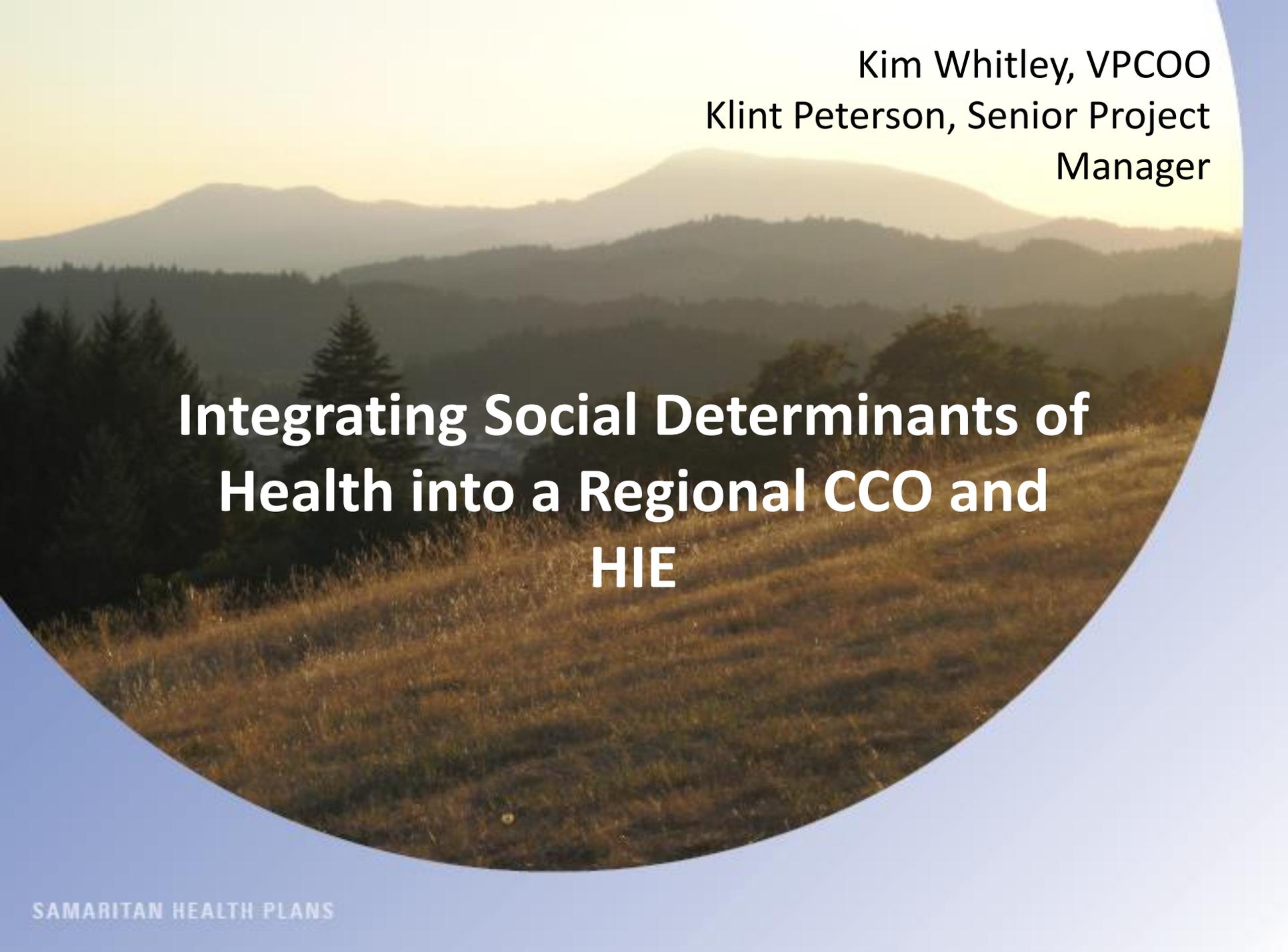


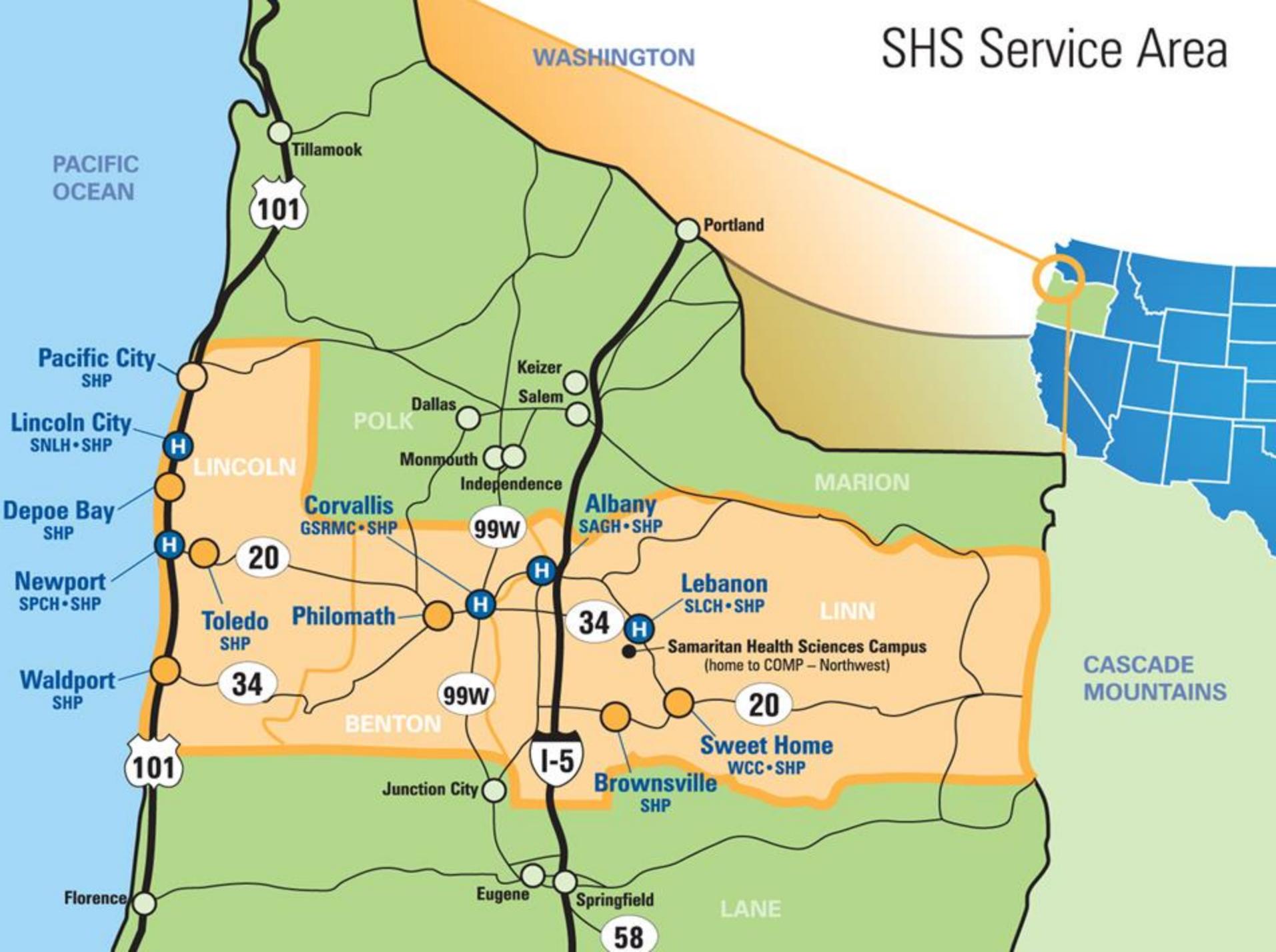
# Samaritan Health Services



Kim Whitley, VPCOO  
Klint Peterson, Senior Project  
Manager

# Integrating Social Determinants of Health into a Regional CCO and HIE

# SHS Service Area



# System Overview

## **Integrated delivery model**

- Hospitals
- Physicians
- Health plans
- Medical school partnership
- Residents / GME
- Centralized business services
- Research / clinical trials

# Samaritan Health Plans Operations

Today, serving over **70,000** lives

- InterCommunity Health Network – Coordinated Care Organization
  - Medicaid beneficiaries in Benton, Lincoln and Linn counties
- Samaritan Choice
  - Employees of SHS and their dependents
- Samaritan Advantage
  - Medicare beneficiaries in Benton, Lincoln and Linn counties
- Samaritan Health Plans
  - Small and large group employers

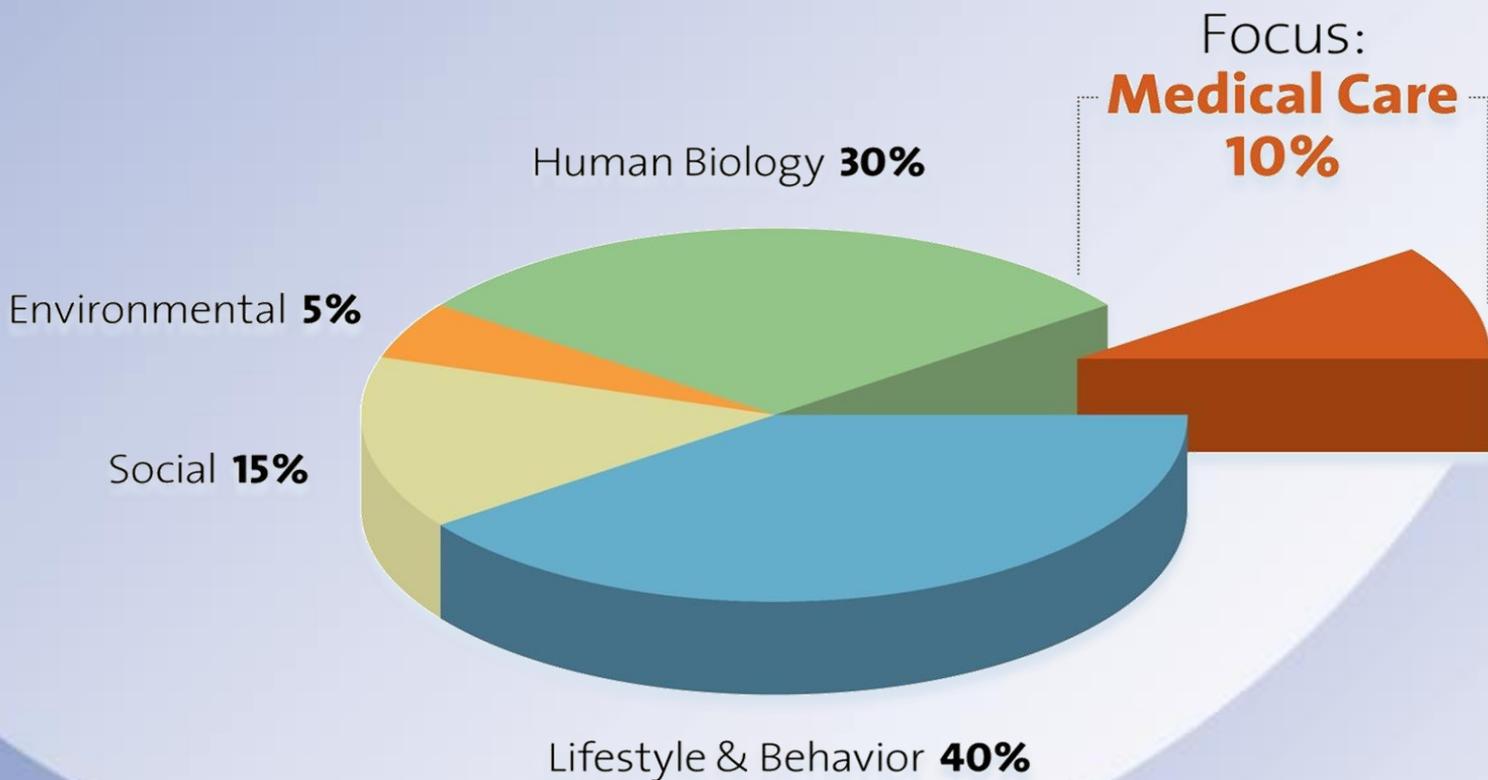


InterCommunity   
Health Network CCO

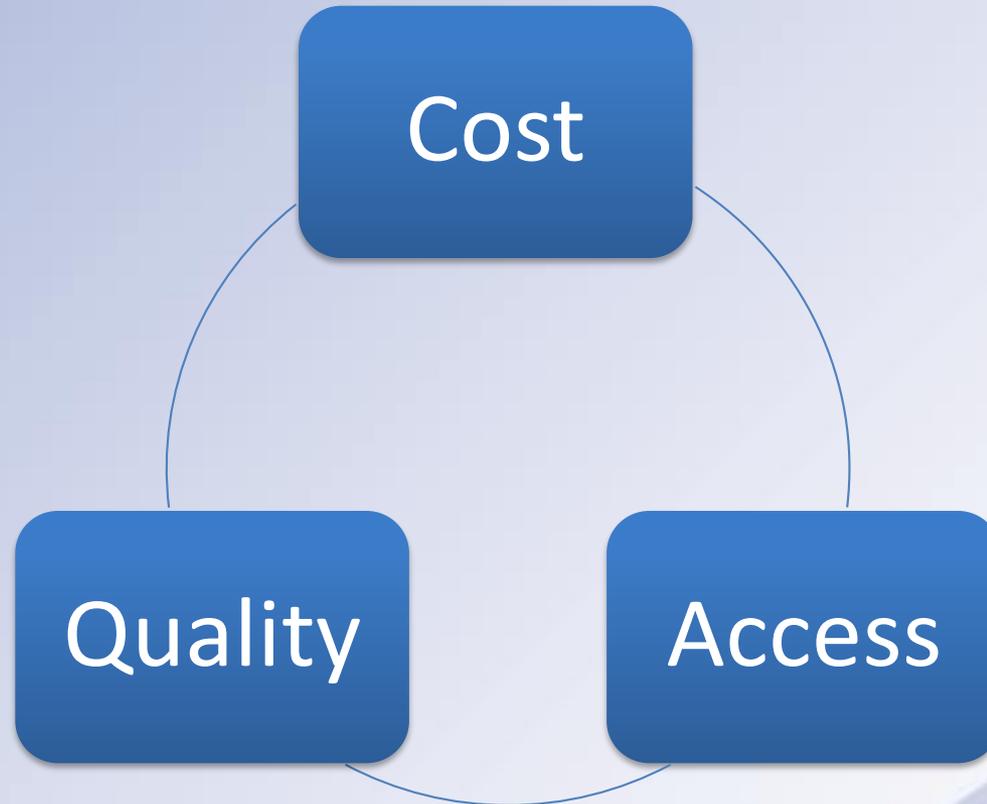
# Our mission as a Coordinated Care Organization

- **Legislated** by Oregon HB 3650 **to transform** how health care is delivered
- **Community-based** management with **global budget** for physical, mental and dental health and non-emergent medical transportation
- **Coordinate** health initiatives
- **Seek efficiencies** through blending of services and infrastructure
- **Engage all stakeholders** to increase the quality, reliability and availability of care

Too much focus placed on medical care, while disregarding the larger sphere of contributing health factors.



# The answer lies in the Triple Aim



# Regional Health Information Collaborative (RHIC)



COLLECT

GOAL 1: Create a whole-person view of the patient



SHARE

GOAL 2: Support patient-centered, coordinated care



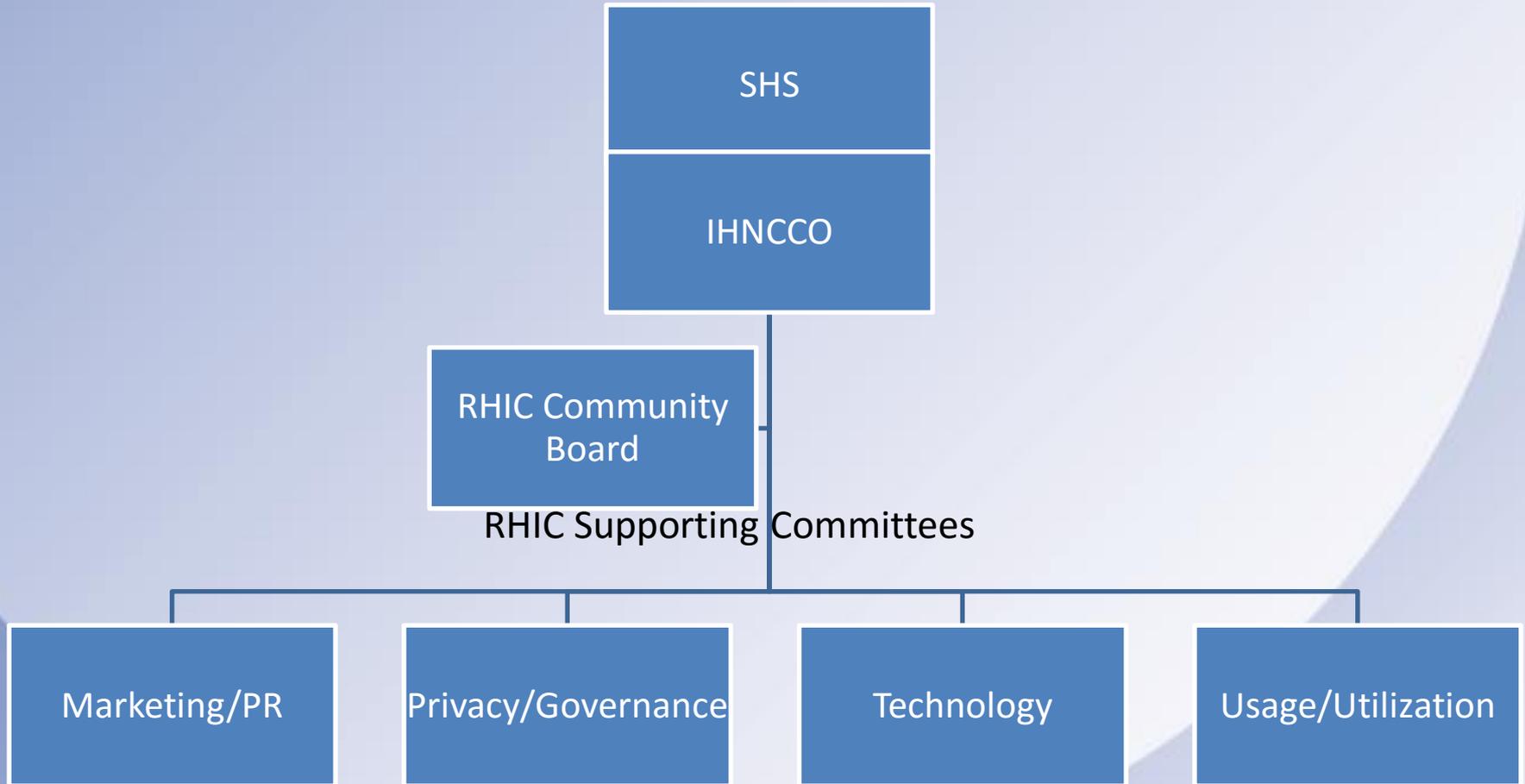
ACT

GOAL 3: Achieve The Triple Aim:

- Enhance the quality, reliability and availability of care
- Improve the health of our communities
- Lower or contain the cost of care



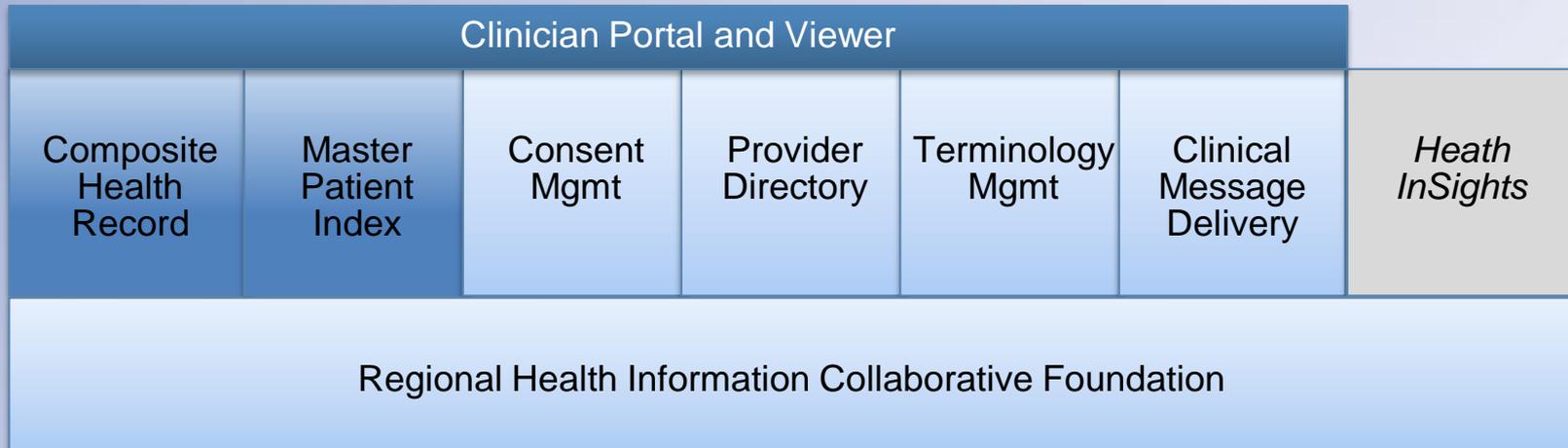
# RHIC Structure



# RHIC's Foundational Capabilities

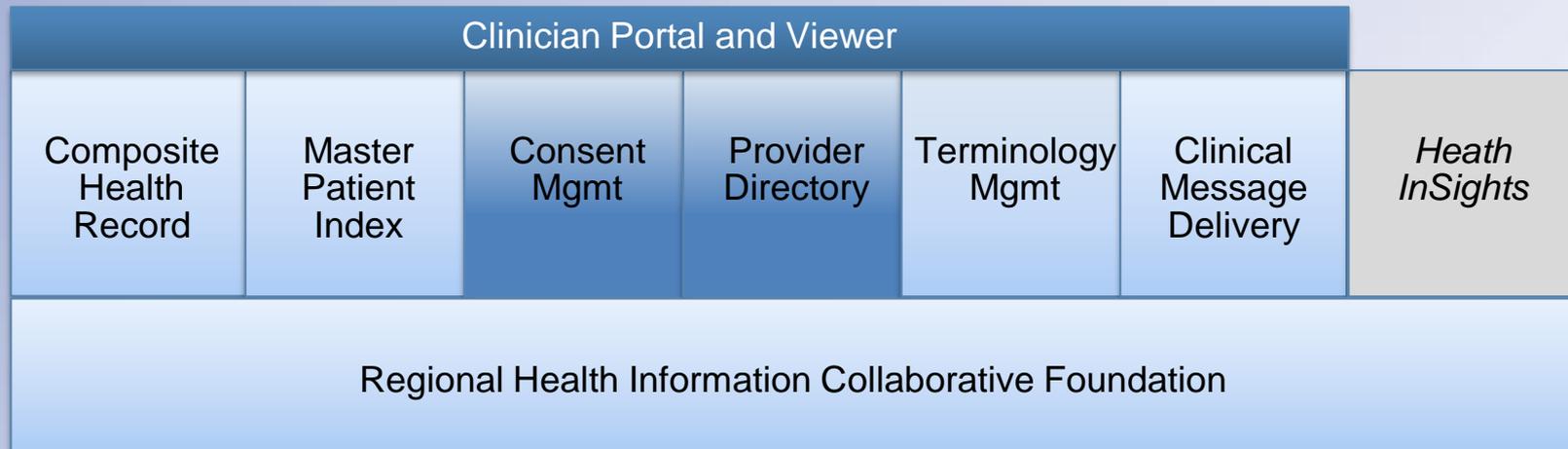
- The main **purpose** of a Health Information Exchange (noun) is to enhance health information exchange (verb).
- RHIC is **designed** as a series of core functionalities that work seamlessly and securely together.
- RHIC **provides** the functionality we need *now*, and the opportunity to evolve capabilities in the *future*
- RHIC supports **standards** include: IHE profiles, C-CDA/CDA/CCD, eHealth Exchange, Direct, HL7v2.x, HL7v3, DICOM, X12, and more...

# RHIC Components



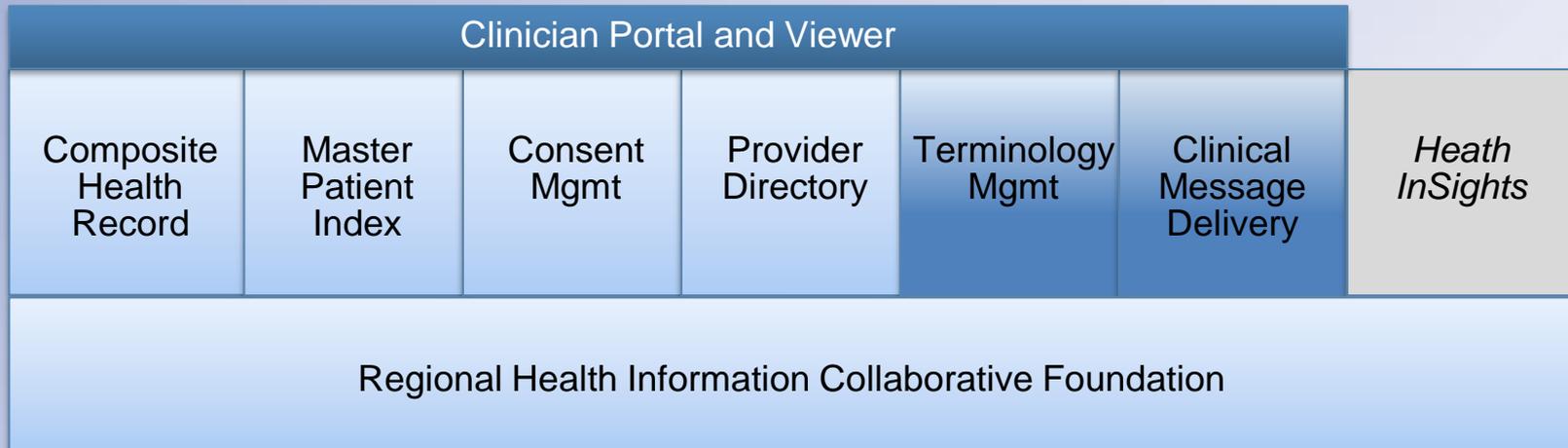
- **Composite Health Record** aggregates and normalizes clinical and demographic data from multiple EMRs and organizations into a consistent, *patient-centric* health record
- **Master Patient Index** manages patient identities and incorporates sophisticated matching technologies (algorithms) which can be used alone or in conjunction with other vendors' indexing and registry systems.

# RHIC Components



- **Consent Management** provides support for *defining* consent policies, *capturing* patient consent directives, and *enforcing* privacy policies whenever data is accessed
- **Provider Directory** ensures that the HIE can locate the correct providers and communicate event notifications, clinical summaries, and other content in the way the provider prefers

# RHIC Components



- **Terminology Management** enables maintenance and use of applicable terminology standards (i.e. LOINC, SNOMED, and ICD) to ensure semantic interoperability between systems.
- **Clinical Messaging** provides powerful capabilities for secure communication between people (e.g. a referring physician and a specialist) and between systems.

# Clinical Viewer Dashboard

Patient Record

[My Account](#)  
[Show Connection Details](#)

M

**Summary**

- Allergies & Alerts
- History
- Documents
- Lab Results
- Radiology Results
- Medications
- Vaccinations
- Conditions
- Procedures
- Procedures Non-Clinical
- Discharge Summaries
- Physical Exams
- Plan
- Encounters

**Allergies and Adverse Reactions**

Category	Allergen	Nature Of Reaction	Last Update	User
Propensity to adverse reactions to drug	Sulfa Antibiotics	Hives		
Propensity to adverse reactions to druo	Augmentin	Nausea And Vomiting		

**Diagnoses**

Abnormal weight gain (R63.5_t20)	...
Abnormal weight gain (R63.5_t20)	...
Follow-up (I10033_t24)	...
Encounter for screening for other disorder (Z13.89_t20)	...
Hyperglycemia, unspecified	...

**Laboratory Results**

CBC WITH AUTO DIFFERENTIAL	...	03/04/2016 00:00
B-TYPE NATRIURETIC PEPTIDE	...	03/04/2016 00:00
TSH	...	03/04/2016 00:00
HEMOGLOBIN A1C	...	01/03/2016 00:00
COMPREHENSIVE METABOLIC PANEL	...	01/03/2016 00:00

**Medications**

AMLODIPINE TAB 10MG	...	10	02/29/2016
Atenolol 100 Mg Po Tabs	...	100	02/25/2016
OMEPRAZOLE CAP 20MG (68462023110_t13)	...	20	02/25/2016
ATENOLOL TAB 100MG	...	100	02/25/2016
Chlorthalidone 25 Mg Po Tabs	...		02/17/2016

**Documents**

TELEPHONE EN	...	Pt notified.
TELEPHONE EN	...	Imtrc 3/7
TELEPHONE EN	...	----- Message from John R. War...
A\T\P Note	...	Pt also with symptoms of hemor...
A\T\P Note	...	Pt with weight gain. I'm not ...

**Radiology & Other Results**

XR CHEST 2 VW	...
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SAMARITAN HEALTH PLANS

# Barriers to Integrating Population Health into an HIE

- Regulatory and Compliance
- Lack of consistency in data formats and standard interoperability requirements
- Patient demographic information
- Patient consent - risks vs. benefits
- Introducing applications, procedures and rigor to organizations that are more focused on patients and their patient needs rather than process.

# Barriers to Integrating Population Health into an HIE

**Use Case – Integrating EMT data into a regional HIE**

**Community Partners**

City of Albany Fire Department

Regional Health Information Collaborative



InterCommunity  
Health Network CCO

# Use case – EMT and HIEs



This is **Joe** – Age 51

He is active and in good health.

No current health concerns.

Manages hypertension with medication (10+ yrs)



One day, Joe is playing wiffle ball with family and friends and becomes fatigued, out of breath and a little confused.



Joe's concerned daughter calls 911 and the EMS Team arrives quickly

# Use case – EMT



- EMS team records vitals, observations and collects limited demographic information.
- Joe is transported to the nearest Emergency Room Facility.



- Verbal exchange of information between EMS and ER Team



- EMS team sends a fax to ER within 8 hours to recap the event.
- After the event, EMS Team may review EMR notes if access is granted

# What if?

- What if the EMS Team was aware of recent medication changes, recent diagnosis or allergies?
- What if the EMS notes including vitals and observations, were immediately and electronically available to ER team?
- What if the patient's PCP or care coordination team was notified of the event?
- Would this have a positive affect on the Triple Aim (access, quality and cost)?
- What if....?

# Questions

