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# Transforming Health Care Delivery in Oregon Through Technology and Robust Health Information Exchange

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May 17, 2018



# Transformation Opportunities and HIT



**CCO  
2.0**

## Overview

- Coordinated Care Organizations (CCOs) started in 2012 with the goal of achieving the Triple Aim:
  - Better care
  - Better health
  - Lower health care costs
- We have a lot of data about what is working and what needs more work over the next five years. We are calling this next phase “CCO 2.0”
- This is important because one in four Oregonians have Medicaid coverage, most through CCOs
- OHA and the Oregon Health Policy Board are leading this work



## Governor Brown's vision

**CCO  
2.0**

The Governor has asked the Oregon Health Policy Board to provide recommendations for CCO 2.0 in four areas:

- Maintain sustainable cost growth
- Increase value-based payments and pay for performance
- Focus on social determinants of health and equity
- Improve the behavioral health system

Oregon  
**Health**  
Authority

# HITOC Key Priorities and Focus Areas

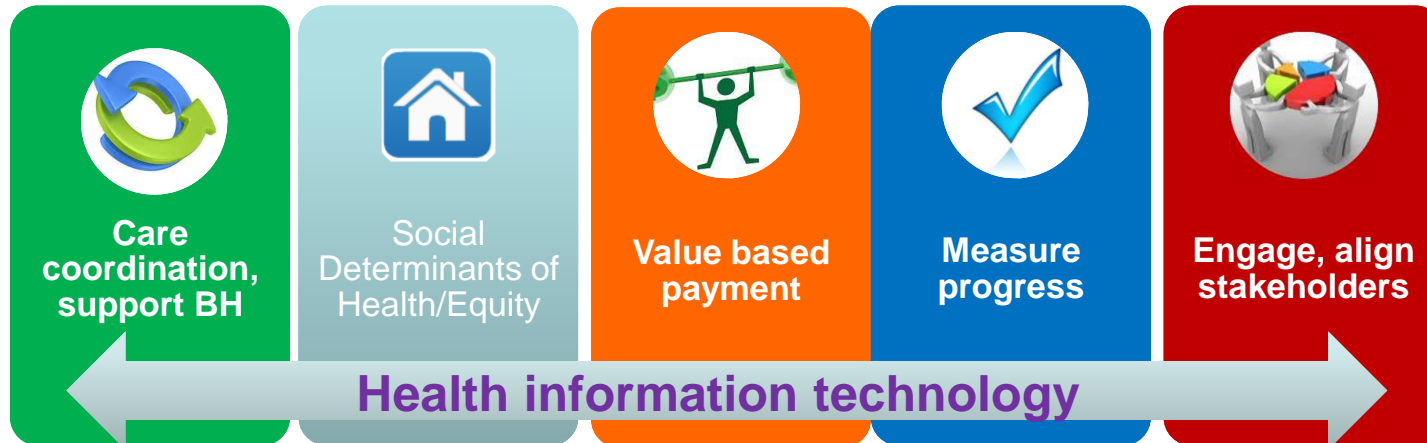
The Action Plan for Health: Foundational strategies	Oregon's HIT Priorities	Oregon's HIT Focus Areas (2017-2020)
<ul style="list-style-type: none"> <li>★ Pay for outcomes and value</li> <li>★ Shift focus upstream</li> <li>★ Improve health equity                             <ul style="list-style-type: none"> <li>• Increase access to health care</li> <li>• Enhance care coordination</li> <li>• Engage stakeholders and community partners</li> <li>• Measure progress</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Support alternative payment models</li> <li>• Support social determinants of health data and partners</li> <li>• Support integration of physical, behavioral and oral health</li> <li>• Support sharing information and care coordination and promote patient access to data</li> <li>• Align across stakeholders and develop partnerships</li> <li>• Monitor and adapt to changing environment</li> </ul>	<ul style="list-style-type: none"> <li>• HIT to support value-based care and alternative payment models</li> <li>• Support high-value data sources, including the social determinants of health</li> <li>• Spread health information exchange and patient access to health data</li> <li>• Implement core HIT infrastructure</li> <li>• Develop shared governance for long-term HIT sustainability and alignment</li> </ul>

★ Governor's CCO 2.0 Priorities, also Improve Behavioral Health, Sustainable Cost Growth

HIT Oversight Council (HITOC): Strategic Plan for HIT/HIE (2017-2020)

<http://healthit.Oregon.gov>

# HIT Supports for Transformation



## Organizations and Individuals:

- Organizations invest in EHRs and HIT
- Patients engage thru HIT
- Local and national HIE efforts spread

## Statewide efforts (in progress):

- Statewide HIE via coordinated networks
- Centralized core HIT
- Aligned payer expectations
- Shared HIT governance for long term sustainability

**HITOC:** strategic planning, monitor and adapt to changing environment, oversee progress, explore emerging areas

**RESULTS SO FAR:  
CURRENT STATUS OF HIT/HIE IN  
OREGON**



## Oregon HIT/HIE Highlights in 2017/early 2018

- Continued high adoption of electronic health records
- Health information exchange continues to spread:
  - Widespread use of EDIE/PreManage
  - Oregon footprint for national HIE efforts expanding
  - Spread and investment in regional HIEs
- Digital divide for behavioral health providers
- HIT Commons launched
  - New public/private partnership for implementing and accelerating HIT



## Behavioral Health HIT Scan Results

OHA conducted a survey of Oregon's 275 behavioral health agencies with at least one state licensed program; about half (48%) completed a survey

### EHR Adoption among Responding BH Agencies



### EHR challenges for those who have an EHR

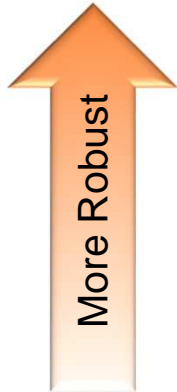
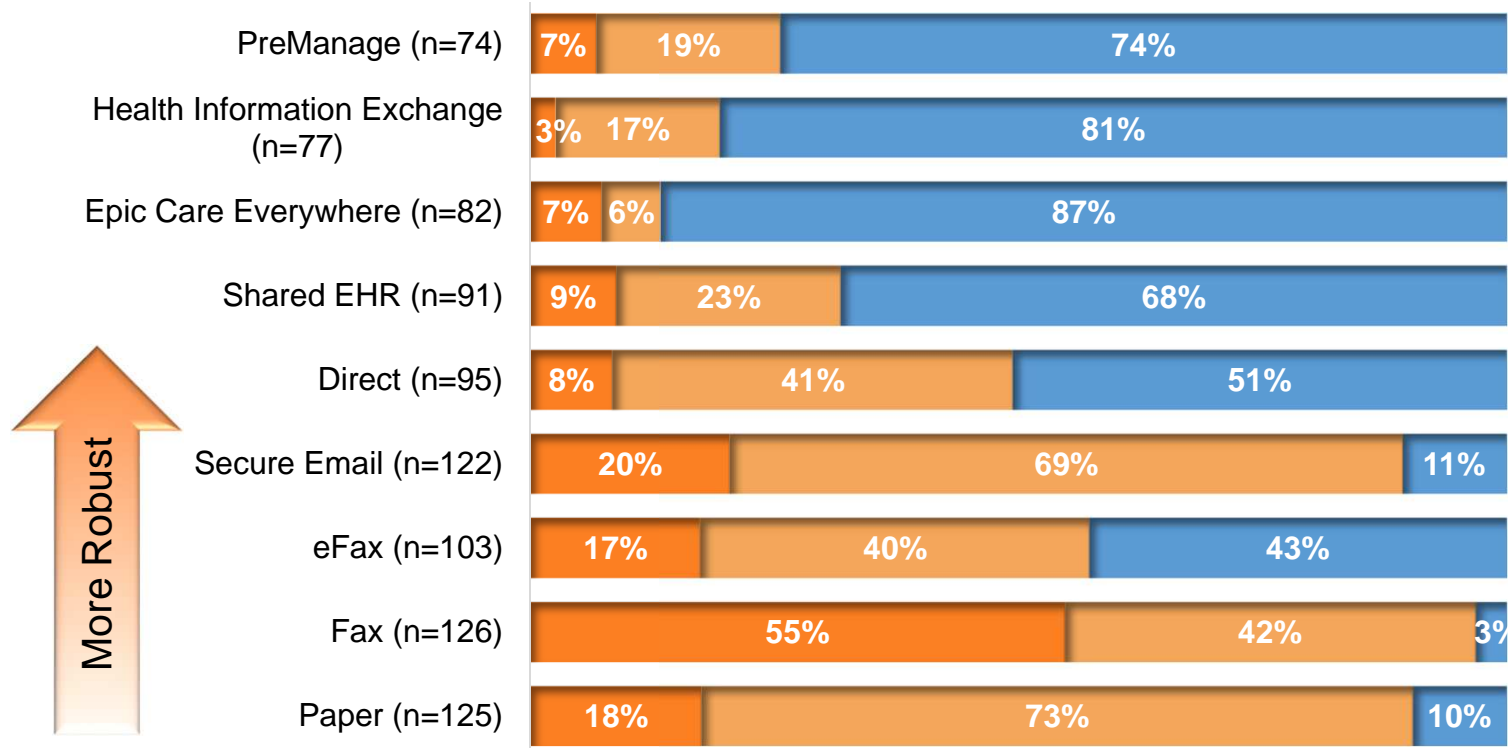
		Count	Response Rate
1	Financial costs	71	70%
2	Unable to exchange information with other systems	55	54%

### EHR barriers for those who do not have an EHR

		Count	Response Rate
1	Financial cost	25	78%
2	Agency size is too small to justify the investment	21	66%
3	Lack of staff resources	15	48%
4	Lack of technical infrastructure	15	48%

# Behavioral Health HIT Scan Results: Current Frequency of HIE Use

■ Most of the time   ■ Some of the time   ■ None of the time



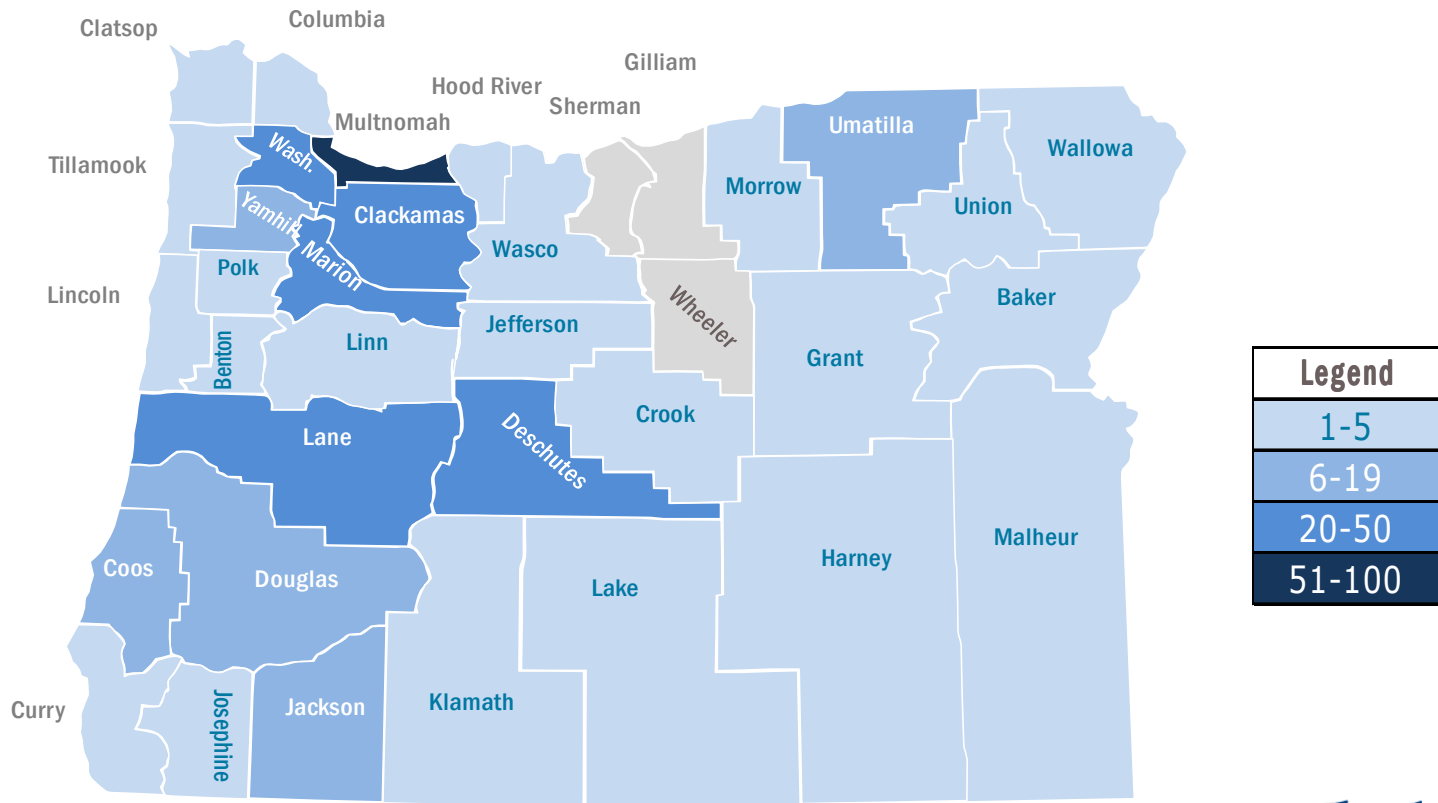
## HIEs and National Efforts in Oregon

Network	Care Summary Exchange	Lab/ Radiology Results	Longitudinal Patient Record	Alerts and Notifications	E-Referrals	Analytics/ Advanced Data Services
EDIE/PreManage				X		
ADIN (Advantage Dental)	X				X	Planned
RHIC (Regional Health Information Collaborative – IHN CCO)	X	X	X	X	Planned	X
Reliance eHealth Collaborative	X	X	X	Planned	X	X
Carequality	X	X				
Commonwell	X	X				
eHealth Exchange	X	X				
Patient Centered Data Home				X		

## HIE Definitions

- **Care Summary Exchange** means the ability to transmit and receive CCDs in CCDA format.
- **Lab/Radiology Results** means the ability to transmit and receive, in ingestible form or other form, results from laboratories or radiology centers and may include a variety of data types including ingestible data and images, PDFs, and transcribed reports.
- **Longitudinal patient record** means collecting information from a variety of sources (CCD, ADT, lab/rad messages, etc.) and assembling it in a unified picture or “dashboard” for each patient.
- **Alerts and Notifications** means pushing information about a patient or set of patients to a certain provider or other entity (like a CCO). This can take many forms, from individual ADTs to mining back-end data to provide notifications about specific health issues.
- **e-Referrals** means an electronic closed-loop referral system in which the referring provider can confirm the referred-to provider accepted the referral and the ongoing status of the referral.
- **Analytics/Advanced Data Services** means tools that allow participants to view and analyze their data for reporting purposes and/or to improve care, improve health outcomes, and lower costs.

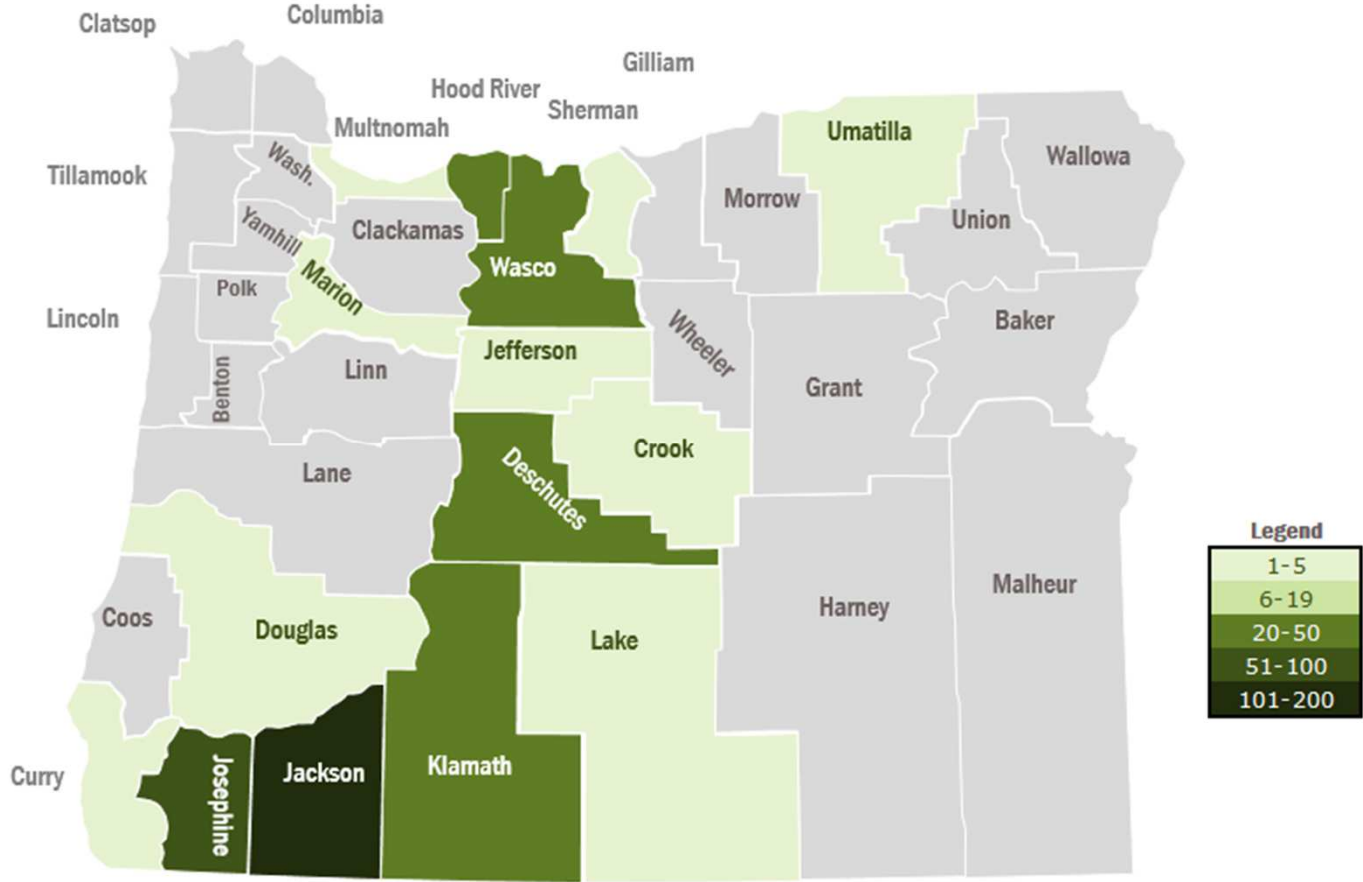
# Collective Medical Technologies, PreManage & EDIE: Site Density



Source: 3/2018 data self-reported to OHA, parent entity and site-level mixed data.



# Reliance eHealth Collaborative: Site Density



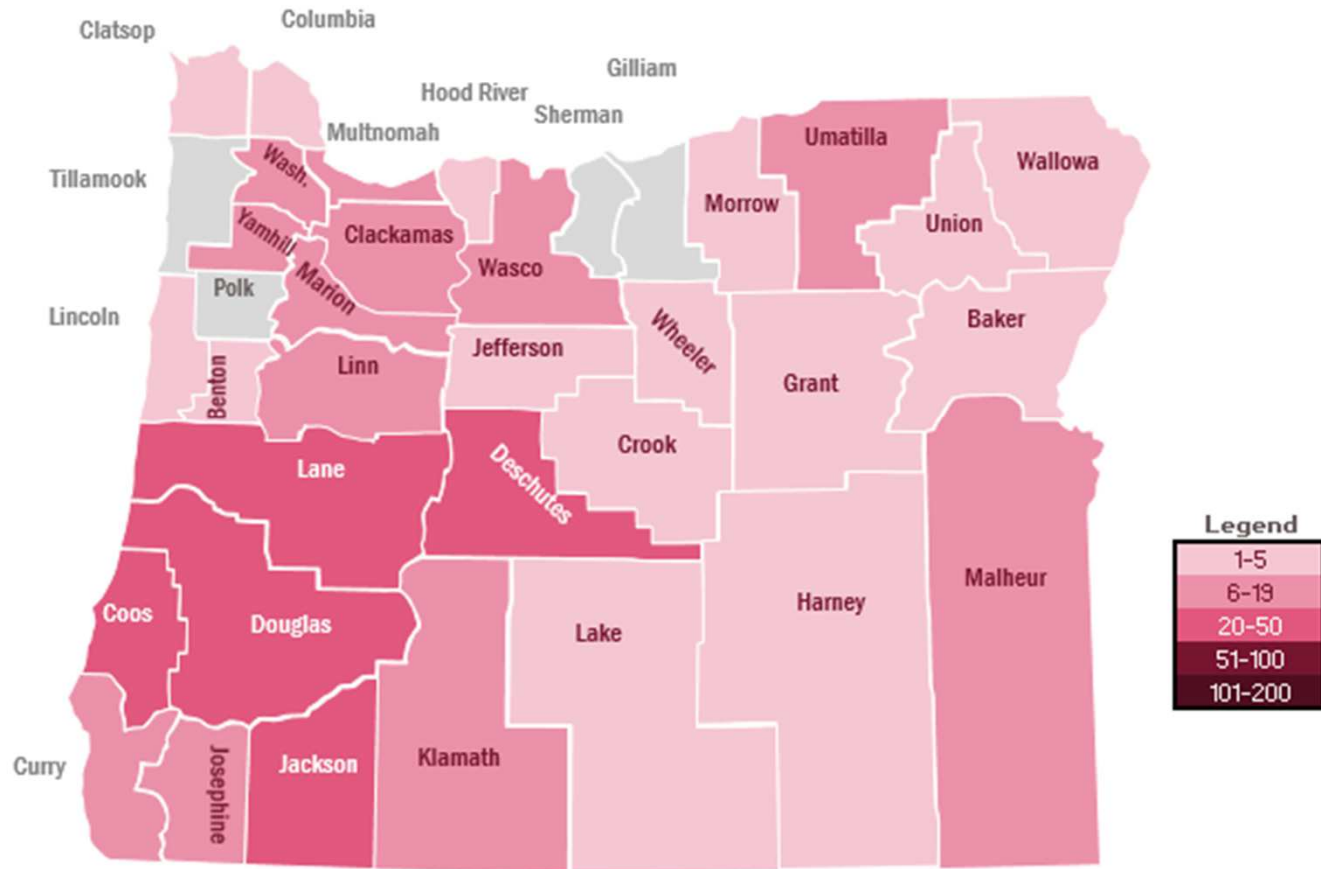
Source: 3/2018 data self-reported to OHA, physical site level data.

# Regional Health Information Collaborative: Site Density



Source: 3/2018 data self-reported to OHA, physical site level data.

# Advantage Dental Information Network: Site Density



Source: 11/2017 data self-reported to OHA, physical site level data.



# Carequality and its Implementers

## Live Today

- athenahealth
- eClinicalWorks
- Epic
- GE Healthcare
- NextGen
- Netsmart

## Application Accepted, Go-Live Expected in Next 1-3 Months

- CommonWell (specifically, Cerner and Greenway in the initial phase)
- Glenwood Systems
- Medent

## Others

- Allscripts – have publicly indicated that they are working on implementation and intend to connect

If not listed, contact your vendor to see if they have plans to connect.

# Potential of National Networks in Oregon

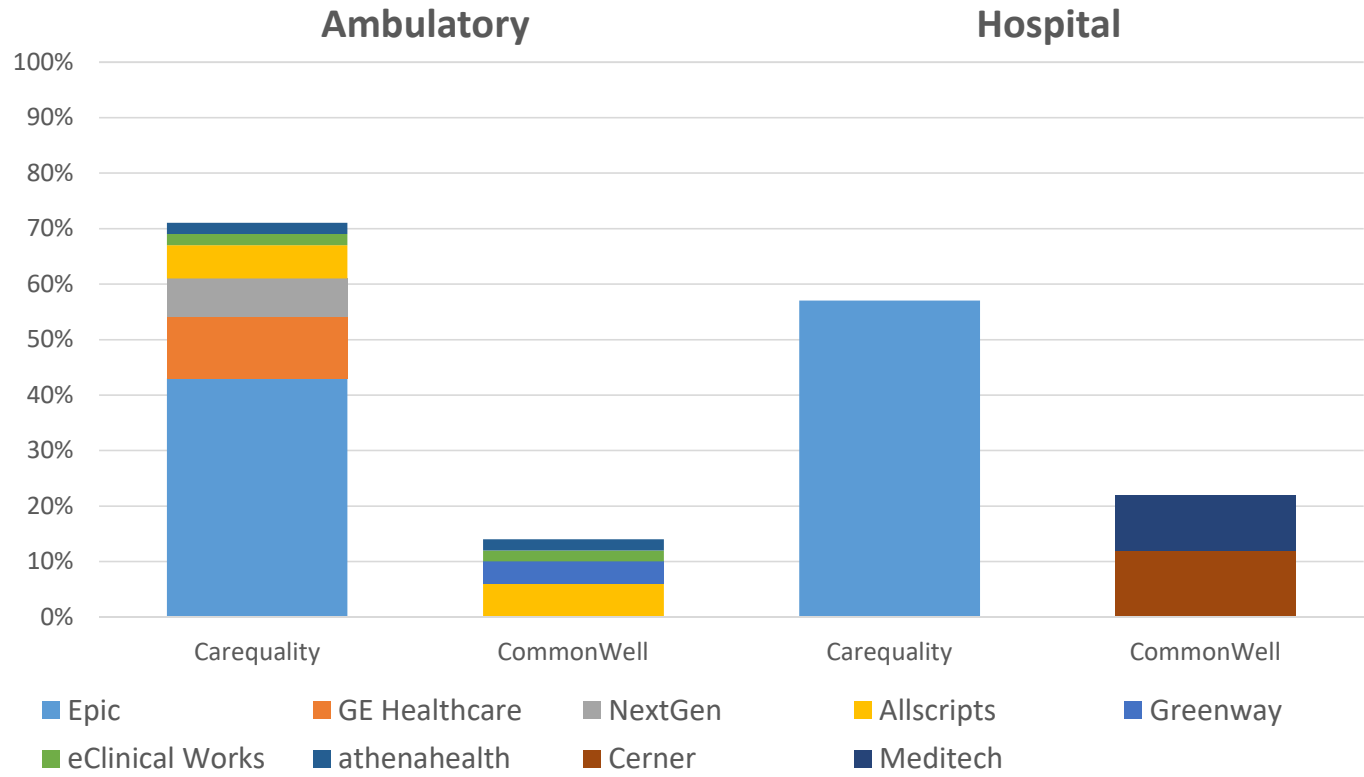


Chart indicates % of EPs participating in the Medicaid/Medicare EHR incentive programs (as of 6/2016) and % hospitals (as reported by OAHHS) using a vendor that has implemented Carequality or joined CommonWell; does not represent actual Carequality users.



## Statewide HIE and “Network of Networks”

- HITOC – Strategic Plan for HIT/HIE (2017-2020)
  - Goal: minimum core data available wherever Oregonians receive care or services across the state
- HITOC Strategic direction: “Network of Networks”:
  - Build upon existing HIE investments and connect HIE “networks”
  - Coordinate stakeholders to develop the necessary framework
    - Common rules of the road, technical and legal frameworks
    - Technology infrastructure necessary centrally
  - Ensure interoperability to improve value of exchanged data
  - Ensure privacy and security practices are in place
  - Provide neutral issue resolution
- Statewide efforts and shared governance needed

## HIT Commons launched January 2018

- Public-private partnership to support and spread statewide HIT efforts in Oregon
  - OHA and Oregon Health Leadership Council co-sponsored development of an HIT Commons Business Plan
  - Building off the success of the EDIE public/private partnership
  - Endorsed by OHA, OHLC, HITOC, and other stakeholders
- Key objectives:
  - Establish neutral governing and decision-making process for investing in HIT efforts
  - Leverage opportunities for shared funding of HIT
  - Coordinate efforts for the adoption and spread of HIT initiatives

# HIT Commons Board Membership

## Health Delivery Systems and Clinics



## State, Professional Associations and Public Health



## CCOs and Health Plans



<http://www.orhealthleadershipcouncil.org/hit-commons/>



## EDIE Utility 2017 Evaluation

- Initial EDIE Utility goals were not realized, however recent trends suggest efforts are beginning to show reductions in utilization
  - ED high utilizers with a care recommendation developed in EDIE/PreManage had a subsequent 10% reduction in ED visits
- EDIE and PreManage users consistently report real time information has greatly improved the efficiency and effectiveness of their care
- EDIE Utility model has been a successful public private partnership
  - Public private partnership and inclusion of broad stakeholder representation has contributed to success

<http://www.orhealthleadershipcouncil.org/edie/>

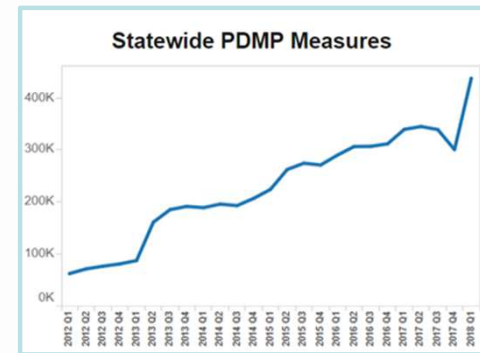


## Oregon's PDMP Integration Initiative

- Integration of the Prescription Drug Monitoring Program (PDMP) with health IT systems
  - Prescribers, pharmacists and their delegates who are PDMP authorized users, will be able to query the Oregon PDMP within their workflow
  - Oregon's PDMP contains controlled substance prescriptions filled in Oregon retail pharmacies, managed by Public Health
  - Ensures providers have accurate, relevant and timely PDMP information at the point of care to make better informed clinical decisions
- Launched technology “gateway” in 2017 (Phase 1)
  - In 2018, HIT Commons will acquire a statewide subscription for HIT system integration with the PDMP (Phase 2)
  - Phased approach with rollout expected over 3 years

# PDMP Integration Phase I – May 2018

- PDMP queries have increased sharply since Q4 2017
- EDIE Alerts include PDMP data in 21 hospitals, for 503 ED providers



**PDMP thru EDIE Alerts Live:**

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>• Adventist Medical Center</li> <li>• Asante Ashland Community Hospital</li> <li>• Asante Rogue Regional Medical Center</li> <li>• Asante Three Rivers Medical Center</li> <li>• Grande Ronde Hospital</li> <li>• Kaiser Sunnyside Medical Center</li> <li>• Kaiser Westside Medical Center</li> <li>• Legacy Meridian Park Medical Center</li> <li>• OHSU Hospital</li> <li>• Providence Hood River Memorial Hospital</li> <li>• Providence Medford Medical Center</li> </ul> | <ul style="list-style-type: none"> <li>• Providence Milwaukie Hospital</li> <li>• Providence Newberg Medical Center</li> <li>• Providence Portland Medical Center</li> <li>• Providence Seaside Hospital</li> <li>• Providence St Vincent Medical Center</li> <li>• Providence Willamette Falls Medical Center</li> <li>• Salem Hospital</li> <li>• Sky Lakes Medical Center</li> <li>• Wallowa Memorial Hospital</li> </ul> |
|---|--|

**PDMP via Regional HIE:**

Both IHN-CCO’s RHIC and Reliance eHealth Collaborative integrations will allow prescribers “one click” access



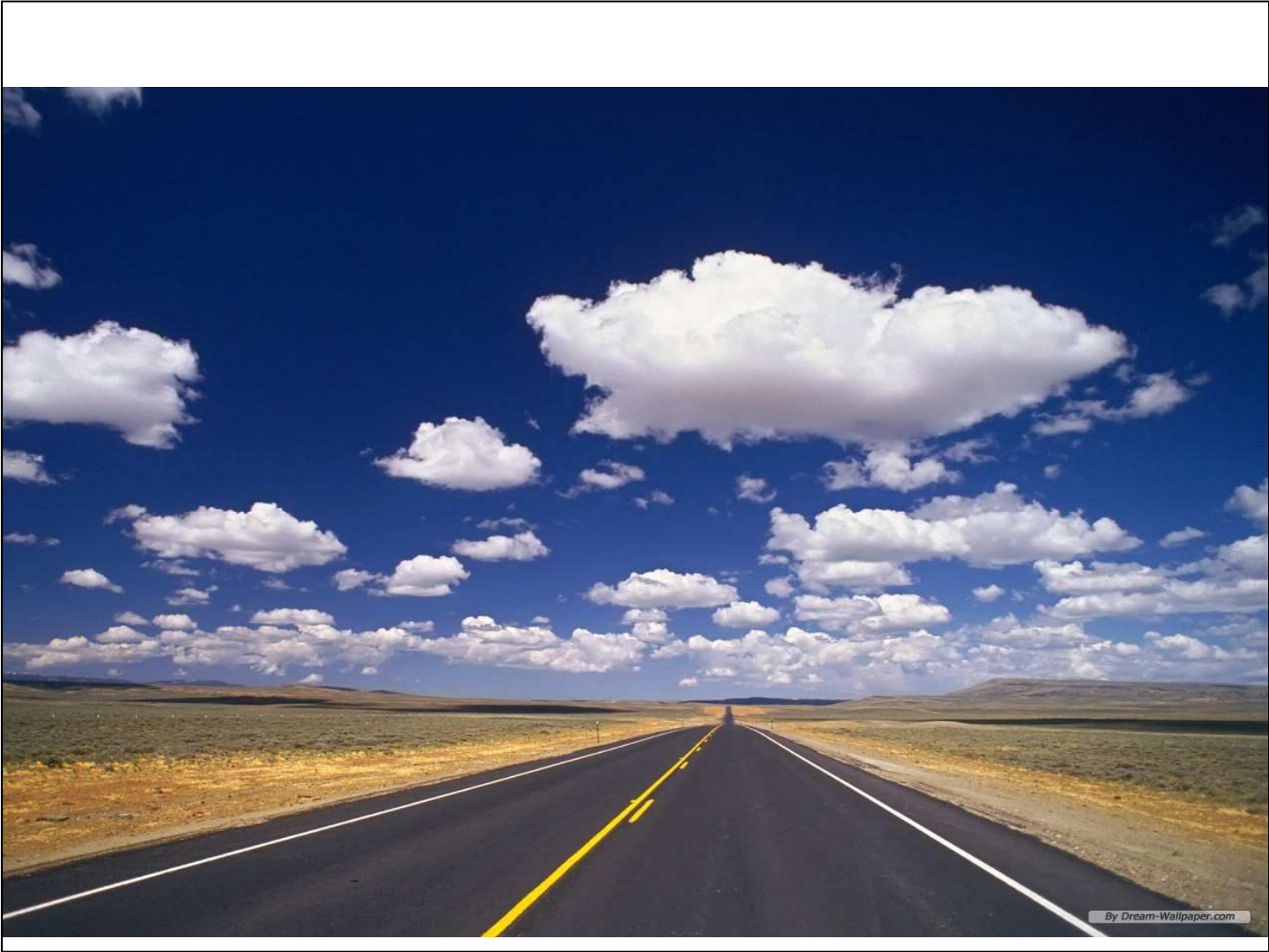


# Interoperability Update



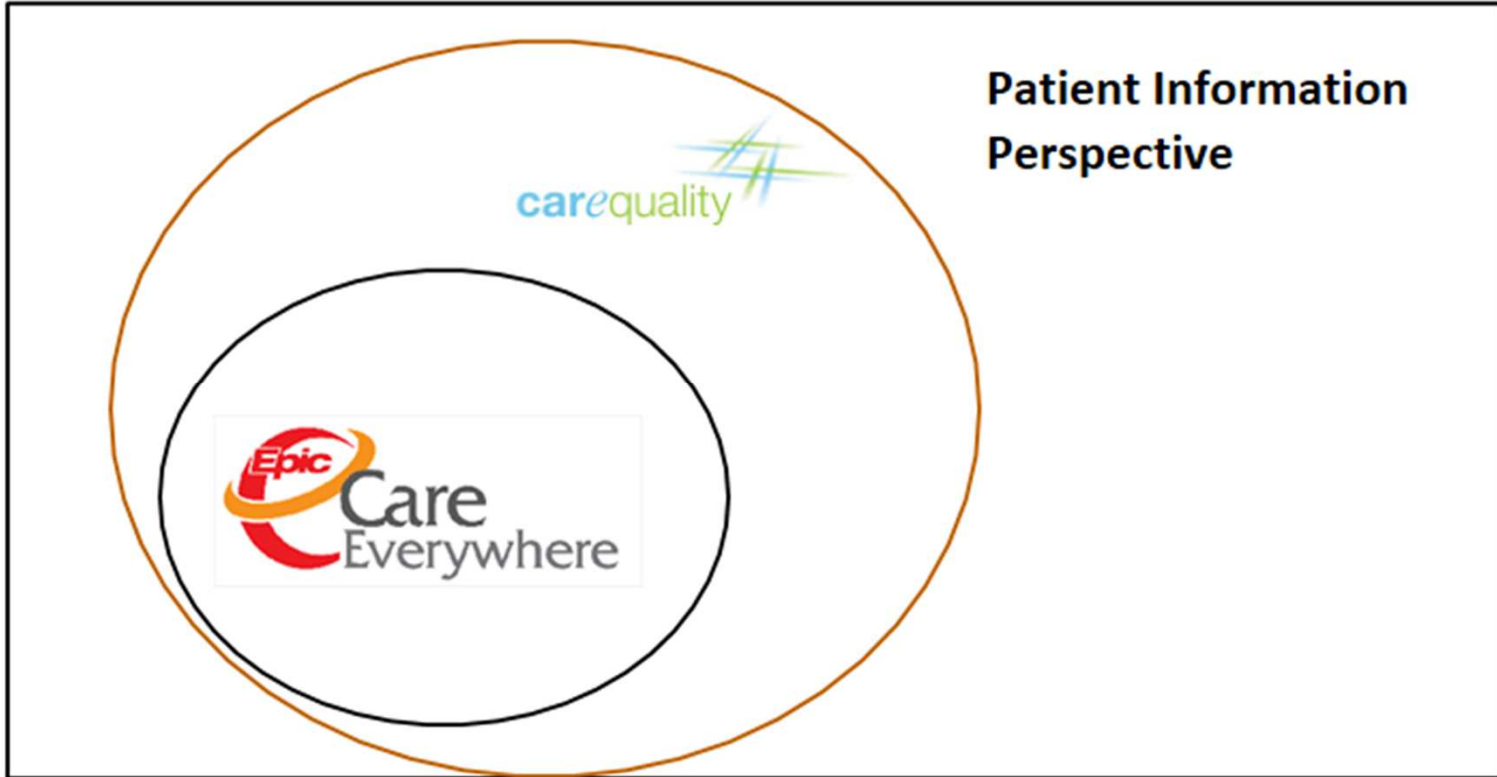
Andy Zechnich, MD, MPH





## Interoperability Portfolio

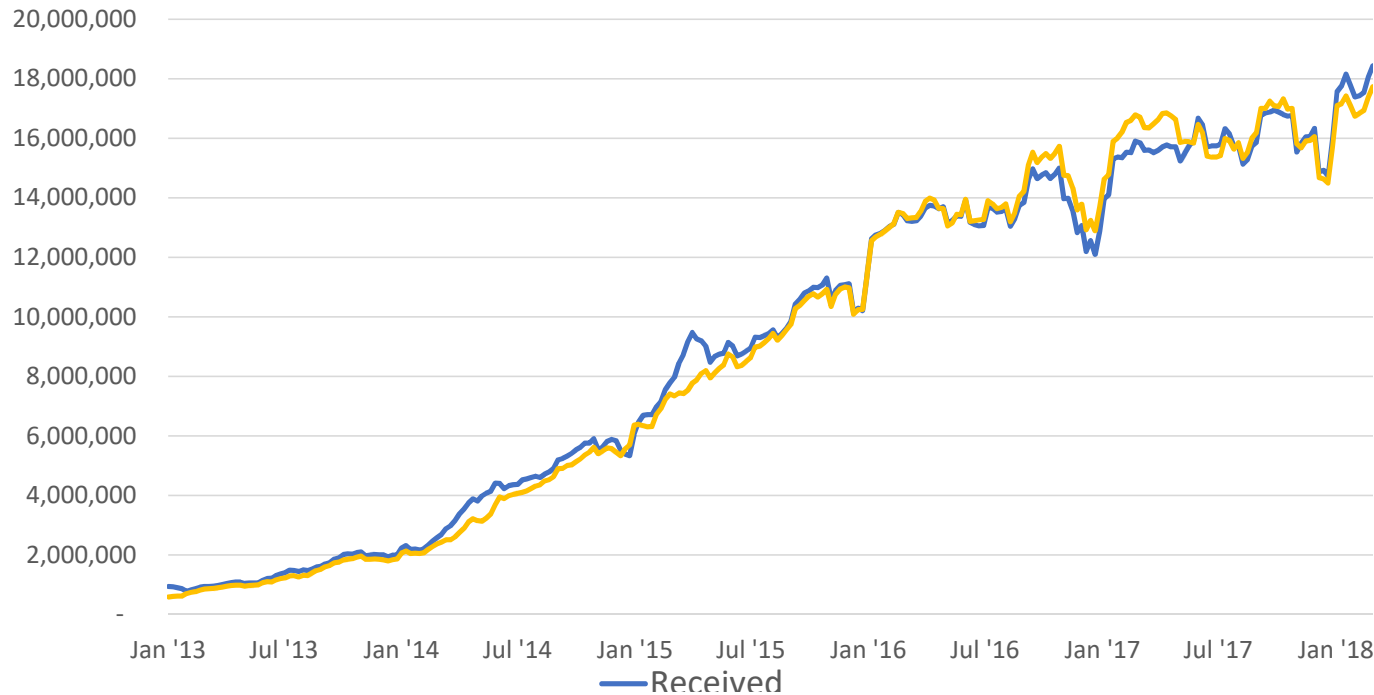
- Care Everywhere (RUG)
- CareQuality
- Direct Messaging
- EDIE/Premanage
- Reliance eHealth Collaborative
- Kno2/RightFax
- Point to Point Interfaces



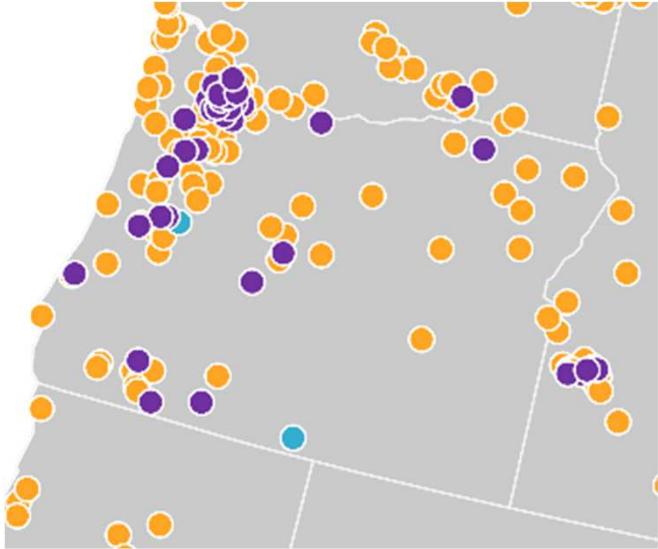
**Patient Information  
Perspective**

Patient Encounter Perspective

# Care Everywhere - Oregon

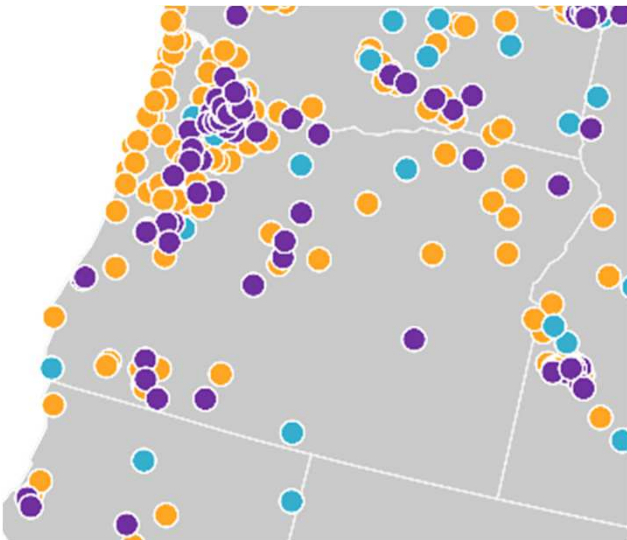


# Carequality Live Sites – April 2017



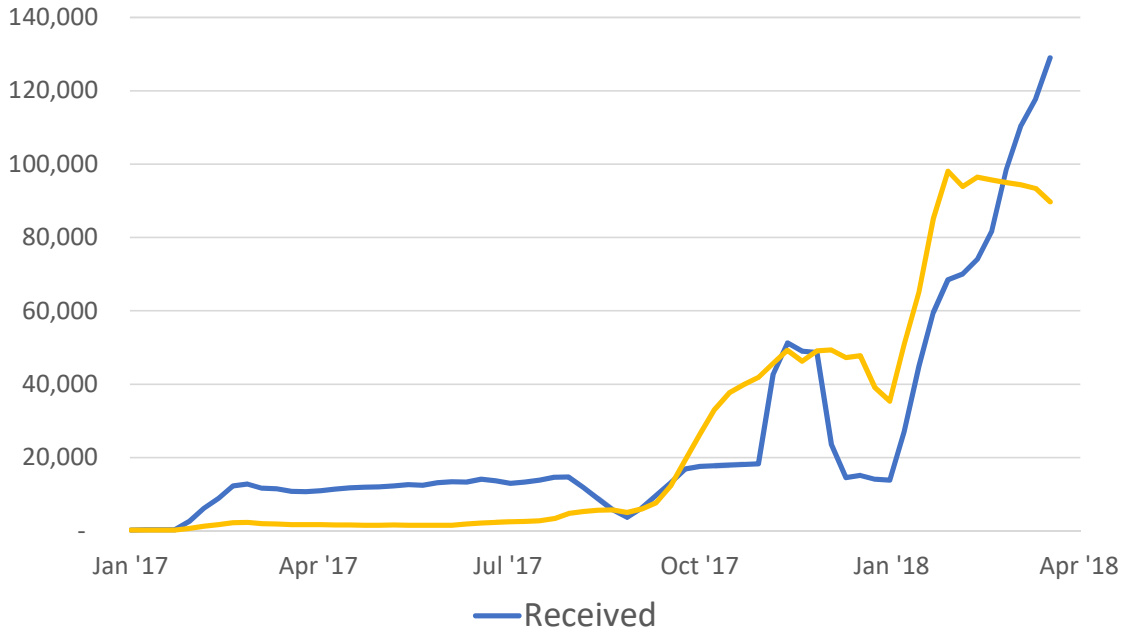
- Epic facilities
- Facilities using other EHRs
- Both Epic and other EHRs

# Carequality Live Sites – April 2018



● Epic facilities      ● Facilities using other EHRs      ● Both Epic and other EHRs

# CareQuality - Oregon





# CCDs

**3/20/2018 Summarization of Episode Note - The Oregon Clinic**

The Oregon Clinic, Gastroenterology - West Clinical Summary, generated on Mar. 20, 2018

[Jump to Section](#)

### Results

No information available.

### Procedures

Code	Procedure Name	Date	Entry Date
CPT-51798	Post void ultrasound 51798	2015/10/26	2015/10/26

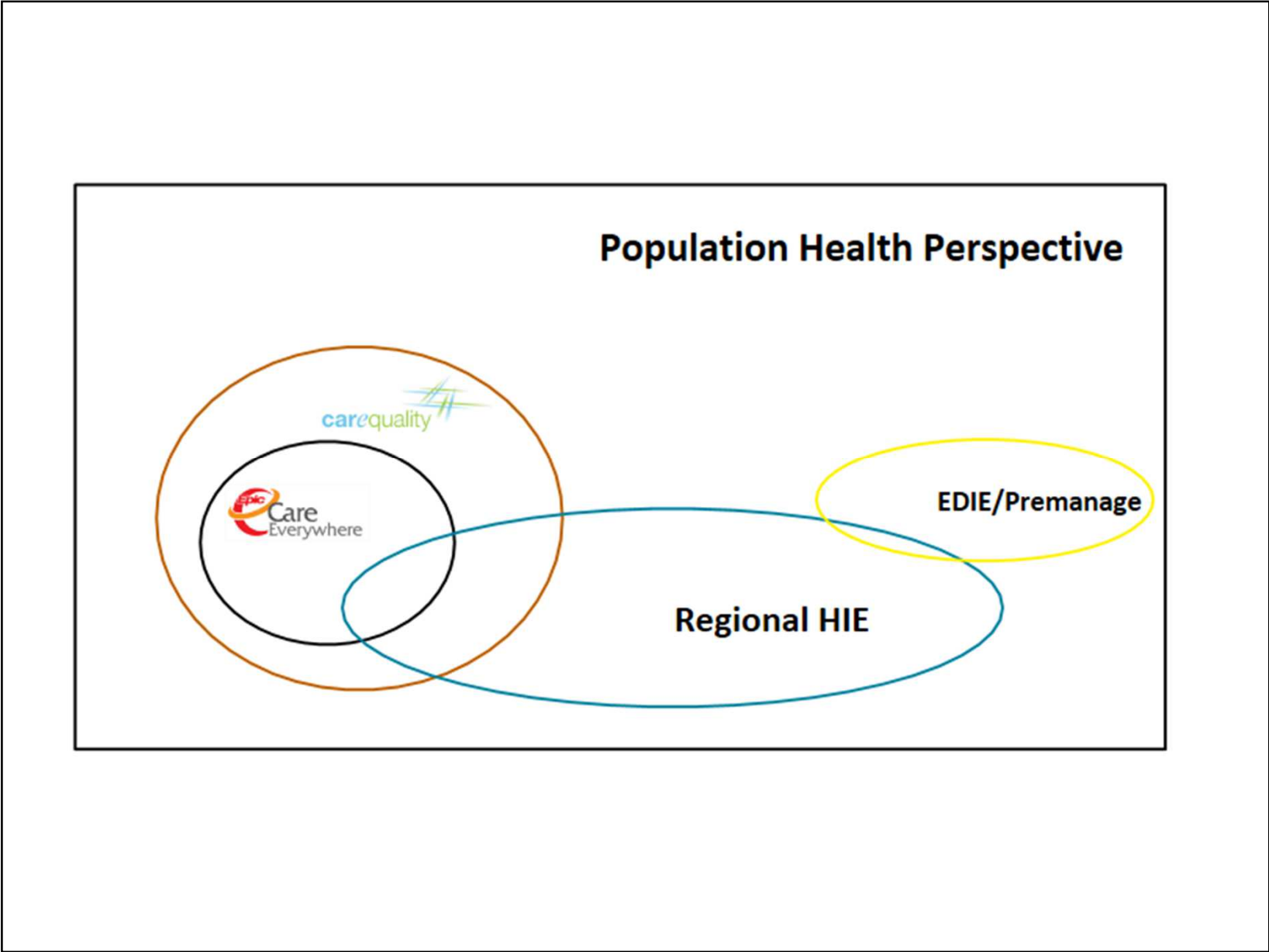
### Conditions or Problems

Problem Name	Problem Code (SNOMED CT)	Onset Date	Status	Entry Date	Provider	Comment	Standard Description	Annotate
Urinary hesitancy	5972002	2015/10/26	Active	2015/10/26				
Gross hematuria	197941005	2015/10/26	Active	2015/10/26				
Mixed incontinence	413343005	2015/10/26	Active	2015/10/26				

### Medications

[Reconcile with Patient's Chart](#)

Medication	Instructions	Start Date	Stop Date	Generic Name	NDC	Provider
VITAMIN D3 CAPS	2000 Units	2015/10/26		CHOLECALCIFEROL CAPS	00536379001	
B-12 1000 MCG CAPS	1 a day	2015/10/26		CYANOCOBALAMIN	31604002732	
ASPIRIN 81 MG TABS	1 tablet twice daily	2015/10/26		ASPIRIN	43292055805	
ENALAPRIL MALEATE 10 MG TABS	1 tablet daily	2015/10/26		ENALAPRIL MALEATE	00093002801	



## Population Health Support

- **Expand the Reach**
  - EHRs not live on Carequality/Care Everywhere
  - Expand concept of 'Providers' – SNFs, long term care, correctional facilities, social services, school or community providers
  - S-HIE concept
- **Care Coordination**
  - Close care gaps
  - Coordination across organizations
  - Referral management
  - Notifications
- **Analytics**
  - Quality Reporting
  - Data normalization
  - Predictive Analytics
- **Patient Engagement**
  - Personal Health Record
- **Disaster Management**
  - Access to patient records

## We cannot only focus on *technology*...



- **Regional Users Group**
  - Configuration
  - Community Commitment to Interoperability
  - Remove Barriers to Exchange
  - Future Collaboration

## Thoughts

- **Build on our core**
- **There is a world beyond Care Everywhere**
- **Focus on scalable solutions**
- **Cannot be all things – focus on use cases**
- **Community commitment and collaboration**
- **CCD exchange is a given, HIE sustainability is in *services***
- **Must reach critical mass (lessons learned from EDIE)**

# Thank You!

- Andy Zechnich, MD, MPH
- [andrew.zechnich@providence.org](mailto:andrew.zechnich@providence.org)



# **Transforming Health Care Delivery in Oregon through Technology and Robust Health Information Exchange:**

## **Panel Remarks from CareOregon PreManage Experience**

HIMSS Oregon Annual Conference

May 17, 2018

Liz Whitworth, PreManage Project Manager

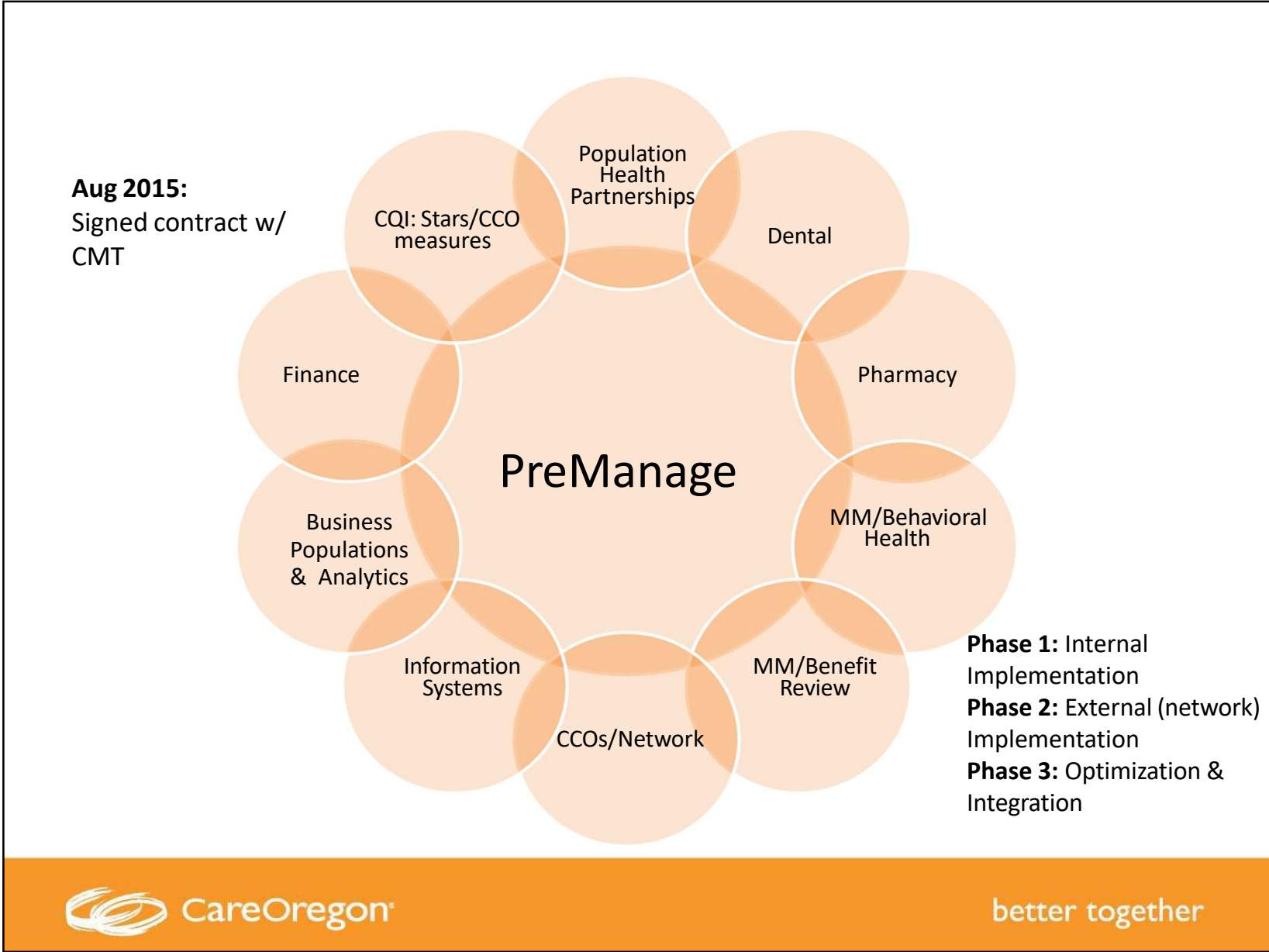


[www.careoregon.org](http://www.careoregon.org) | [facebook.com/careoregon](https://facebook.com/careoregon) | [twitter.com/careoregon](https://twitter.com/careoregon)

## PreManage Goals *(initially set in 2015 but remain the same)*

- Timely care coordination & follow up
- Timely intervention with ED providers to divert inappropriate admissions
- Case finding for program outreach & intervention
- Team coordination across shared members
- Streamlining operations/finance reporting & processes
- Integrated & improved analytics reporting





## LEVERAGING PREMANAGE FOR IMPROVED CARE COORDINATION AND PATIENT CARE

Three recent examples to highlight:

1. PreManage use for FamilyCare transition
2. Supporting PreManage adoption by key network partners
3. Working across organizations to support needs of high risk members

## PREMANAGE USE FOR FAMILYCARE TRANSITION

- Early indication of hospital utilization/risk
- Full Transition population visible or go-live date of 2/1/18
- Network use of PreManage to support patient transition to new payer
- CareOregon teams utilized flags and care recommendations to understand unique needs of new members



## SUPPORTING PREMANAGE ADOPTION BY KEY NETWORK PARTNERS

### Cohort:



### Flag on member detail view:

The screenshot shows a member detail view with several tabs: Clack Cty-Assigned, HS-Clackamas MH, HS-Willamette Dental, RX Risk Score 9-14.99, 1-HRP-Alyssa Moore, Active, RCT 1, Plan-HSO-CO PH/MH/Dental, and ED Disparity Measure. A tooltip is displayed over the ED Disparity Measure flag, providing the following text:

ED Disparity Measure patient identified by OHA using claims with a 36-month rolling look back period where members have two or more visits to any location (not limited to EDs) with a principal mental illness diagnosis. Updated weekly, this patient counts toward the Oregon CCO Disparity Measure: Emergency Department Utilization for Individuals Experiencing Mental Illness and should not be confused with the HEDIS Mental Illness Value Set.

- Increased interest from network
- Clinics need elbow-to-elbow TA
- Health plan/clinic integration
  - Shared high risk populations (ED Disparity Measure)
  - Clinic workflows with embedded health plan staff (Health Resilience Specialists)

# SUPPORTING NEEDS OF HIGH RISK MEMBERS

## Care Recommendation:

### CARE RECOMMENDATION:

- *Pt has been volatile toward EMS in the past.* Pt has presented to ED on numerous occasions with suspected self-inflicted wounds to Abdomen, Neck, Penis, and Hand.
- *In the last 12 months:* pt has filled 46 prescriptions for Lyrica prescribed by 19 different providers at 37 different pharmacies. He has also had 28 prescriptions for Gabapentin concurrently prescribed by 14 different providers, filled at 19 different pharmacies.
- Pt self reports Seizure Disorder and TBI--This has not been confirmed by a Neurology work-up since he has moved to OR.
- CareOregon Pharmacy has placed a 4 capsule/day and 120/per 30-day limit on ALL Lyrica prescriptions. As of notification mailed to patient on 4/13/18: Pt will be required to have all Lyrica prescriptions prescribed by Dr. Norton (OHSU Beaverton Clinic) only to be filled at the OHSU Beaverton Clinic Pharmacy ONLY.
- Please refer pt. to OHSU Beaverton Clinic's Behavioral Health Consultant for Care Coordination: 971- [REDACTED]
- All CareOregon communication from member will be directed to Rachel--patient's assigned RN Care Coordinator: 503-[REDACTED] or 503-4-[REDACTED]
- Consider a toxicology screen, particularly for ETOH, to rule out substance use; ETOH is contraindicated for his reported seizure disorder.
- Consider MH screening and assessment while at ED due to concerns over self-injury.

### Additional Information:

EMS providers advocating for single hospital destination and limiting medication administration enroute. This will take time. Currently all EMS first responders arrive with a police escort.

# SUPPORTING NEEDS OF HIGH RISK MEMBERS

## Care Coordination:

### CARE COORDINATION:

- Pt's case is being managed by an intensive, Interdisciplinary team comprised of: BH consultant, ENCC RN Care Coordinator, CareOregon Pharmacy Management, and Tri-County 911. In order to deliver effective, pt appropriate Care Coordination, it is essential that pt receives a consistent message from ALL providers that Lyrica/Gabapentin prescriptions be prescribed by Dr. Norton, OHSU Beaverton Clinic and filled by ONE pharmacy at the OHSU Beaverton Clinic Pharmacy.
- Please refer pt. to OHSU Beaverton Clinic's Behavioral Health Consultant for PCP Care Coordination: 971- [REDACTED]
- All CareOregon communication from member must be directed to Rachel--Patient's assigned RN Care Coordinator: 503-[REDACTED] or 503-[REDACTED]

These are guidelines and the provider should exercise clinical judgment when providing care.

# SUPPORTING NEEDS OF HIGH RISK MEMBERS

## Summary Tab:

2018-04-12 Tri-County 911

Claudia Schroeder

- client receives MULTIPLE prescriptions for Lyrica and Gabapentin concurrently from different providers!
- self-reported traumatic Brain Injury s/p MVC 2009
- self reported seizure disorder, complex partial ( r/t TBI)
- self reported hand surgery ( complex injuries from a chipper shredder

## Med/Surg Tab:

2018-04-12 Tri-County 911

Claudia Schroeder

- client receives MULTIPLE prescriptions for Lyrica and Gabapentin concurrently from different providers!
- self-reported traumatic Brain Injury s/p MVC 2009
- self reported seizure disorder, complex partial ( r/t TBI)
- self reported hand surgery ( complex injuries from a chipper shredder

# SUPPORTING NEEDS OF HIGH RISK MEMBERS

## Substance Abuse/Overdose Tab:

2018-04-12 Tri-County 911

Claudia Schroeder

- client receives MULTIPLE prescriptions for Lyrica and Gabapentin concurrently from different providers!
- concerns for current alcohol use

## Behavioral Tab:

2018-04-12 Tri-County 911

Claudia Schroeder

- client receives MULTIPLE prescriptions for Lyrica and Gabapentin concurrently from different providers
- concern over self-inflicted injuries, concern over possible escalation of self harm
- client denies self harm
- client does not present with signs/ symptoms of a mental health issues, denies any mental health concerns
- has declined all offers of supports, such as counselor, health resiliency worker etc.



THANK YOU

Liz Whitworth

PreManage Project Manager

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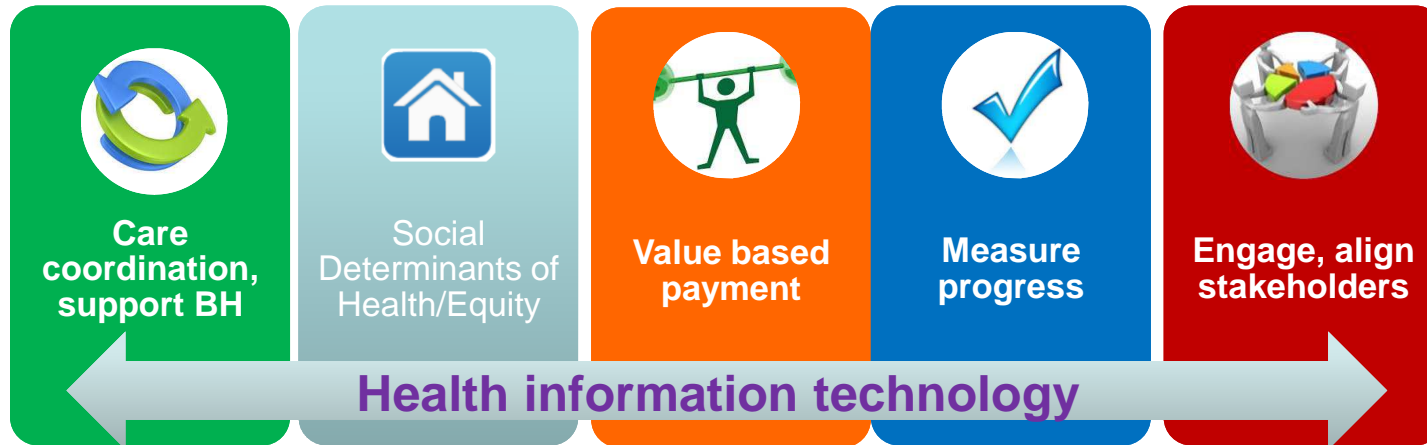
**WHERE WE'RE GOING:  
HIT EFFORTS IN DEVELOPMENT**



## HIT/HIE Ongoing Efforts (2018-2020)

- Health information exchange
  - Develop “Network of Networks” for HIE
  - Bring Medicaid providers onto robust network of HIEs
  - Seek opportunities to support national networks
  - Provide access to high-value data (e.g., PDMP)
  - Improve consent and privacy practices
- Infrastructure and statewide HIT
  - Provider Directory, Common Credentialing programs
  - Clinical Quality Metrics Registry
- Shared governance for Oregon HIT
  - Further develop HIT Commons, building off EDIE Utility
- HITOC strategy, policy, oversight
  - HIT role w/in social determinants of health

# HIT Supports for Transformation



## Organizations and Individuals:

- Organizations invested in EHRs and HIT
- Patients engaged thru HIT
- Local and national HIE efforts spread

## Statewide efforts:

- Statewide HIE via coordinated networks
- Centralized core HIT
- Aligned payer expectations
- Shared HIT governance for long term sustainability

**HITOC:** strategic planning, monitor and adapt to changing environment, oversee progress, explore emerging areas

**Learn more about Oregon's HIT/HIE developments, get involved with HITOC, and Subscribe to our email list!**

[www.HealthIT.Oregon.gov](http://www.HealthIT.Oregon.gov)

**HIT Commons**

<http://www.orhealthleadershipcouncil.org/hit-commons/>

**CCO 2.0 Efforts:**

<http://www.oregon.gov/oha/OHPB/Pages/CCO-2-0.aspx>

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**Oregon**  
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