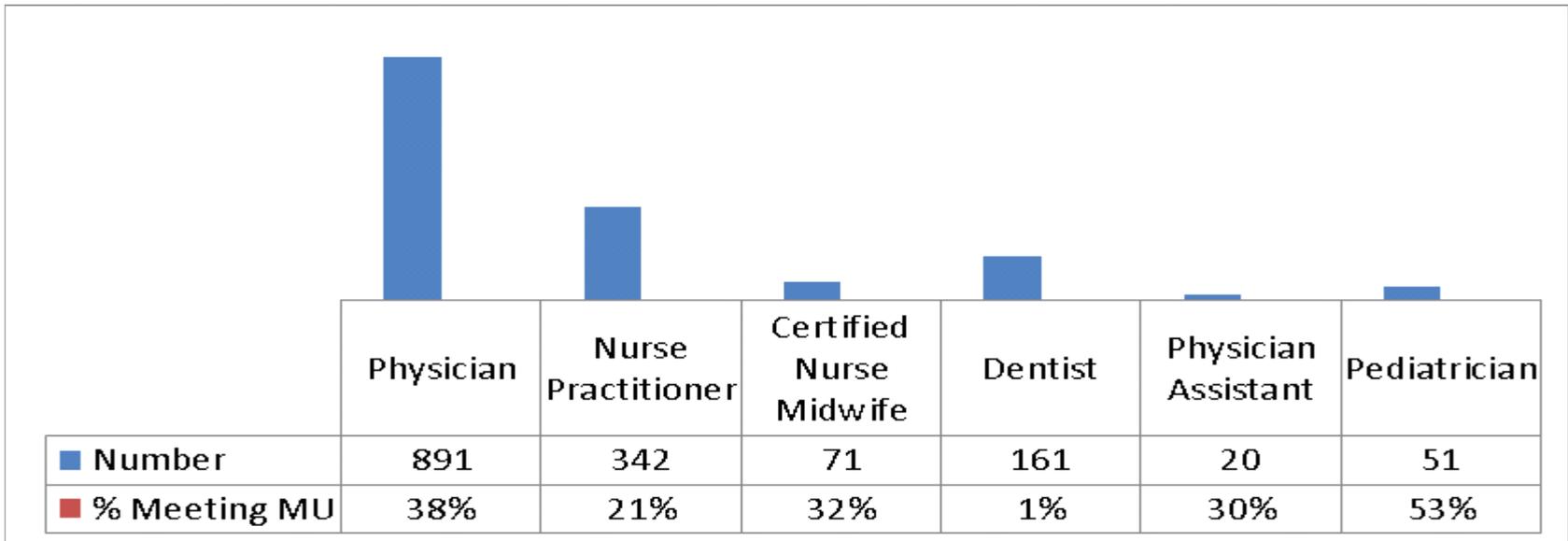
# Oregon EHR Incentive Payments

- Total Medicaid EHR incentives paid in Oregon as of Sept 3<sup>rd</sup>: **\$77.4 million**
- Total Medicare EHR incentives paid in Oregon as of July 31st: **\$103.8 million**
- Total paid to Oregon providers: **\$181.2 million**

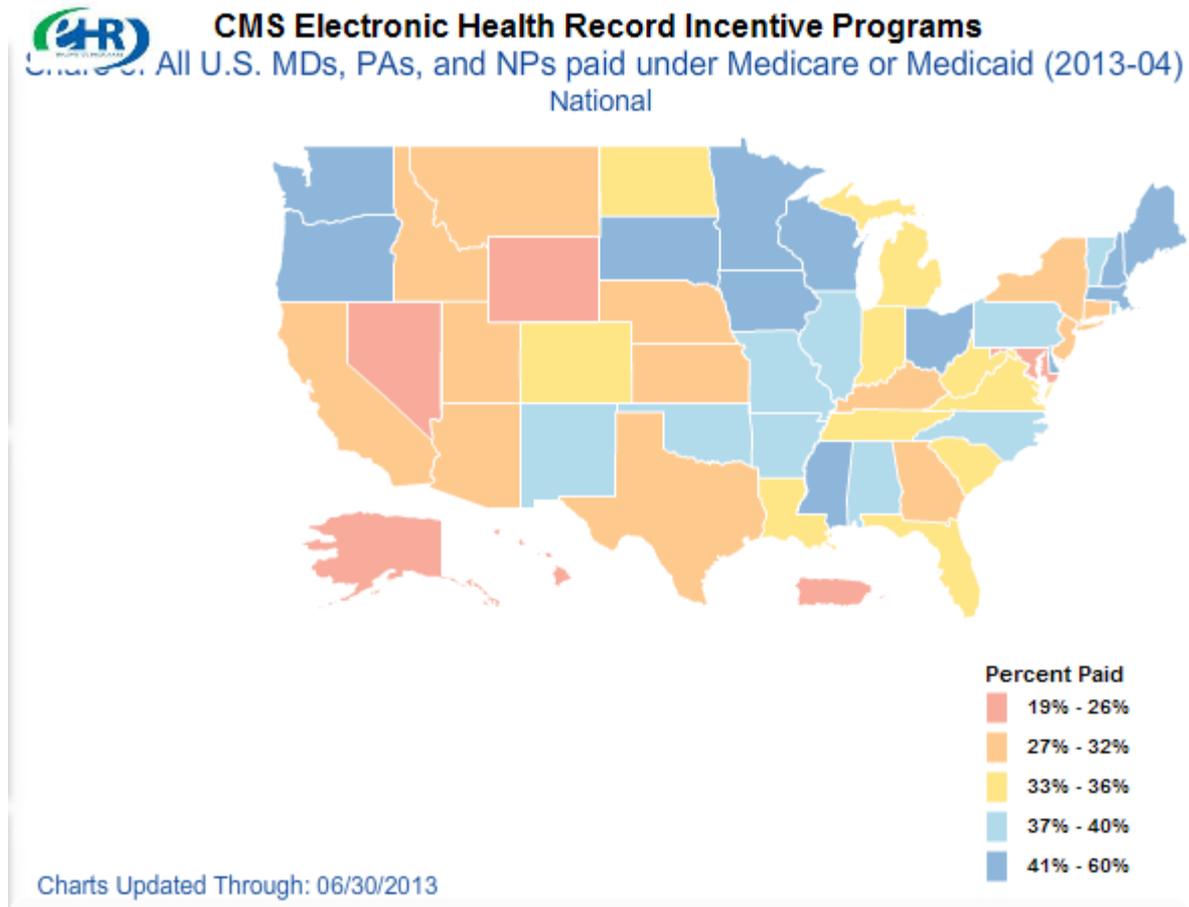
Medicare has paid approximately 3100 providers and 23 hospitals  
Medicaid has paid approximately 1500 providers and 51 hospitals

# Oregon EHR Incentive Payments – a closer look into meaningful use

- ✓ Of those providers that attested for a first year payment in 2011, 51% received a payment for program year 2012
- ✓ 31%, or 470 providers participating in the Medicaid EHR Incentive program are meaningful users; nationally, this rate is 22.5%
- ✓ There are a total of 3600 meaningful users in Oregon to date with more to add:
  - ✓ Close to 200 Medicaid EHR Incentive Program applications being processed



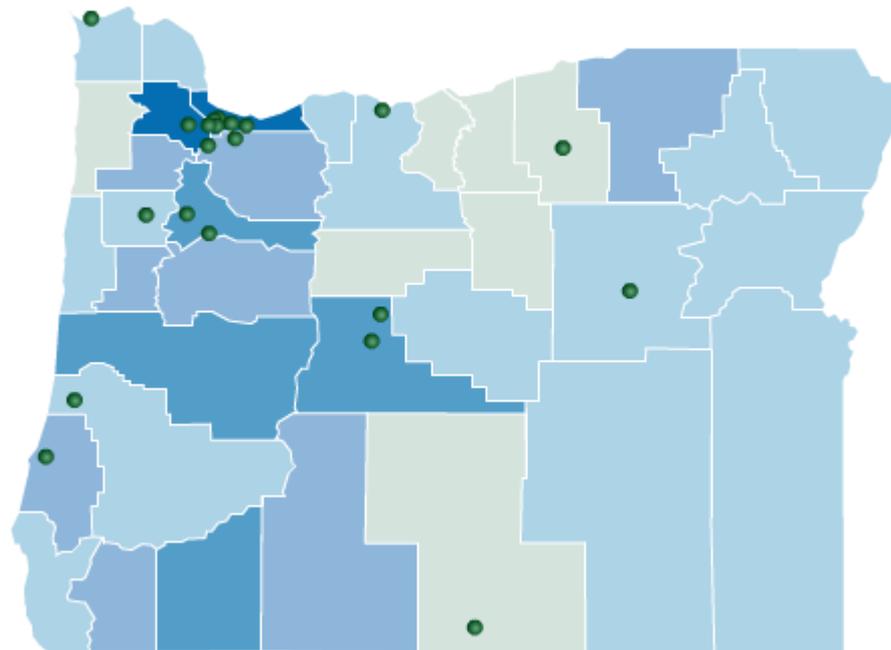
# Medicare and Medicaid EHR Incentive Programs



# Oregon EHR Incentive Program - Overview



## CMS Electronic Health Record Incentive Programs Medicare Payments to Eligible Professionals Oregon



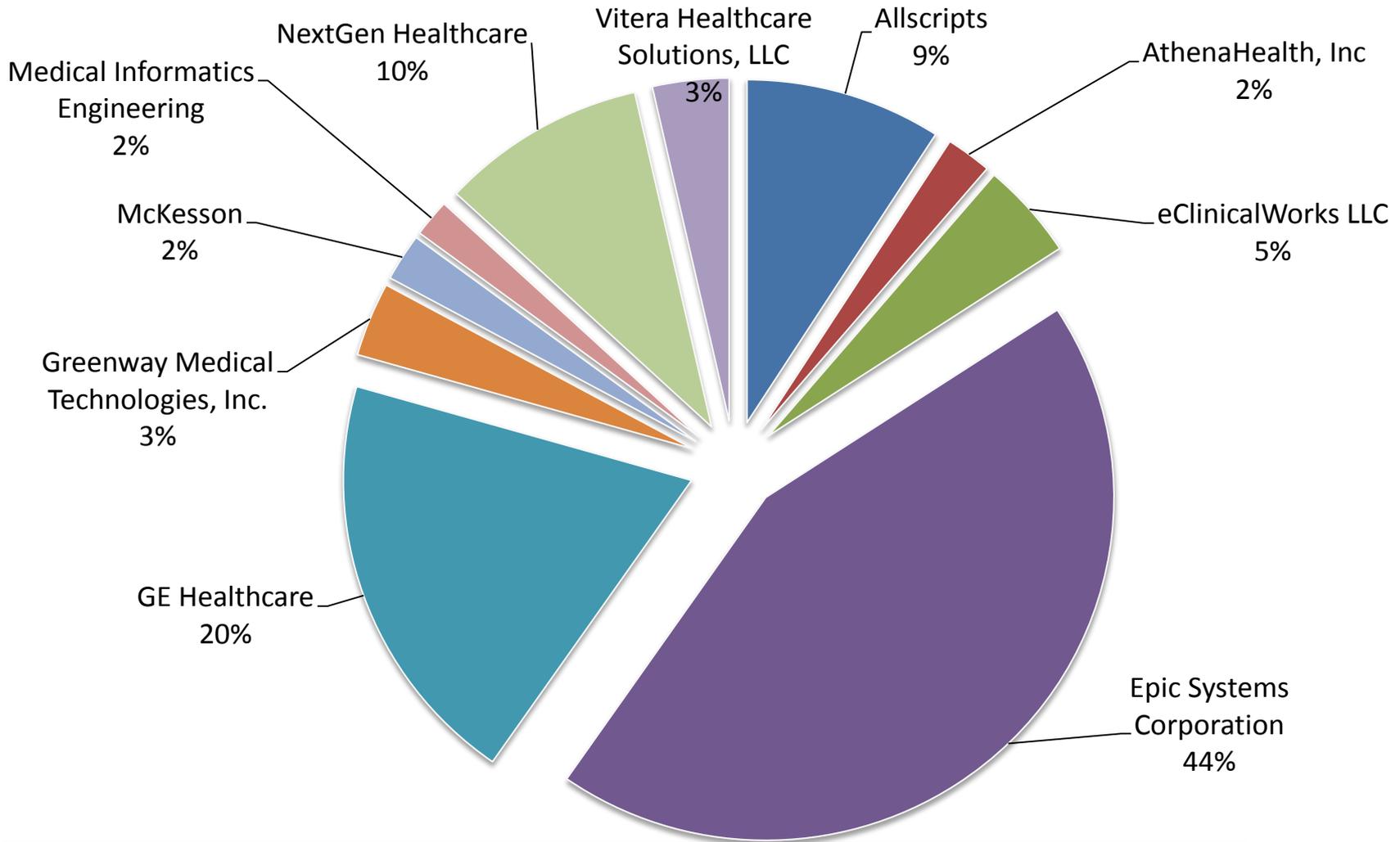
### Number of Providers

- 0 - 0
- 1 - 15
- 16 - 100
- 101 - 250
- 251 - 2,250

Map Last Updated: 06/30/2013

Charts Updated Through: 06/30/2013

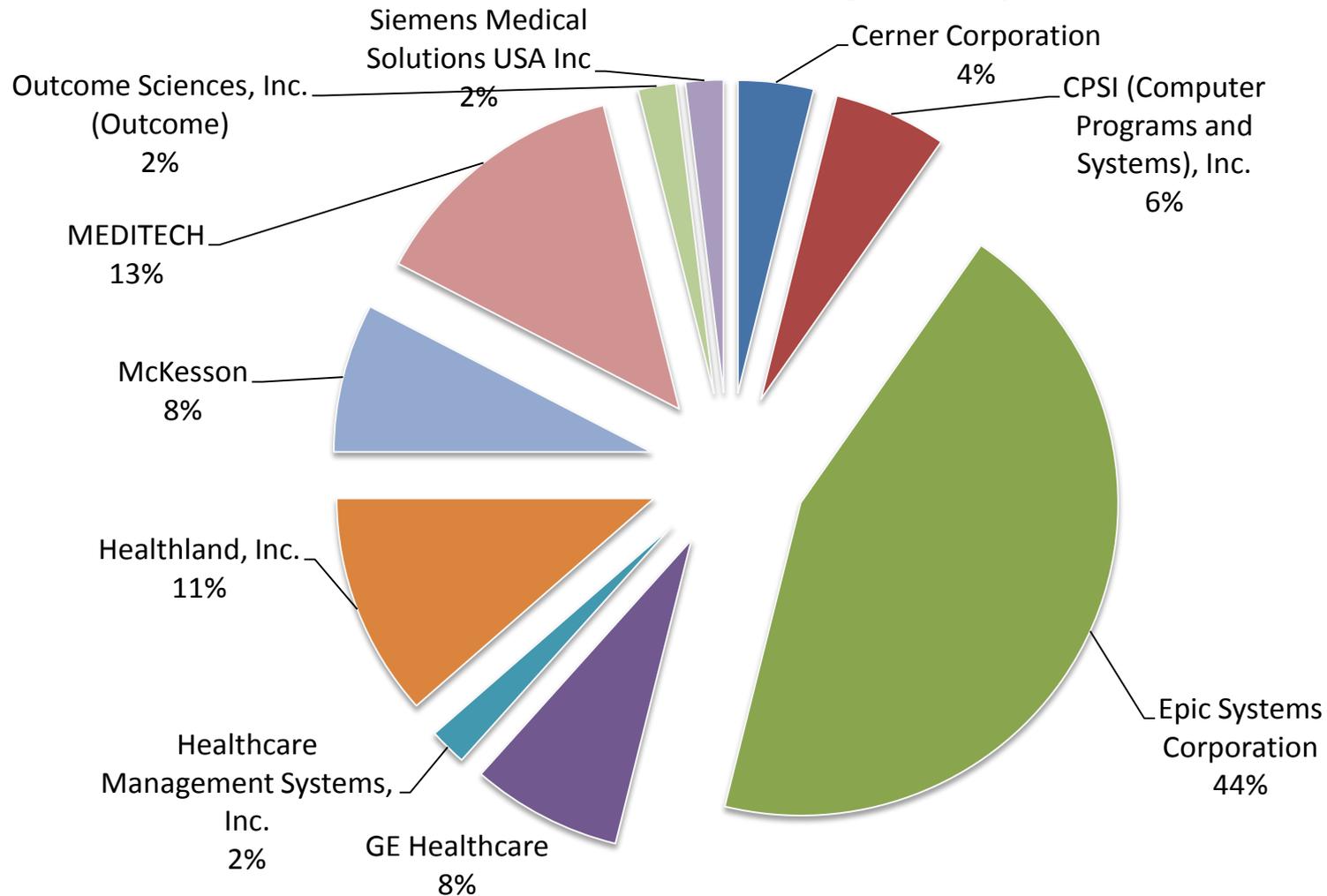
# Oregon Eligible Professionals receiving EHR Incentives- Certified Systems Reported (top 10) N=3862 out of a total of 4668



Count of unique providers that received a payment in either the Medicare or Medicaid EHR Incentive Programs from 2011  
– Aug 2013

# Oregon Hospitals receiving EHR Incentives- Certified Systems Reported

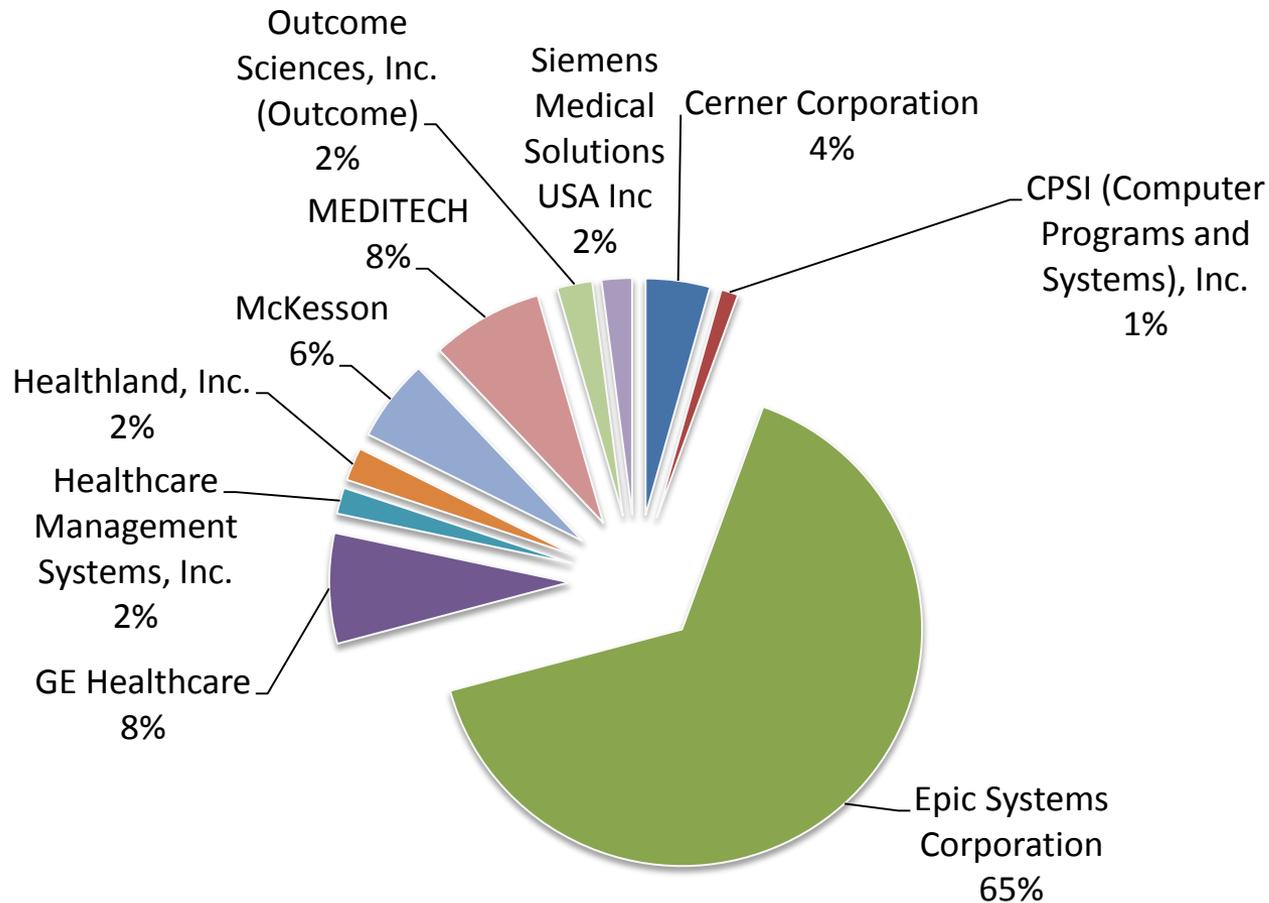
## N=52 out of 59 total Oregon Hospitals



Count of unique hospitals, that received a payment in either the Medicare or Medicaid EHR Incentive Programs from 2011 – Aug 2013 -

# Oregon Hospitals receiving EHR Incentives- Certified Systems Reported

## N=52 total Oregon Hospitals - weighted



Count of unique hospitals, weighted by available beds, that received a payment in either the Medicare or Medicaid EHR Incentive Programs from 2011 – Aug 2013 -

# EHR Adoption Summary

## EHR Incentive payments rank high in Oregon

- Oregon's EHR adoption rate is 42% nationally

## EHR system adoption varies

- **For providers**
  - EPIC top system in one-third (11/32) counties with EHR payments
  - Two-thirds of Oregon's counties have top systems such as GE Healthcare, Allscripts, NextGen, Greenway, and 7 other EHR systems
  - 97 total EHR systems being reported
- **For hospitals**
  - EPIC is the top system, when using weighted data

## Gaps to consider

- Behavioral Health and Long term care don't benefit from incentives

---

# CareAccord Update

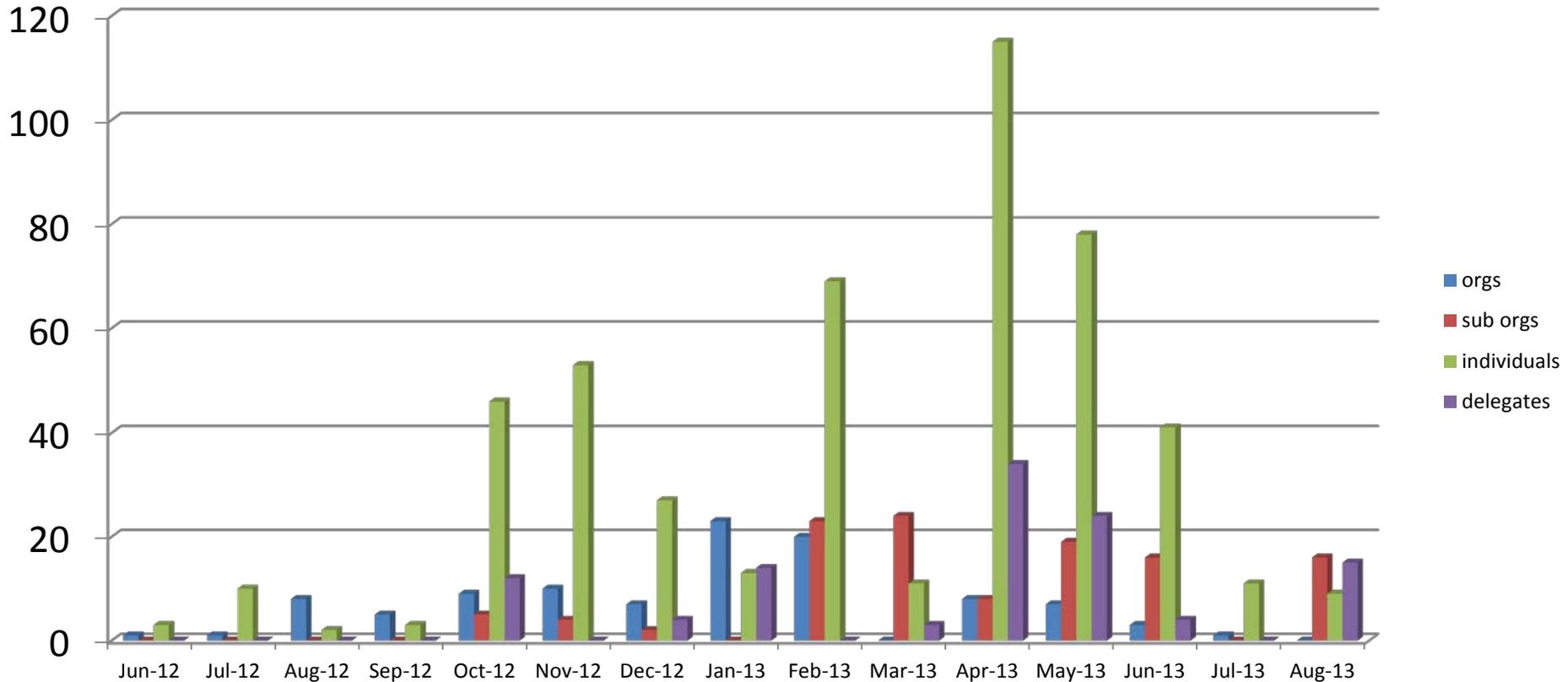
September 12, 2013



# CareAccord Cumulative Total Registered Users Chart

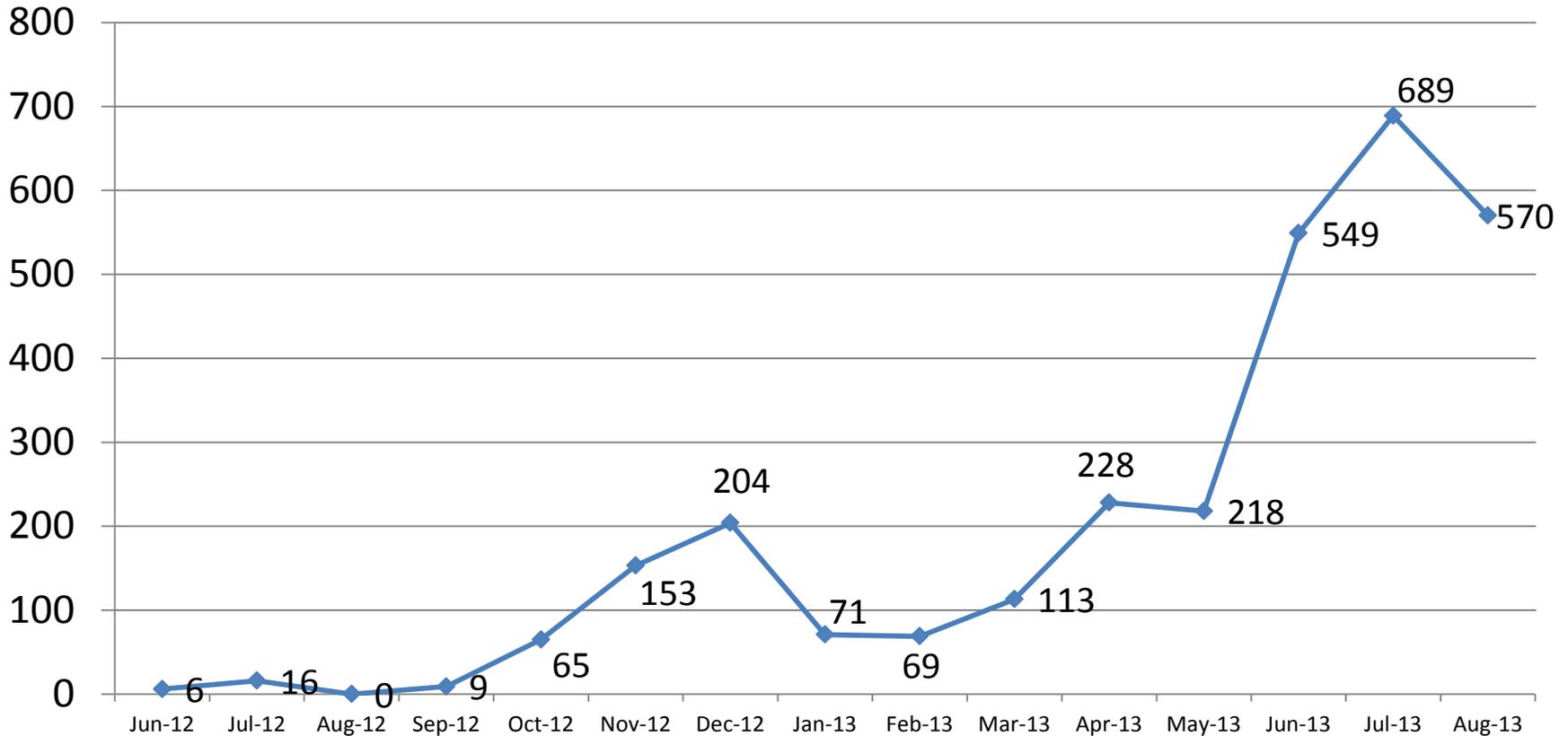
Account Type	Total CareAccord Registered Accounts June 1, 2012 – August 31, 2013
Organizations	105
Sub-Organizations	121
Individuals	491
Delegates	112
Total:	829

# CareAccord Registered Users per month June 2012 – August 2013

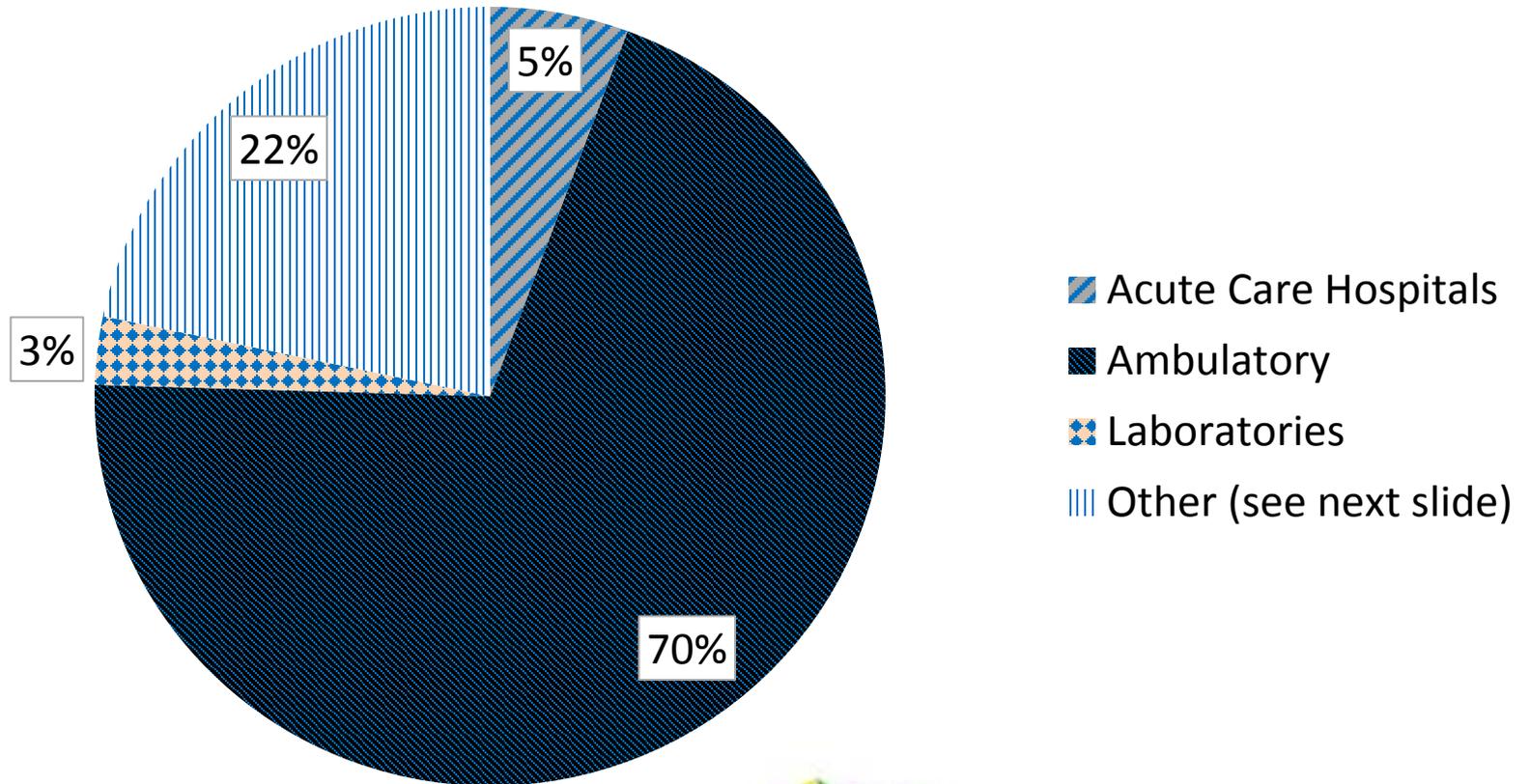


# CareAccord Direct Secure Message Transactions by Month

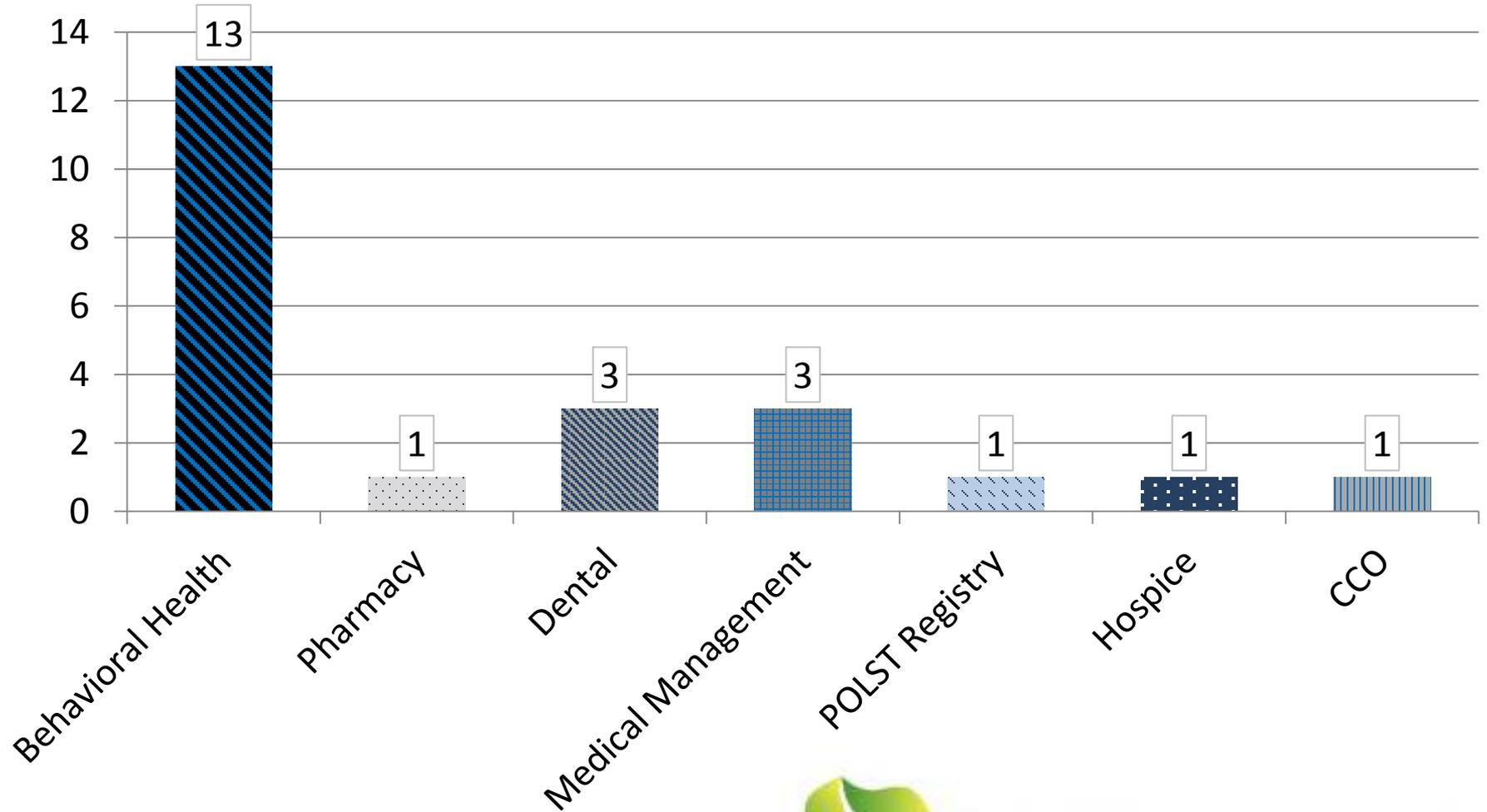
## June 2012-August 2013



# Organization Types August 2013



# Breakdown of "Other" Organization Types August 2013



National Association for Trusted Exchange (NATE)  
Personal Health Record Pilot Project  
August- December 2013

Participants: Oregon, California, Alaska

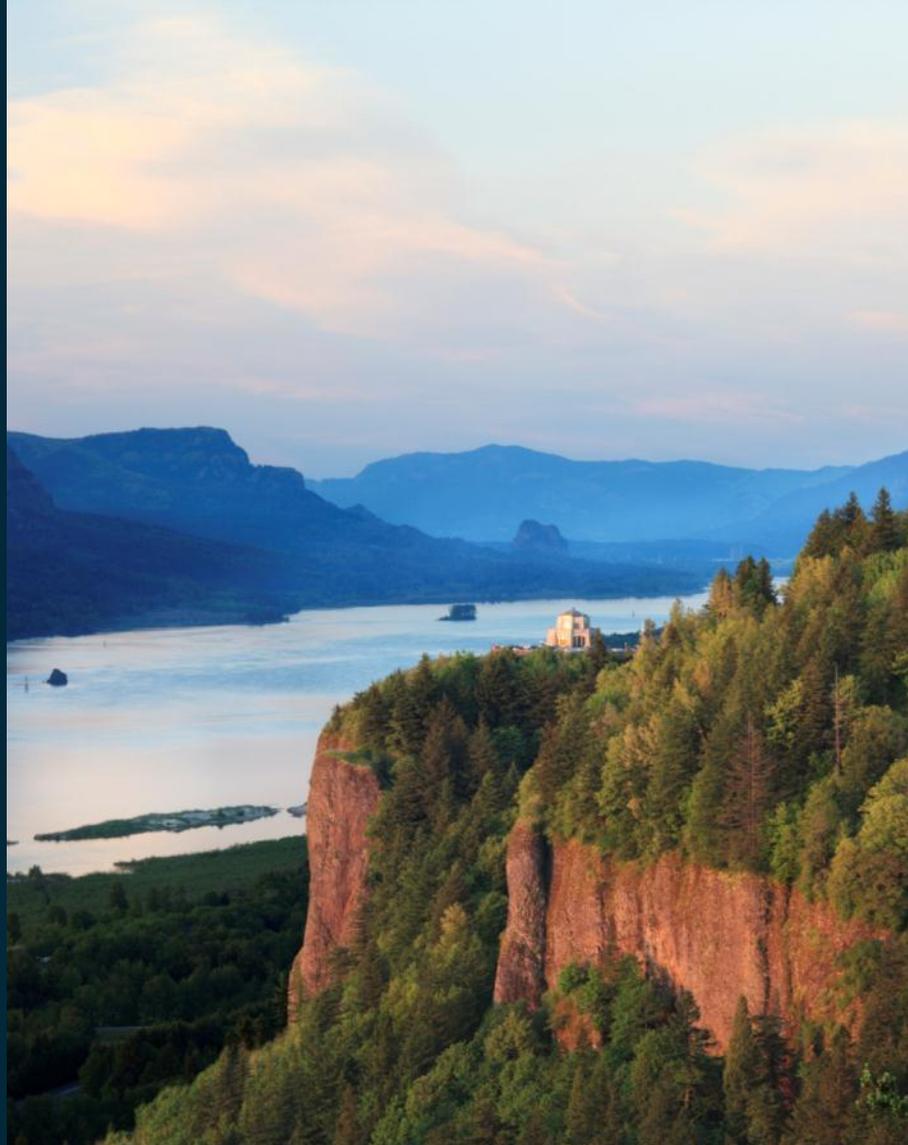
Objectives:

- Create a trust framework to include PHR's within the NATE trust community for pilot and post pilot.
- Determine minimum trust policies and practices in which a PHR would be required to meet.

Use Cases:

- Exchange of health information to single and multiple locations within the NATE trust community.
- Bi-directional exchange between a provider and patient





# O-HITEC Update

*Overview of the goals and outcomes  
of Oregon's Regional Extension Center*

WE ARE **OCHIN**



# Overview: Regional Extension Center (REC)

- The Office of the National Coordinator awarded OCHIN the Regional Extension Center (REC) grant through its subsidiary organization, O-HITEC
- Up to \$14m award, spread out over the course of 3 years, based upon the successful completion of three milestones and the investment of resources prior to reimbursement
  - **Milestone 1:** Provider/clinician enrollment
  - **Milestone 2:** Go-live on an approved electronic health record (EHR)
  - **Milestone 3:** Formal attestation number received by CMS, by provider

# O-HITEC : Oregon's Stats

In Oregon, there are a total of 9,385 health care clinicians (MDs, physician assistants, nurse practitioners) in Oregon of whom 3,462 are primary care providers (PCPs) including doctors in the following specialties:

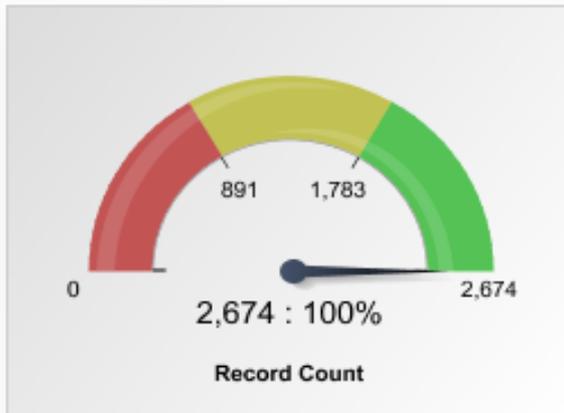
- family medicine
- general practice
- obstetrics/gynecology
- general internal medicine
- and general pediatrics.

The first 10 PCPs in any single incorporated practice are eligible for Office of the National Coordinator (ONC) REC federal subsidy. A total of 2,674 Oregon PCPs met this criteria. Of these, 1,844 PCPs are in practices with 10 or fewer PCPs while the remaining 830 represent the first 10 PCPs in practices with more than 10 PCPs. Of these providers, many are located in rurally-designated areas serving a large Medicaid, Medicare and uninsured population.

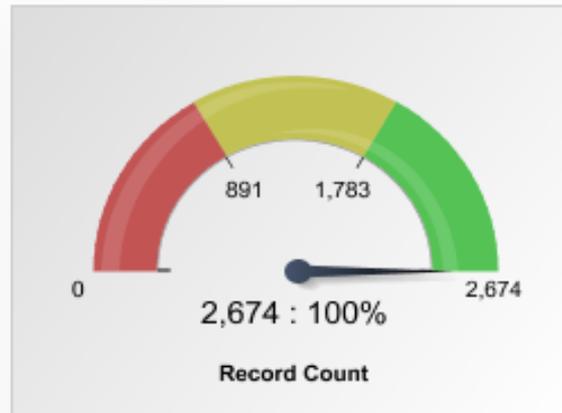
# O-HITEC: Status Report

As Oregon's Regional Extension Center, O-HITEC has been successful in:

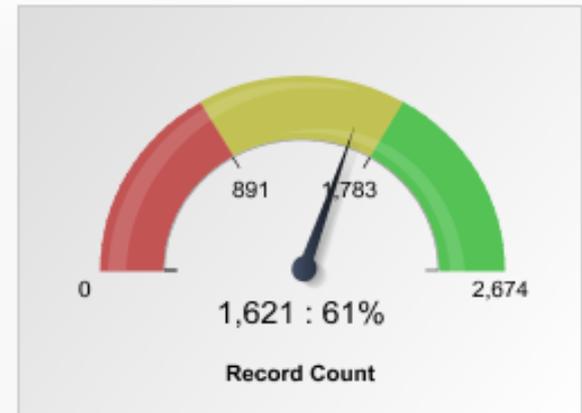
- Successfully enrolling 2,674 eligible physician's/clinicians



*Milestone 1 (Sign-Up) Grant Credits*



*Milestone 2 (Go-Live) Grant Credits*



*Milestone 3 (MU) Grant Credits*

# O-HITEC: National Rankings

O-HITEC: Grant Progress Report: 8/22/2013				
		Number	Percentage	National Average
	<b>REC Membership Summary:</b>			
	Total Enrolled	2674		
	Total Completed MU1	1503	61%	67%
	<i>Milestones Achieved To Date:</i>			
	MS1	2674	100%	
	MS2	2674	100%	
	MS3	1503	61%	
	<b>REC Financial Summary:</b>			
	Total Grant Award	\$14,597,817		
	Grant revenue Drawn Down To Date	\$13,057,451		
	Grant Revenue Remaining	\$1,540,366		

# Outreach Strategy & Efforts to Date

## **GOALS:**

1. To encourage O-HITEC members to return their Milestone 3 Attestation Forms to complete MU Stage 1
2. Maximize technology and communications strategies to meet and hopefully exceed 80% of MS 3 (currently at 61%)
3. Encourage action, good behavior, and maximize “momentum” already gained and in preparation for members to successfully enter MU stage 2

## **MEMBER FOCUS**

- Outreach effort with community town halls and individual in person meetings
- Those who have achieved Milestone 2 (working to 3)

## **INCENTIVES w/ATTESTATION**

- Branded certificate “badge” (logo) of success
- Audit Document



# ONC Regional Extension Center (REC) Program Update

*Overview of the current REC extension  
and OCHIN/O-HITEC's Strategy*

WE ARE **UCHIN**



# Overview: ONC Extension

- O-HITEC can apply for a 12 month extension, which if provided, will allow us to continue assistance to February 2015 – specifically to help remaining members achieve MS3 and/or MU1
- O-HITEC still does not have resources to support MU2.



# cHealth Innovation Symposium

# What is the cHealth Innovation Symposium?

- November 13 – 15, 2013
- An annual, co-branded, coordinated health IT event
- A place where health care providers, educators, and health IT experts will have access to:
  - Trusted and best-in-class information
  - A supportive community
  - The best information and experts to keep them (and their organizations) on the leading edge of health care reform

Proudly brought to you by your partners at:

OCHIN



OREGON  
MEDICAL  
ASSOCIATION



Register Now!

2013

## cHealth Innovation Symposium

*Engaging Health Care and Health IT in a Coordinated Landscape*

November 13-15, 2013 | Oregon Convention Center | Portland, Oregon

Proudly brought to you by your partners at:

OCHIN



OREGON  
MEDICAL  
ASSOCIATION



OREGON HEALTH  
NETWORK  
An OCHIN Organization

Home

About

Schedule

Sponsors

Travel and Accommodations

Contact

Mark Your Calendar!

November 13-15, 2013 | Oregon Convention Center | Portland, Oregon



The cHealth Innovation Symposium is an annual, coordinated health care and health IT transformation event designed to support every participant, change agent, and decision maker in the continuum of health care.

Register Now!

Learn More...



+1

---

# State Near-Term HIT/HIE Development Strategy (Phase 1.5)

September 12, 2013



# Phase 1.5 Overall approach

- Listening sessions helped identify:
  - What can be uniquely provided in state level foundational services
  - Connect what's happening locally and fill the gaps where there aren't local resources
- Goal: Create a statewide resource that supports providers and health plans at different ends of the technology spectrum:
  - Augment and support existing services – state services will wrap around existing ones, and be interoperable with local investments
  - Provide those with little or no exchange and analytic capabilities some foundational and high-value services

# Phase 2.0 Vision for 2015 and Beyond

- OHA HIT Task Force: developing the Phase 2 business plan framework to
  - Reduce gaps in patient information and create an even playing field
  - Unify data collection and transparency to assure value/outcomes
  - Improve understanding and engagement of patients
- Oregon's statewide efforts will be expanded to provide or support:
  - robust, interoperable health information exchange that supports both data “push” as well as data “query”
  - More robust data aggregation
  - Sustainable financing and public/private partnership approach to governance

## 6 Elements of 2013-2015, “Phase 1.5”

- Building blocks to facilitate exchange and analytics:
  - State-level provider directory and
  - Incremental development of a state-level patient index
- High value services around expensive transitions of care:
  - Statewide hospital notifications to providers, health plans, CCOs, health systems when their patients are seen in ED/inpatient
- Electronic connectivity of all members of the care team across organizational and technological boundaries:
  - Statewide Direct secure messaging to augment local capabilities, add new members of the care team, and support statewide connections between providers from within their electronic health record.

## 6 Elements of 2013-2015, “Phase 1.5” (cont.)

- Reliable, actionable information from aggregation of clinical quality data:
  - Statewide clinical quality data registry to support quality reporting and quality improvement efforts, and enhance existing capabilities (population management, analytics, targeting of care coordination resources)
  - Supporting the development of new methodologies to pay for outcomes
- Meaningful use of HIT and ensuring the quality of health information captured by providers in their EHRs:
  - Technical assistance to providers to help providers meet federal Meaningful Use requirements and ensure clinical metrics data are complete and credible

# Oregon HIT/HIE Priorities to Support Health System Transformation

(draft 8/13/13)

Timeline: 2015 Forward

Timeline: Today  
Phase 1 Current Policy and Technology: Setting the initial direction and initiating electronic communication.

\* Continue: Direct Secure Messaging & Interstate efforts

Timeline: 2013-2015

Phase 1.5 Policy and Technology: Services, standards and policies to initially focus on CCOs and their providers' needs to support local care coordination, clinical quality reporting, and aggregation for performance metrics and analytics.

\* Foundational: provider directory, incremental development of patient index, Direct secure messaging and HIE web portal

\* High priority services: statewide hospital notifications/alerts, clinical quality data registry, technical assistance to providers

Phase 2 Policy and Technology: Goal of shared information infrastructure that supports health system transformation.  
\* More robust HIT/ HIE: Support query, data aggregation, analytics.

Phase 2 Governance: Goal of Task Force approved model for governance

Phase 2 Financing Goal of Long Term Sustainability

Phase 1 Governance: OHA and HITOC

Phase 1.5 Governance: OHA with Technical Advisory Group, and HITOC

Phase 1 Financing: ONC Cooperative Agreement

Phase 1.5 Financing: Medicaid/state match, ONC Cooperative Agreement & other investors



Better Health,  
Better Care, Lower Costs

### HIT Foundational for Health Systems Transformation

Innovative Whole Person  
Delivery Models

Building Blocks:  
Provider Directory  
Patient Index



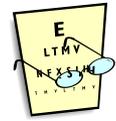
X-Ray



High Value:  
Notifications

Alternative Payment  
Models

Electronic Connectivity:  
Secure Messaging



Actionable Information:  
Clinical Quality Data Registry  
Technical Assistance

Performance Reporting

Across Setting  
Care Coordination

---

# BREAK

September 12, 2013

Oregon  
Health  
Authority

---

# Health Information Technology Task Force Update

September 12, 2013



---

# Health Information Technology Task Force Charter

# Charter

**OBJECTIVE:** The Health Information Technology Task Force will make recommendations to the Oregon Health Authority (OHA) on key components of a multi-year state Health Information Technology (HIT) / Health Information Exchange (HIE) business plan framework to support Oregon's health system transformation efforts.

# Key Questions

- Which services or infrastructure should be offered statewide?
- What is the right role for the State, including policy, standards, guidance, etc.?
- How can the State best partner with stakeholder organizations financially to build and support longer term needs?
- How should any statewide services be governed and operated (State-run, non-profit, etc.)?

# Guiding Principles

- The Task Force will create recommendations by consensus whenever possible.
- When the Task Force discusses terms that can be understood multiple ways, the Task Force will come to a shared understanding of how those terms are being used.
- The Task Force will consider past work, near-term work in development, stakeholder input, federal trends and other relevant information.

# HIT Task Force and HITOC

- Task Force is time/scope limited to help OHA set the state HIT/HIE framework for the next several years
- Oregon's HIT Oversight Council (HITOC) is ongoing, will carry the HIT/HIE framework forward from a statewide policy and oversight perspective.

# HIT Task Force Work Plan

Meeting date/location	Topic
Meeting 1: Weds, 9/4, 1-5pm, Portland	Orientation and background
Meeting 2: Thurs, 9/19, 1-5pm, Salem	Goals, Overall Approach, intro to Governance
Meeting 3: Weds, 10/9, 1-5pm, Portland	Governance, intro to Finance
Meeting 4: Weds, 10/30, 1-5pm, Salem	Technology and Finance
Meeting 5: Weds, 11/20, 1-5pm, Portland	Finalize recommendations

## Process:

- Clear purpose and outcome from each meeting
- Key question(s) for each topic

Potential for 1-2 ad hoc subgroup meetings if needed (tentatively 9/24, 10/17)

---

# Task Force Feedback

September 12, 2013



# Key Uses of Health Information

- Change care - get better care.
- Avoid the avoidable and intervene where appropriate.
- Integrate behavioral health – oral health – long term care.
- Coordination of care “closed loop” referral

# Key Uses of Health Information

- Validation of care given. “Doesn’t make you have better care but allows you to document and demonstrate that you are doing better care.”
- Avoid duplication - cost driver
- Right balance of information for care management and information for population management.

# Overarching considerations for state supported/statewide HIT

- Transparency
- Care transformation
- Providers who are not a part of the “normal” health system
- Localness of health care
- Including of A&D and BH... if we don’t have addiction records, we can’t get our hands on the “whole person”.
- Authoritative directory of licensed physicians... we are all trying to manage and keep up to date independently

# Overarching considerations for state supported/statewide HIT

- Economies of scale
- Common approach
- Member focused (not provider focused) -member model
- Share best practices...replicate and standardize
- Needs to be value and needs driven – people have to see the value -never asked anyone to put information in the system that isn't of value to them.
- Need to identify what we can't solve.

---

# Task Force Parameters

September 12, 2013



# Parameters

- Overarching:
  - Need to think differently
  - Don't get our scope too big –get something done.
  - No one is disenfranchised. Make sure every citizen in Oregon can exchange information.
  - Concrete on requirements.
  - Taxonomy on opportunities or challenges: centralizing, standardizing and aligning
- Technology:
  - Direct secure messaging –a utility that has to be in place. Direct is a step but not sufficient to where we are going

# Parameters

- Technology Assistance, Policy Clarifications and Guidance:
  - Lay out a path and keep meeting milestones
  - Figure out the training and implementation.
- Finance:
  - Sustainability: political, financial, leadership

---

# Public Comment

September 12, 2013



---

# Next Meeting:

**Thursday, November 7, 1:00 pm – 4:30 pm**  
**Portland State Office Building, Room 1E**  
**800 NE Oregon Blvd, Portland, OR**