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# State of the State of HIT: Transformation 2.0 and Social Determinants of Health

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# Health System Transformation Results

## 1 Better health

CCO members who report better health: **↑13** percentage points  
(59% to 72%, 2011–2015)

## 2 Better care

Avoidable ER use in Oregon: **↓50** percent  
(2011–2016)

## 3 Lower costs

Taxpayers save: **\$2.2** billion  
(2012–2017)

# CCO 2.0 Focus Areas

CCO 2.0 policies build on Oregon's strong foundation of health care innovation and tackle our biggest health problems.



Improve the behavioral health system and address barriers to the integration of care



Increase value and pay for performance



Focus on the social determinants of health and health equity



Maintain sustainable cost growth and ensure financial transparency

# CCO 2.0 Will Firmly Establish VBPs as the Primary Method of Payment

Value-Based Payments (VBP) link provider payments to **improved quality and performance** instead of to the volume of services

CCO provider payments must increasingly be in the form of a VBP

**20%**

2020



**70%**

2024

CCOs must also develop new or expanded VBPs in five areas:

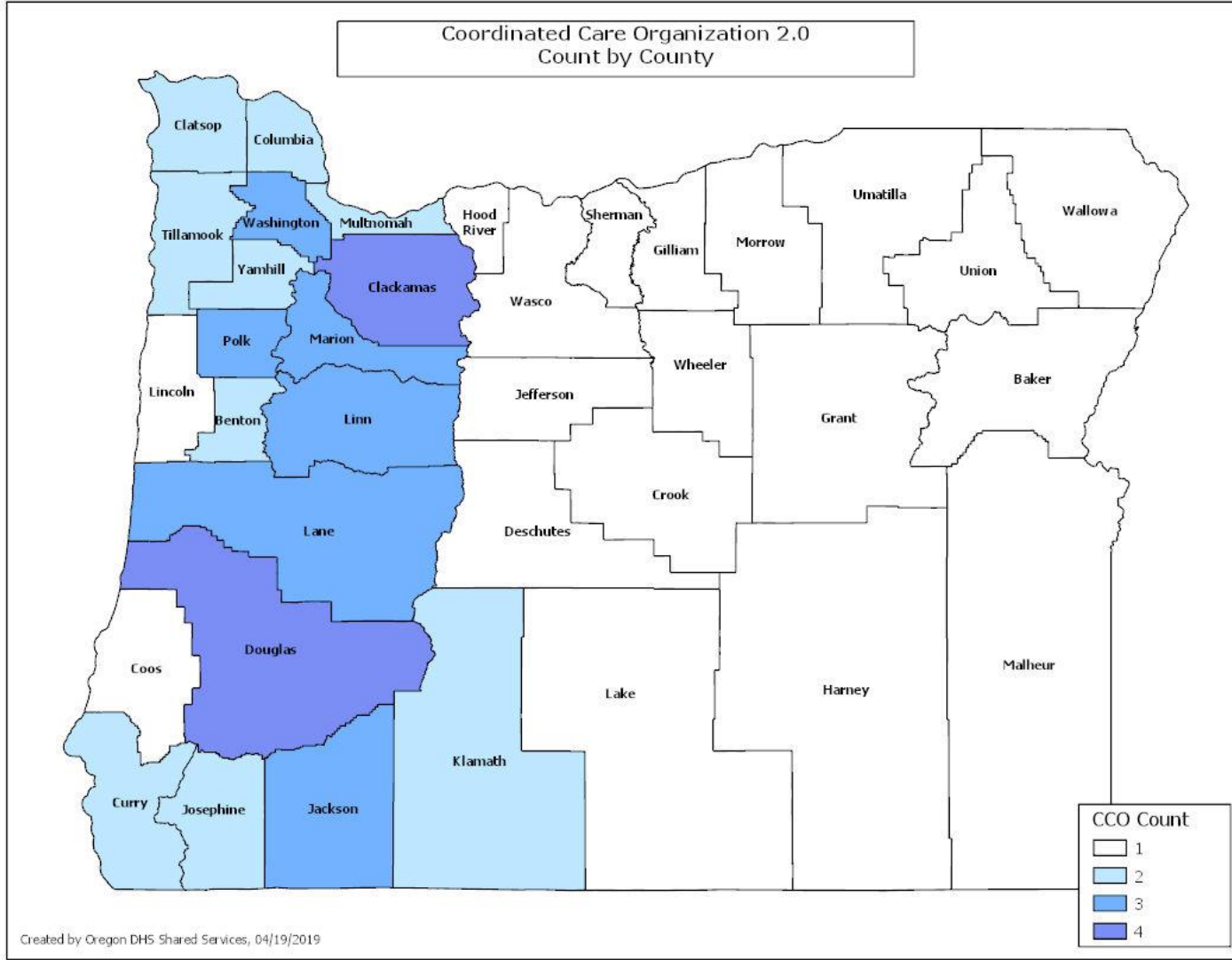
- Hospital care
- Maternity health
- Children's health
- Behavioral health
- Oral health

# Social Determinants of Health and Health Equity Policies

Social determinants of health and health equity policy strategies target improved health, bending the cost curve through:

- **Addressing the root causes of health issues**
  - SDOH-HE Capacity Building Bonus Fund
- **Aligning community priorities and streamlining efforts**
  - Shared Community Health Assessments/ Community Health Improvement Plans
- **Increasing smart workforce strategies**
  - Traditional Health Workers, such as Community Health Workers

# CCO 2.0 Applicants – count by county



See list of CCO 2.0 applicants and other maps:

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

# CCO 2.0 and HIT

New levers for accountability and new transparency into CCO HIT efforts

- HIT Roadmaps:
  - Participation in partnerships – HIT Commons
  - EHR support for physical, behavioral, oral providers
  - HIE support, including hospital event notifications
  - HIT for value based payment and population management

See Attachment 9 to CCO 2.0 RFA:

<https://www.oregon.gov/oha/OHPB/Pages/CCO2-0-RFA.aspx>

# Federal Changes to HIT

- 21st Century Cures Act
  - Defined information blocking, expanded applicability to providers, HIEs, networks, and defined monetary penalties
- CMS and ONC Improving Interoperability draft rules:
  - Changes to Certified EHR Technology: new core data set
  - Standards and requirements for APIs
  - Requirements for sharing provider information, event notifications, information blocking
- Trusted Exchange Framework and Common Agreement (TEFCA)

**Proposed rules:** <https://www.healthit.gov/topic/laws-regulation-and-policy/notice-proposed-rulemaking-improve-interoperability-health>

**TEFCA:** <https://www.healthit.gov/topic/interoperability/trusted-exchange-framework-and-common-agreement>



# US Core Data for Interoperability (USCDI)

## USCDI v1

### Assessment and Plan of Treatment

### Care Team Members

### Clinical Notes \*NEW

- Consultation Note
- Discharge Summary Note
- History & Physical
- Imaging Narrative
- Laboratory Report Narrative
- Pathology Report Narrative
- Procedure Note
- Progress Note

### Goals

- Patient Goals

### Health Concerns

### Immunizations

### Laboratory

- Tests
- Values/Results

### Medications

- Medications
- Medication Allergies

### Patient Demographics

- First Name
- Last Name
- Previous Name
- Middle Name (including middle initial)
- Suffix
- Birth Sex
- Date of Birth
- Race
- Ethnicity
- Preferred Language
- Address \*NEW
- Phone Number \*NEW

### Problems

### Procedures

### Provenance \*NEW

- Author
- Author Time Stamp
- Author Organization

### Smoking Status

### Unique Device Identifier(s) for a Patient's Implantable Device(s)

### Vital Signs

- Diastolic Blood Pressure
- Systolic Blood Pressure
- Body Height
- Body Weight
- Heart Rate
- Respiratory rate
- Body Temperature
- Pulse oximetry
- Inhaled oxygen concentration
- Pediatric Vital Signs \*NEW
  - BMI percentile per age and sex for youth 2-20
  - Weight for age per length and sex
  - Occipital-frontal circumference for children < 3 years old

# Nationally, Oregon is Ahead re: HIT Basics

Oregon ranks well above national averages for hospital and physician rates:

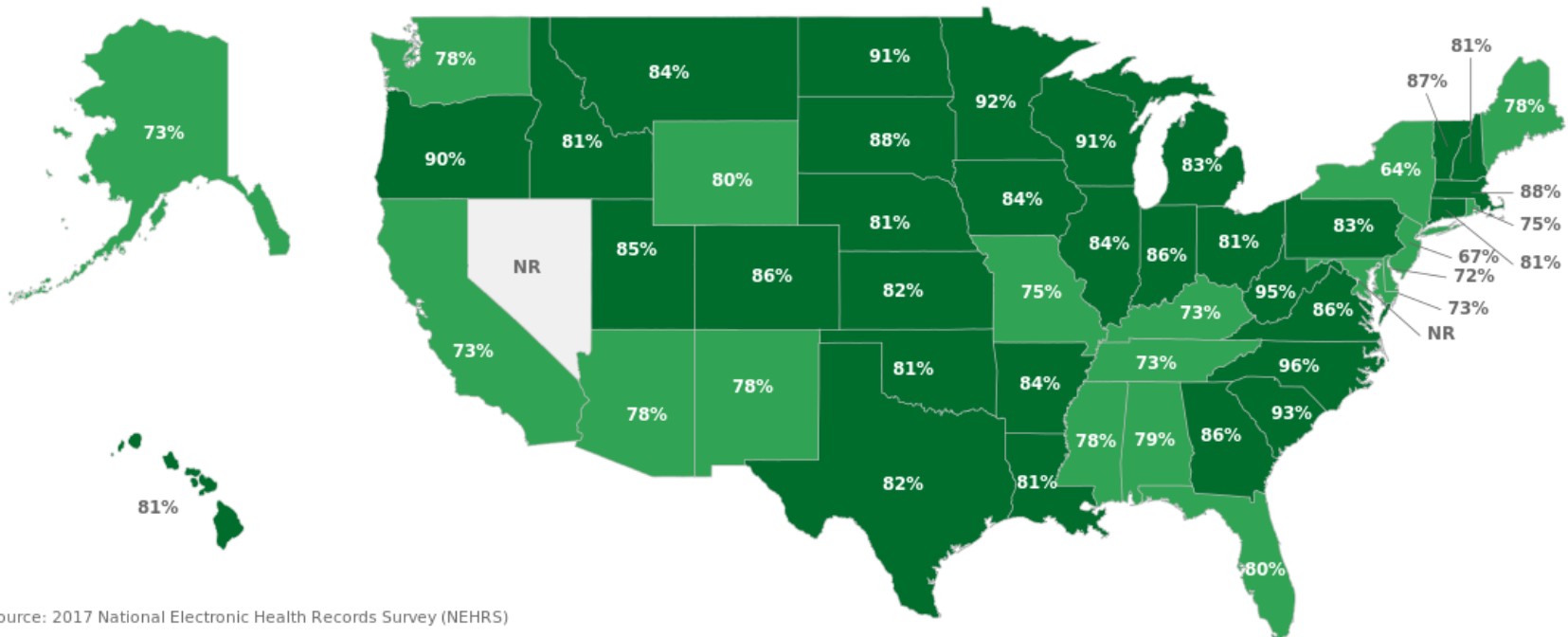
- EHR adoption
- Interoperability and data sharing
- Patient engagement through HIT

*For more information see ONC's Health IT Dashboard for data briefs and interactive tools: <https://dashboard.healthit.gov>*

# Physician Certified EHR Adoption: Oregon 90%

% of all Physicians that have Adopted Certified EHRs | National Avg = 80%

□ Not reliable □ 0 - 25 % □ 26 - 50 % □ 51 - 75 % □ 76 - 100 %

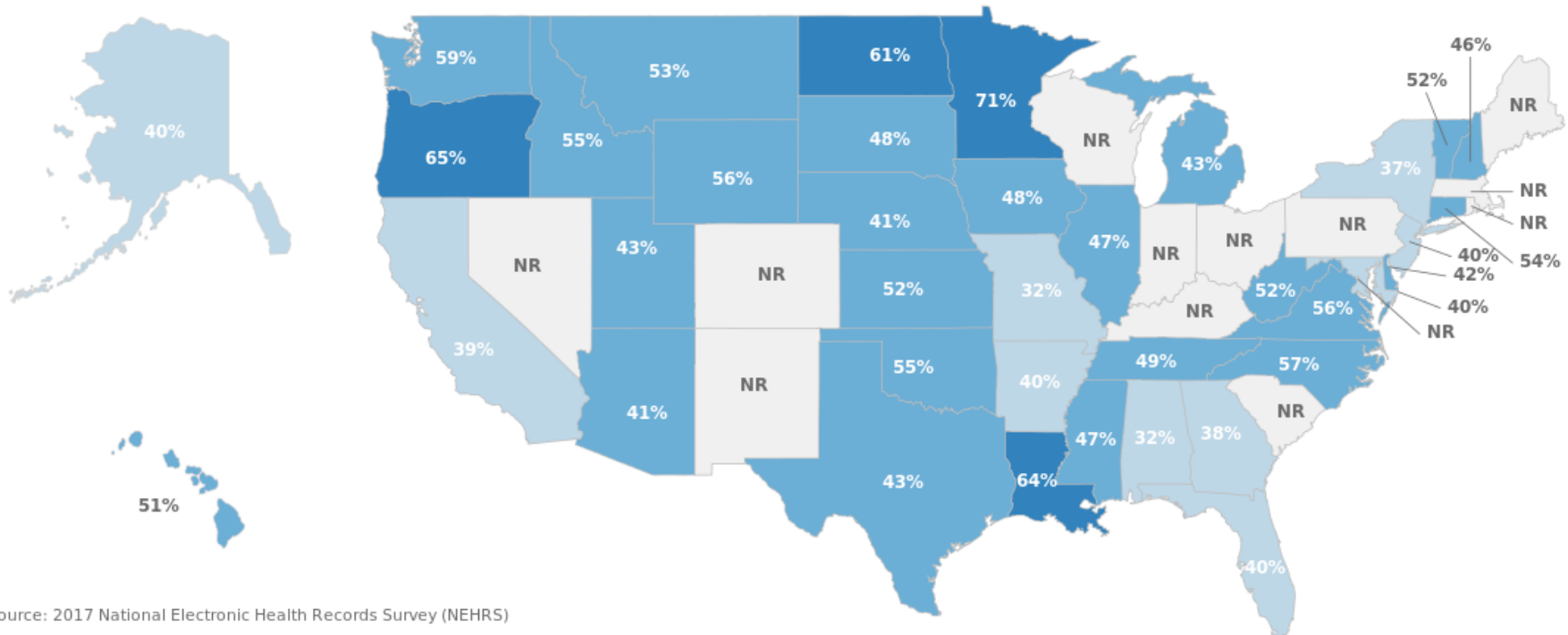


Source: 2017 National Electronic Health Records Survey (NEHRS)

# Physician Interoperability: Send or Receive - Oregon 65%

% of Physicians that Electronically Send or Receive Patient Health Information with Any Other Providers | National Avg = 46%

Not reliable 
  0 - 25 % 
  26 - 50 % 
  51 - 75 % 
  76 - 100 %



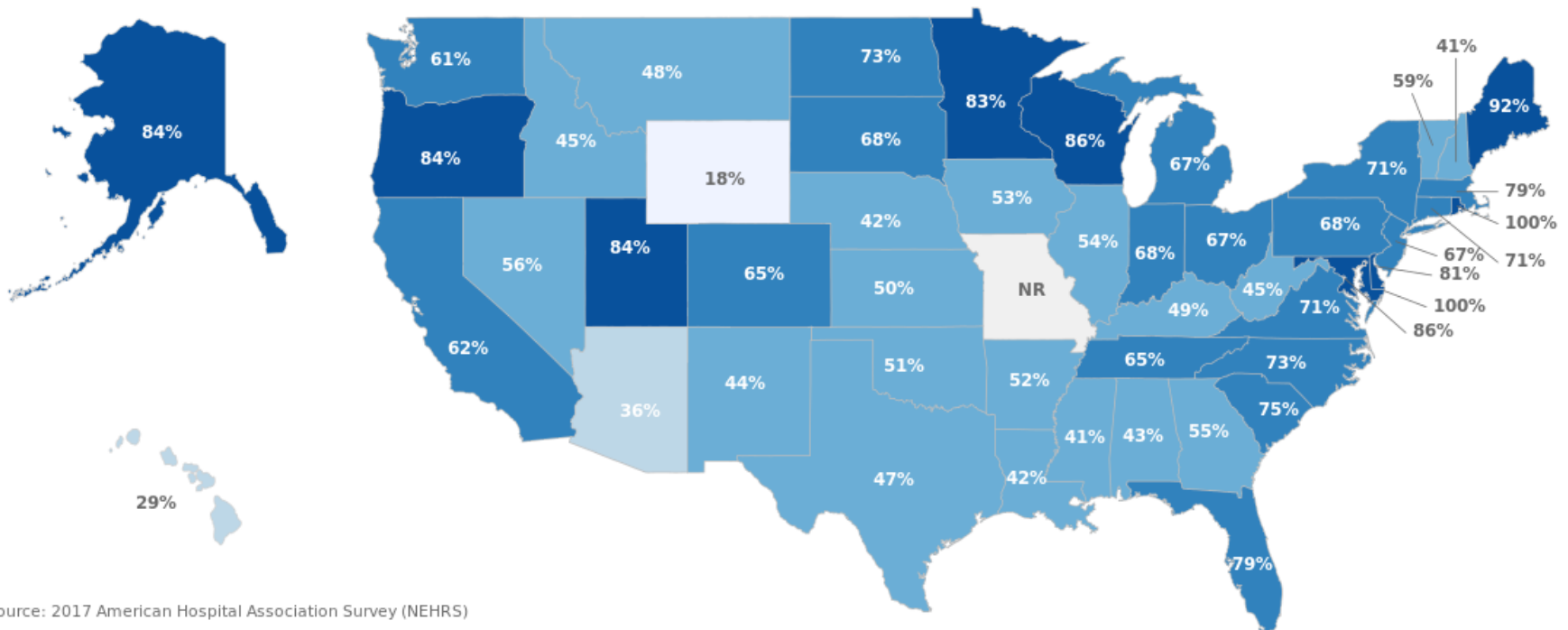
Source: 2017 National Electronic Health Records Survey (NEHRS)

# Hospital Interoperability: Query

## Oregon 84%

% of Hospitals that Electronically Find Patient Health Information from Outside Providers | National Avg = 61%

Not reliable 
  0 - 25 % 
  26 - 50 % 
  51 - 75 % 
  76 - 100 %

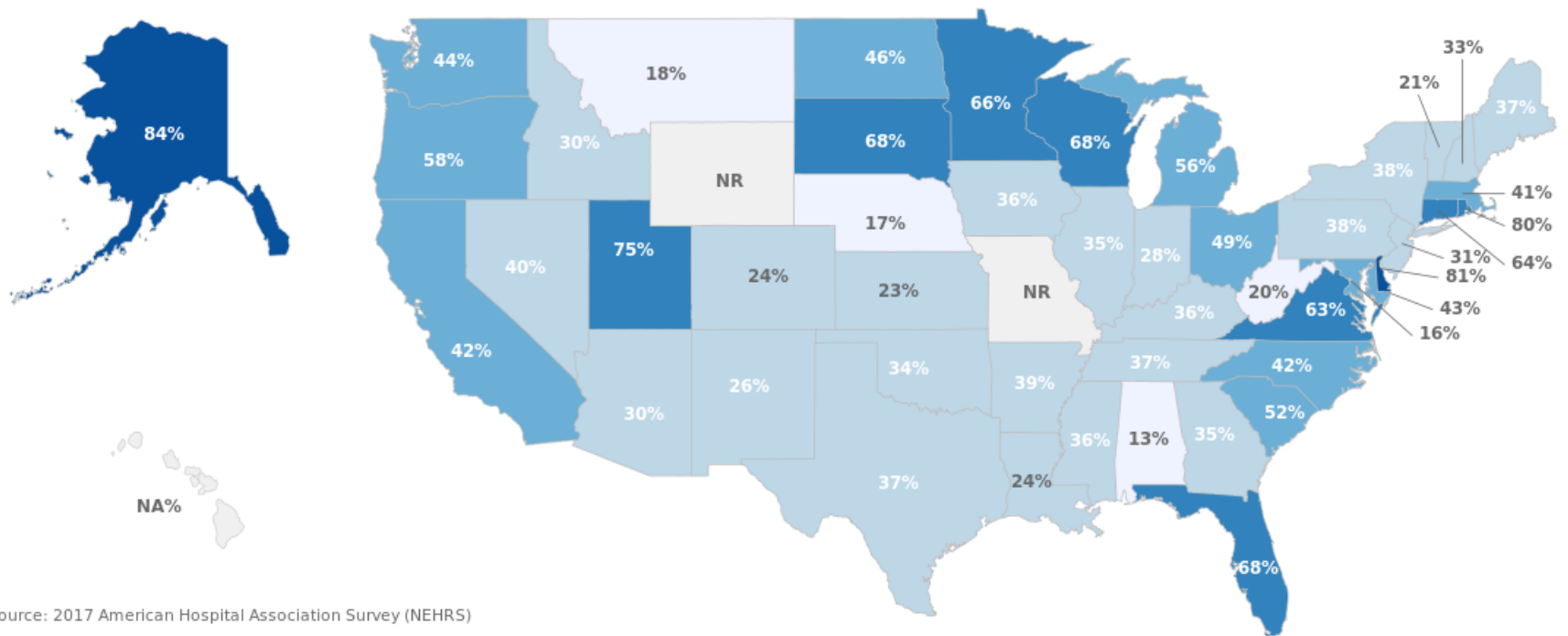


Source: 2017 American Hospital Association Survey (NEHRS)

# Hospital Interoperability/Integration: Oregon 58%

% of Hospitals that Electronically Send, Receive, Find and Integrate Patient Information from Outside Providers | National Avg = 41%

Not reliable 
  0 - 25 % 
  26 - 50 % 
  51 - 75 % 
  76 - 100 %



# Hospitals participate in multiple networks

## Nationally

- Most hospitals used multiple methods to send or receive summary of care records
- 71% of hospitals participate in a national network
- 69% participate in state/local/regional network

		Participate in National Network	
		Yes	No
Participate in State, Regional, and/or Local HIO	Yes	<b>51%</b>	<b>18%</b>
	No	<b>19%</b>	<b>12%</b>

National Network	% in 2017
Surescripts	61%
e-Health Exchange	25%
DirectTrust	24%
CommonWell	14%
Carequality	8%
Patient Centered Data Home	4%

SOURCE: 2017 AHA Annual Survey Information Technology Supplement

# HIE Adoption in Oregon

	#	% EDie or PreManage 2017 to 2018	% Regional HIE 2016 to 2018*	% Carequality 2017 to 2019
Hospitals	60	100% → 100%	37% → 37%	35% ↗ 43%
Patient Centered Primary Care Homes	653	47% ↗ 68%	27% ↗ 29%	38% ↗ 41%
<u>Other Key Clinic Types</u>				
CCO Key Clinics	443	62% ↗ 79%	23% ↗ 25%	44% ↗ 48%
Community Mental Health Programs	30	20% ↗ 43%	17% ↗ 23%	10% → 10%
Certified Community BH Clinics	14	43% ↗ 71%	21% ↗ 29%	7% ↗ 14%

\*Regional HIE data from Reliance eHealth Collaborative and RHIC (Regional Health Information Collaborative)



# Changes in State Landscape

- **Health information exchange continues to spread**
  - Some HIE networks are connecting to each other, forming an organic “network of networks”
- **HITOC Strategic Plan update for 2021**
  - During 2020, HITOC will develop, update, and engage with folks across Oregon to hear needs
- **State HIT/HIE efforts are addressing HITOC direction**
  - Several programs have recently launched
  - HIT Commons (public/private partnership) maturing
- **Alignment of interests in social determinants of health**

# State HIE Strategies and Efforts

Prescription Drug  
Monitoring Program  
Integration initiative

High-value data

Behavioral  
Health Info.  
Sharing Toolkit

Statewide  
information  
sharing  
"Network of  
Networks"

Support and Connect  
HIE Networks

HIE  
Onboarding  
Program

Oregon  
Provider  
Directory

EDie/  
PreManage

HIT  
infrastructure

Services

Clinical Quality  
Metrics  
Registry

HIT Commons

Shared governance

Policy, Strategy, Oversight,  
Transparency

HITOC



**Greg Van Pelt, President, Oregon Health Leadership Council**

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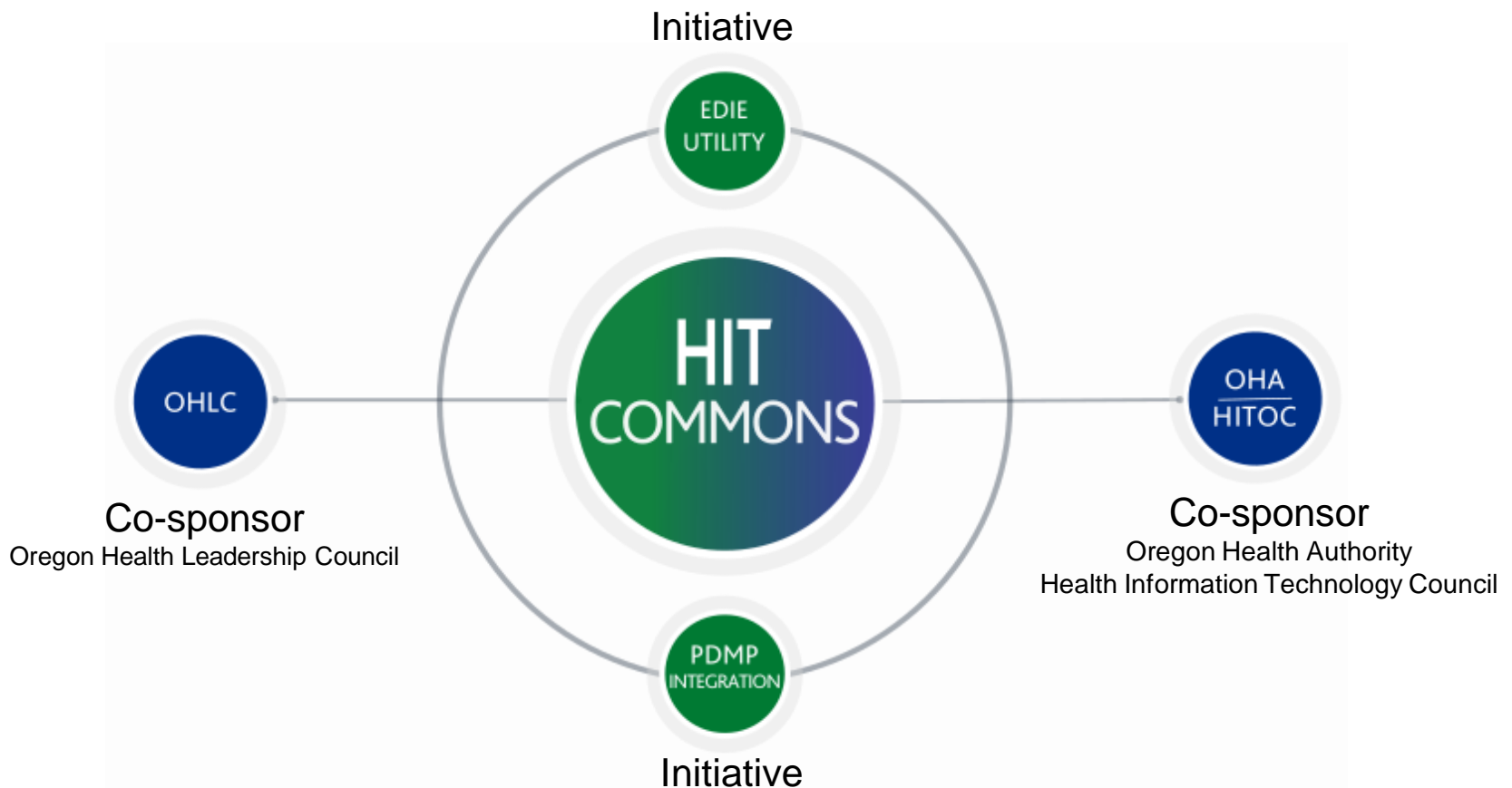
IN PARTNERSHIP WITH

**OREGON HEALTH**  
LEADERSHIP COUNCIL

**Health**  
Authority

# HIT Commons

A shared public/private governance partnership to accelerate and advance health information technology in Oregon

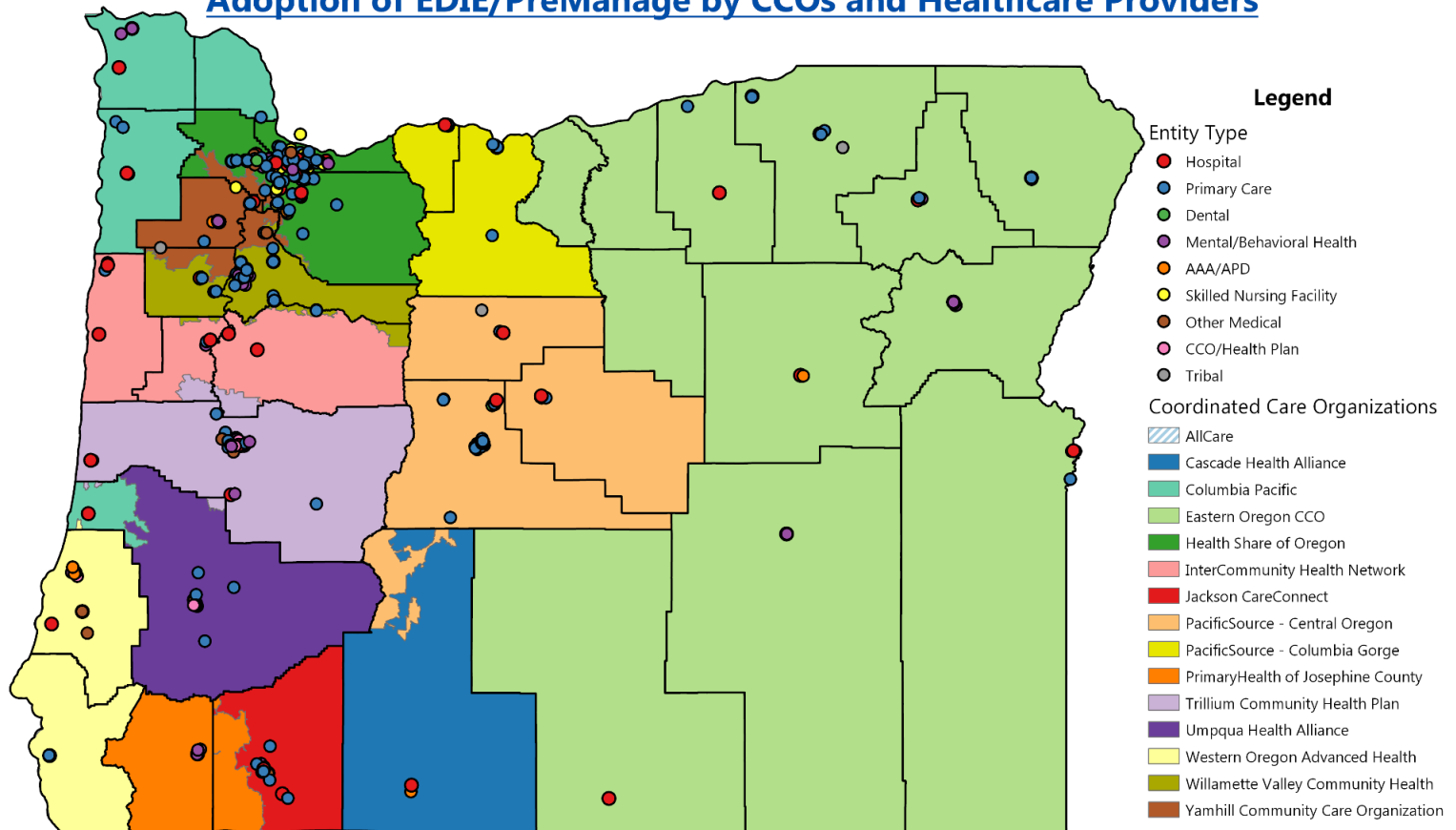


# Emergency Department Information Exchange and PreManage

- Emergency Department Information Exchange (EDie):
  - Provides real-time alerts and care guidelines to EDs for patients who have high utilization of hospital services
- PreManage is complementary product to EDie:
  - Expands real-time notifications to health plans and providers etc. to better manage their members and coordinate care
  - Capability to add brief patient specific information that can be viewed by all providers in the care continuum
- Financing model:
  - EDie: HIT Commons utility model. Costs are shared by OHA, health plans, CCOs, and hospitals
  - PreManage: health plan/payer subscription. Can extend to provider network

# Edie/PreManage Spreading Statewide

## Adoption of EDIE/PreManage by CCOs and Healthcare Providers



# EDie/PreManage: Delivering Results: Q4 2017 – Q3 2018

- 28% decrease in emergency department (ED) visits in the initial 90 days after a care guideline was created
- Hospital EDs that actively use EDIE and have identified workflows for addressing high utilizers have seen a reduction in ED high utilizer\* visits
  - 5% decrease in overall ED visits
  - 7% decrease in co-morbid mental health-related visits
  - 6% decrease in substance use disorder-related visits
  - 8% decrease in potentially avoidable visits

\*High utilizer = 5+ ED visits within 12 months.

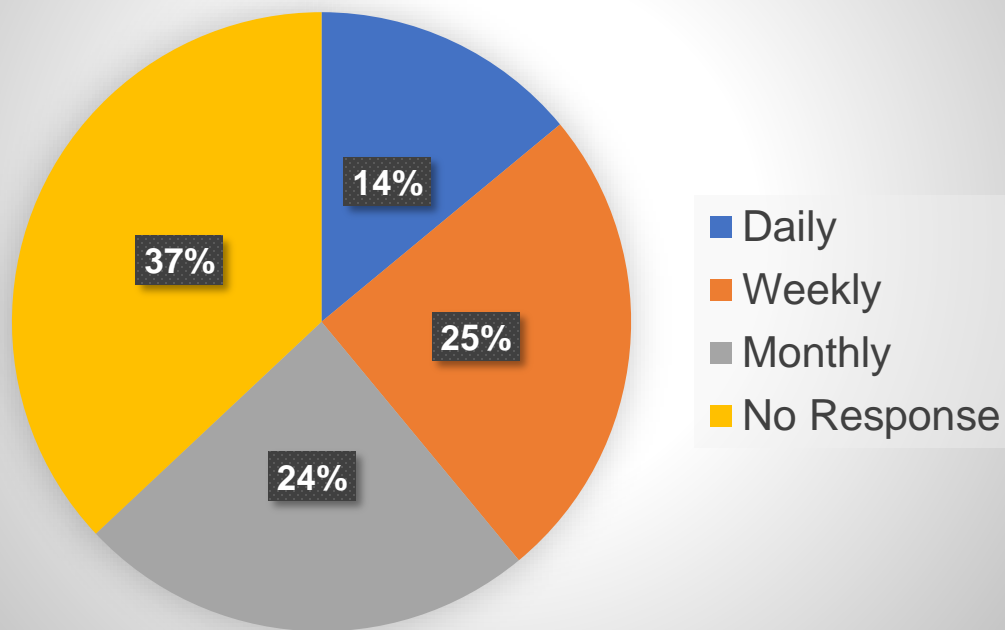
# Oregon Prescription Drug Monitoring Program (PDMP) Integration

- The PDMP Registry
  - Operated by OHA's Public Health Division
  - Collects prescription fill data for controlled substances (schedule II-IV)
  - Used by authorized prescribers and their delegates
  - Improve prescribing practices, patient safety, health outcomes
- Access to the state PDMP database has been available via a web link for several years
  - PDMP Integration gives access to the same data, but within the electronic health record
- July 2018, OHLC negotiated a statewide contract to provide PDMP integration to all health care organizations



# Why Integrated Access is Vital

How often do you check the PDMP?



## Top barriers to using the PDMP:

- Time\* (72%)
- Forgotten password (59%)
- Lack of delegates (51%)

\*Time = Prescriber's must leave workflow to log-in and access web portal.

# Benefits of PDMP Integration

- ✓ **Faster:** 'One Click' access from within your electronic workflow without needing to enter and search for your patient
- ✓ **Simpler:** Allows prescribers and pharmacists to retrieve PDMP data without the need to memorize passwords or log into a different system
- ✓ **On Demand:** Utilize PDMP data at the point of care, for help in prescription and clinical decision making

Up to **4 mins/patient**  
time savings reported



# PDMP Integration Funding

82%

of costs covered  
by federal &  
state funds

Remaining costs through  
shared funding model



Statewide subscription for PDMP integration included in HIT Commons annual membership fees\*.

\*Pharmacies pay \$50 per pharmacy site.

# PDMP Integration Highlights

## 2018 HIT Commons Success

### Metrics

#### Participation Goals

- ✓ **3,500** prescribers
- ✓ **2** pharmacy chains

## 2019 HIT Commons Success

### Metrics

#### Participation Goals

- 13,500** prescribers
- ✓ **3** pharmacy chains

## Live with integrated PDMP

- 6900+ Prescribers
  - 30 Emergency Departments
  - 74 Clinics/health care entities
- 570 Pharmacists
  - Walmart
  - Providence retail pharmacies (Oregon)
  - Albertsons

## In process

- 18 entities are awaiting implementation
- 101 organizations are in process
  - Providence, Legacy, OHSU, St Charles
  - Rite Aid pharmacies

# PDMP Integration Highlights

## 2018 HIT Commons

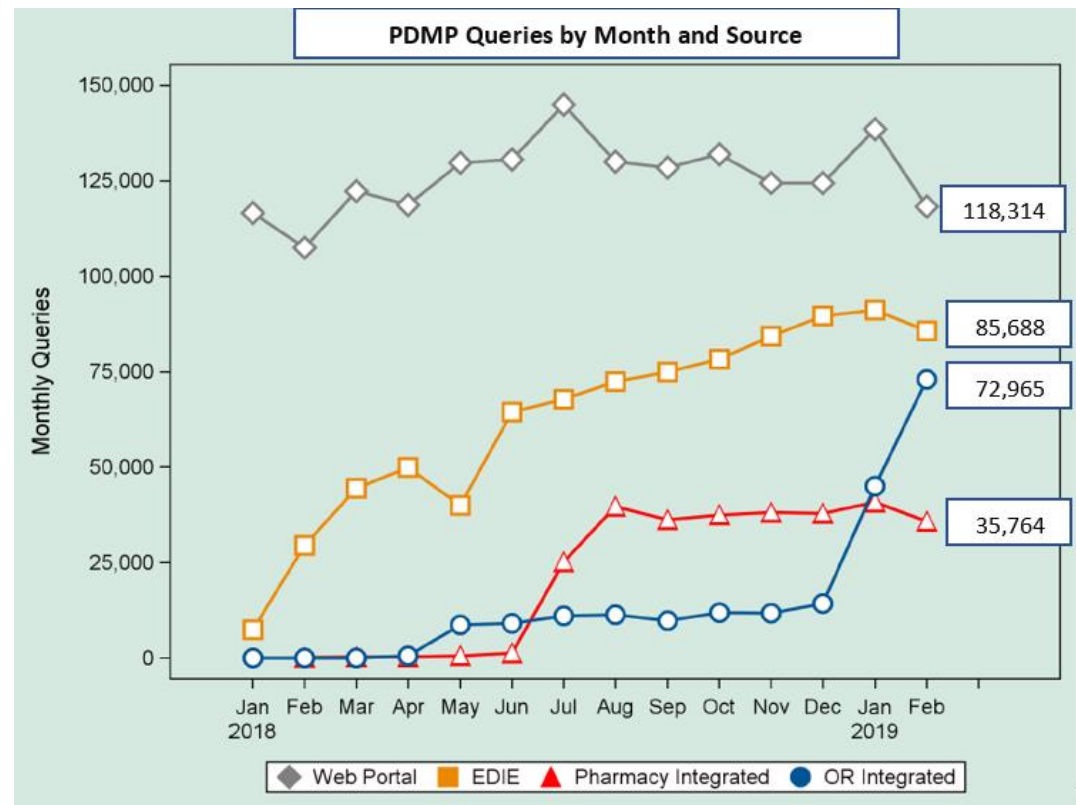
### Success Metrics

Increase PDMP use  
✓ 30% increase

## 2019 HIT Commons

### Success Metrics

Increase PDMP use  
✓ 25% increase



*\*Does not include out of state queries – currently connected to ID, NV, ND, KS, TX*



# Launching Thrive Local Kaiser Permanente's Social Health Program

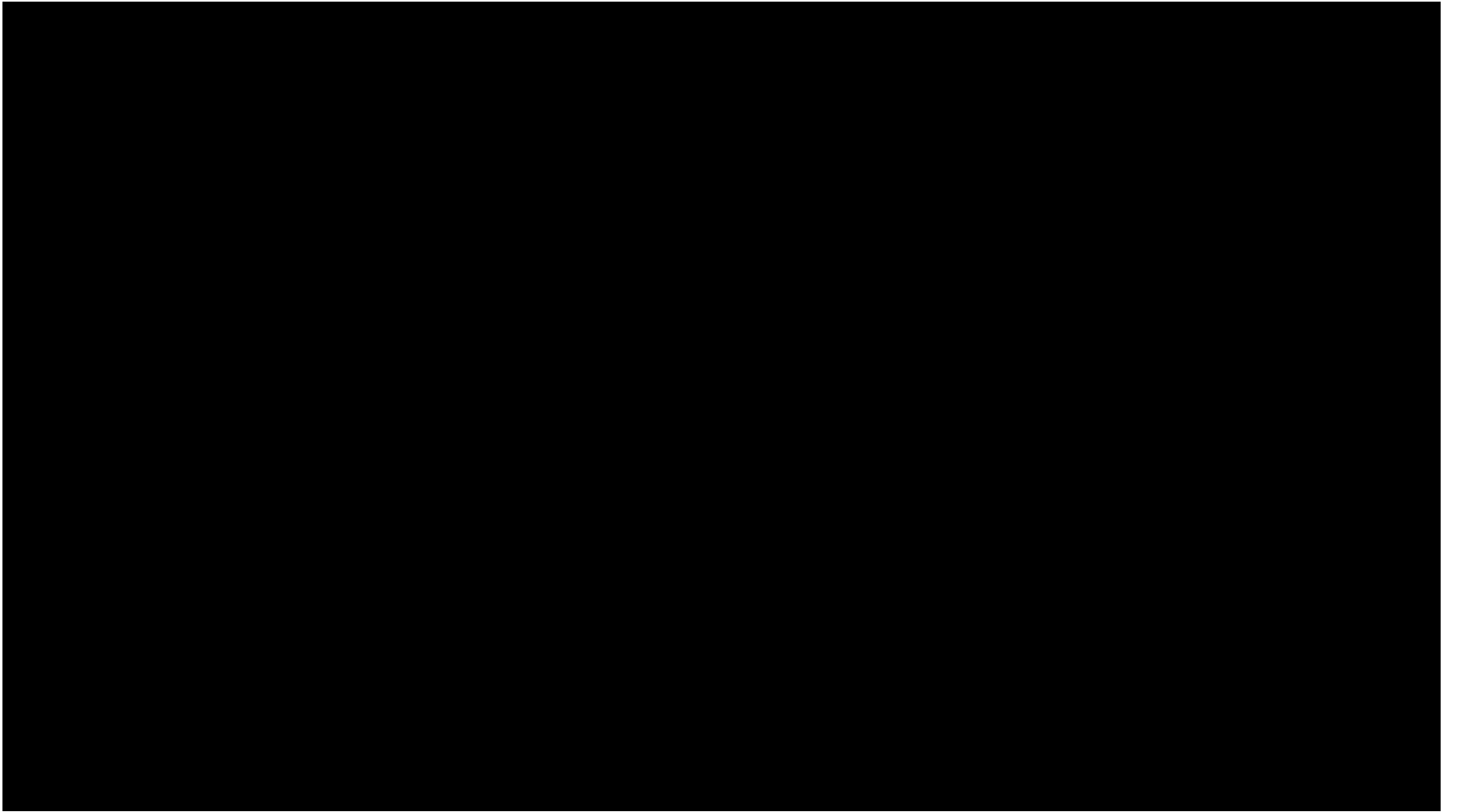
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*June 6<sup>th</sup>, 2019*

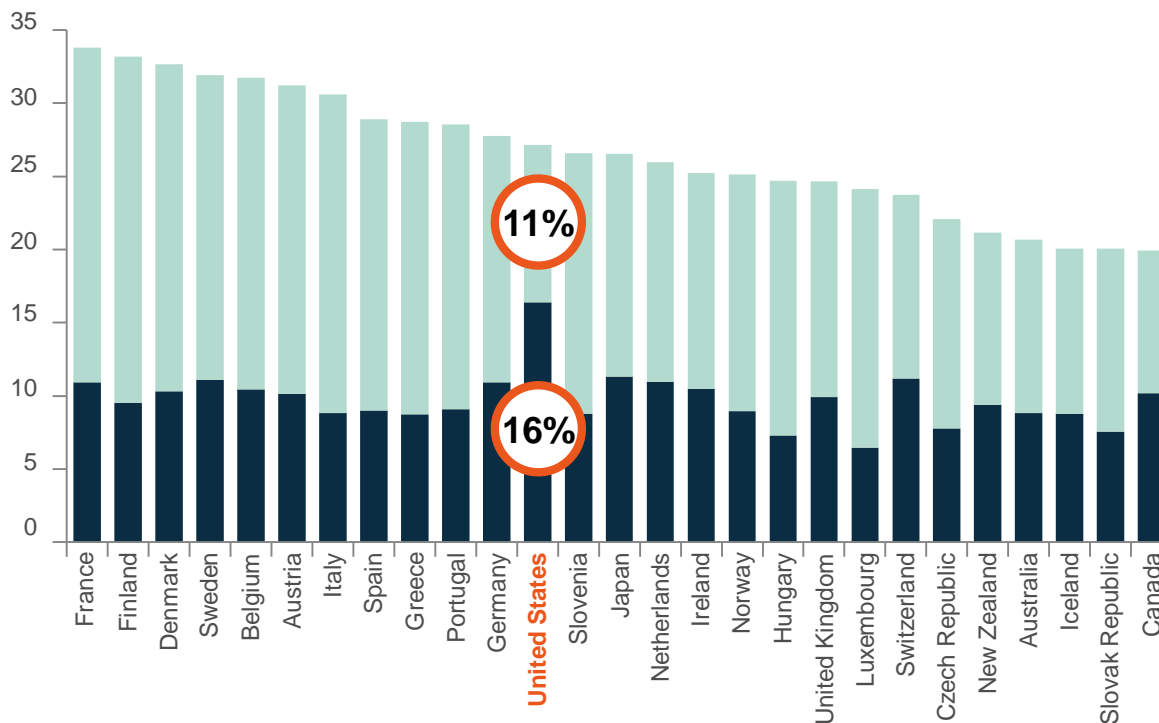
*Nicole Friedman, MS*



**KAISER  
PERMANENTE®**



# From *The American Healthcare Paradox*



Spending on Social and Health Programs by Country (2013)

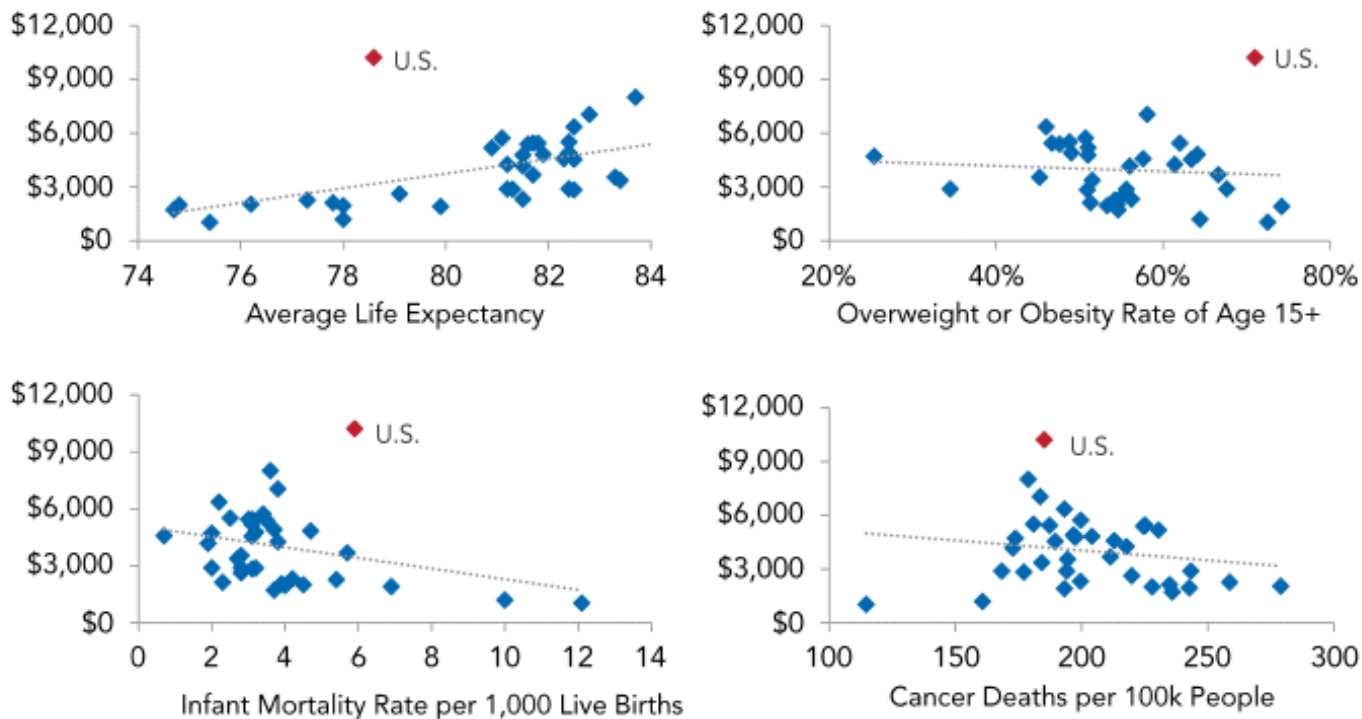
- Social service expenditure as % of GDP
- Health expenditure as % of GDP

Source: OECD, CDC, CMS



# Higher Spending $\neq$ Better Outcomes

## HEALTHCARE SPENDING PER CAPITA BY HEALTH OUTCOMES (DOLLARS)



SOURCE: Organization for Economic Co-operation and Development, *OECD Health Statistics*, June 2018. Compiled by PGPF

NOTE: Data are for 2017 or latest available for all OECD countries.

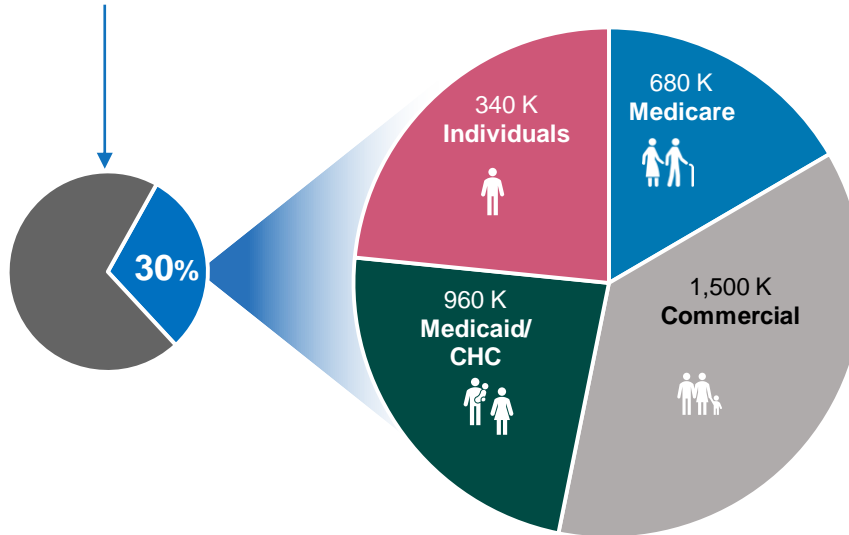
© 2018 Peter G. Peterson Foundation

[PGPF.ORG](http://PGPF.ORG)

# Many Members Struggle Financially



11,500,000 total KP members



A total of  
**3,480,000**  
or 30% of KP  
members at or  
below 250%  
federal poverty  
level

*\*Reflects a 2018 estimate; WA not included*

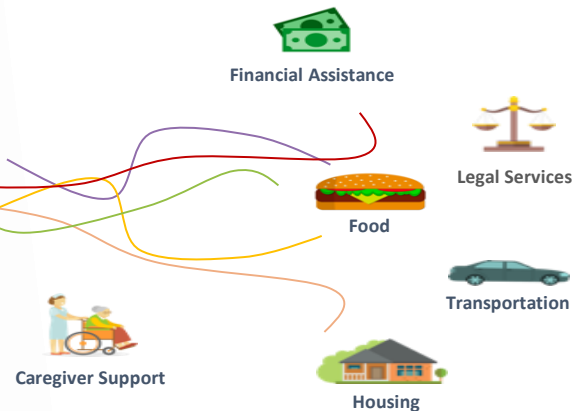
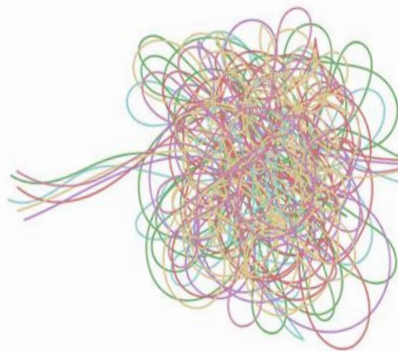
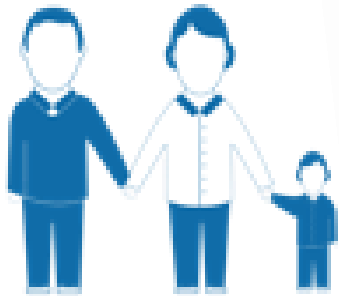
# Current Factors Impacting the Social Determinant Landscape

## Market Factors

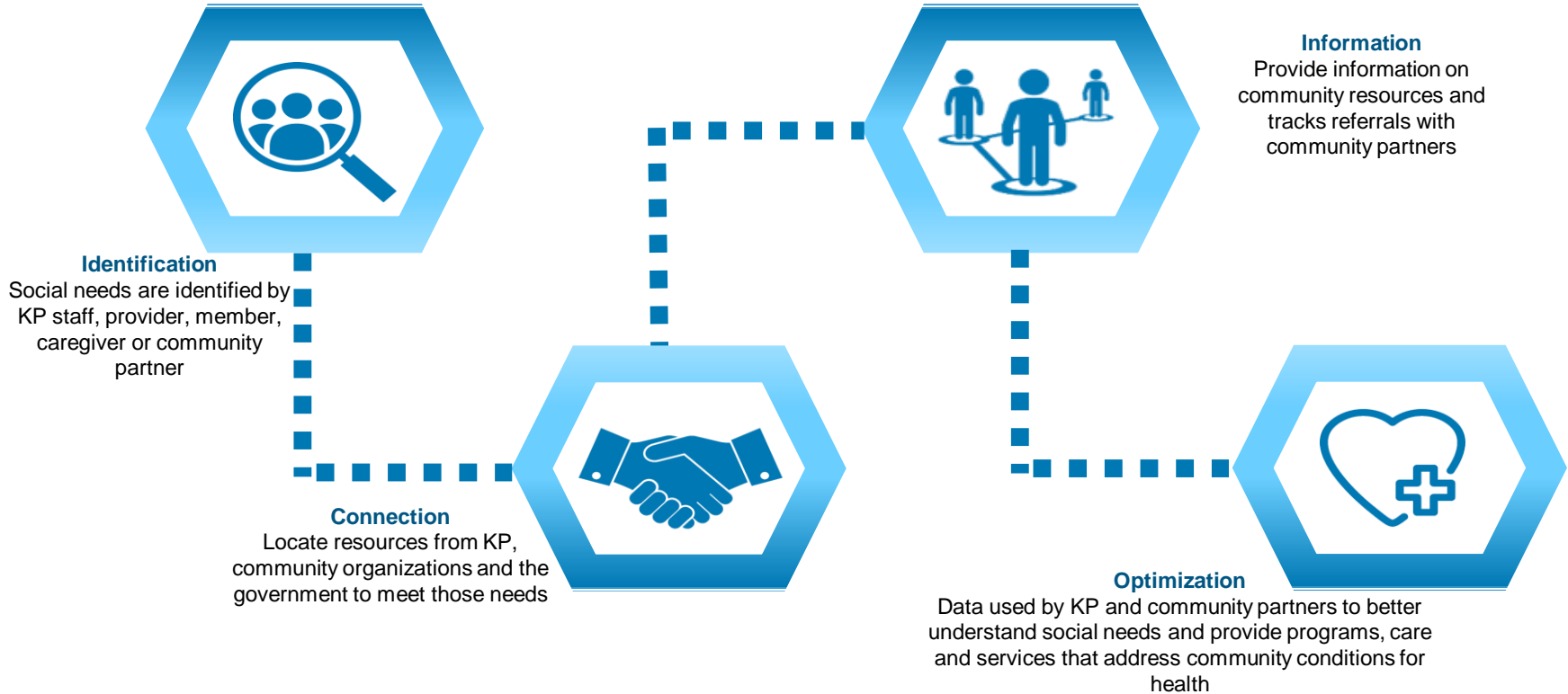
- Affordability
- Efforts by competitors
- CMS regulations
- Emerging evidence
- EPIC enhancements

## Internal KP Factors

- No standardized approach
- Reactive
- Medicalize social needs
- KP staff not empowered
- Not leveraging community



# Creating Social Care



# Introducing Kaiser Permanente's new Thrive Local

## Resource Directory



Online platform allows users to search and filter for community resources.

Resources updated regularly by contracted vendor

## Community Partner Networks



Community Based Organizations (CBOs) outside of KP use vendor platform

KP users send and track referral to Community Partner network

## Technology Platform



Closed loop referrals

Bidirectional exchange of information between KP and Community Network

Integration of KP HealthConnect and kp.org

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Integrated clinical and social care, supported by data integration and partnership with community

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# Thrive Local will be used by multiple areas within Kaiser Permanente Operations



\* Care Management is KP created programs to manage patient's who need specific chronic care i.e. Diabetes, Asthma, Heart, Cancer, Bariatrics, Chronic Pain, Complex Care, etc.

# Thrive Local Requirement Mapping

Capabilities/ Business Requirements	Unite Us	EpicCare	Epic Coordinated Care Mgmt Module	Epic Healthy Planet	Epic Healthy Planet Link
Licensed Already by Kaiser Permanente	<b>IN PROGRESS</b>	<b>YES</b>	<b>NO</b>	<b>YES</b>	<b>NO</b>
Social Determinants of Health Assessment	✓	Available for regional rollout late 2019	✗	✗	✗
Social Determinants of Health Tracking	✓	Available for regional rollout late 2019	✗	✗	✗
Resource Data Creation & Maintenance	✓	✗	✗	✗	✗
Community Partner Network* Creation & Maintenance	✓	✗	✗	✗	✗
Resource Directory	✓	✗	✗	Provides a directory container which requires content from a 3 <sup>rd</sup> party vendor	✗
User Profile Administration	✓	✓	✓	✓	✓
Decision Support (i.e. eligibility)	✓	✗	✗	✗	✗
Resource Recommendations	✓	✗	✗	✗	✗
Resource rating and comment	✓	✗	✗	✗	✗
Taxonomy Coding	✓	✗	✗	✗	✗
Closed Loop referrals with Community Partner Network	✓	✗	Available for regional rollout late 2019	Available for regional rollout late 2019	Available for regional rollout late 2019
Inter-network referrals (i.e. from community partner to another**)	✓	✗	✗	✗	✗
Portal for Community Partner Network	✓	✗	✗	✓	✓
Public Access	✓	✗	✗	✗	✗
Secure Email/ Text Communication	✓	✗	Available for regional rollout late 2019	✗	✗
Reporting	✓	✗	Available for regional rollout late 2019	✓	✗
Data Management	✓	✗	Available for regional rollout late 2019	✓	✗
Integration with Epic	✓ Epic App Orchard	N/A	N/A		

Legend: Green - Exists today, Yellow - future release, Unplanned - Epic App Orchard, \*Community Partner Networks are groups of \*\*community-based organizations (CBOs) in a given geographic area. Items in Green box are not included in this business case

# Key Benefits

## For Members



Reliable referrals to organizations that can address members' most pressing needs



Help navigating complex systems



Improved experience of care due to built-in capabilities for referral and feedback



Improved health and well-being

## For Communities



More effective and efficient referrals among community-based organizations



More revenue from public and private sources through referral volume and proof of impact



Increased organizational capacity through more targeted referrals



Community-wide analysis to inform policy, investment decisions and community advocacy

## For Kaiser Permanente



Improved satisfaction among frontline providers



Improved performance on health outcomes, member well-being, membership growth and retention



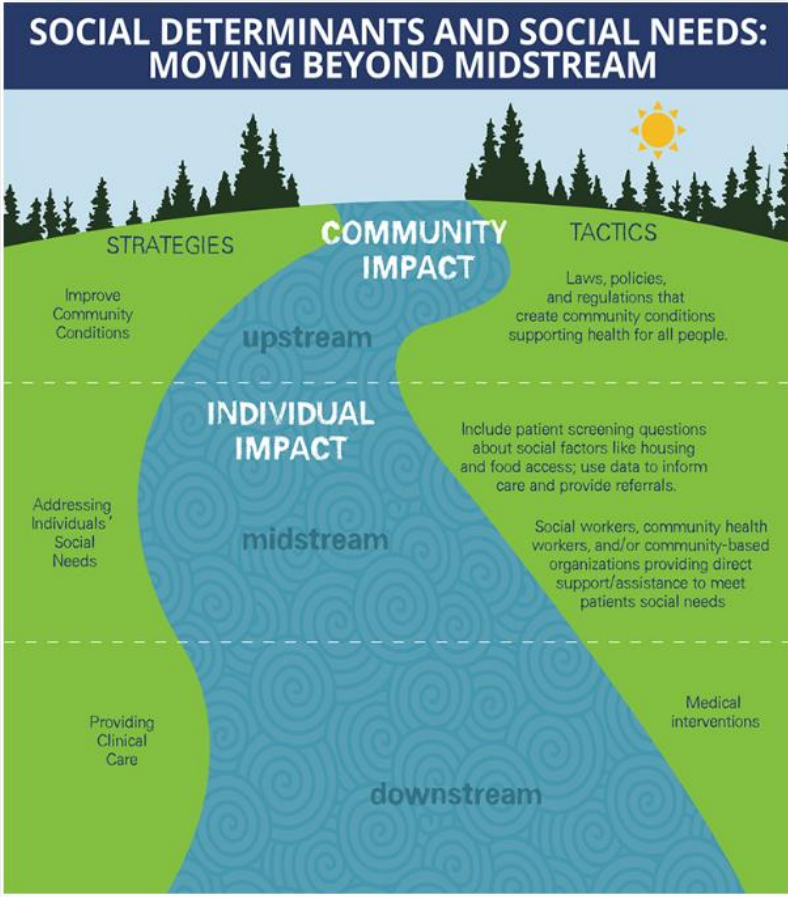
Reduced utilization and total cost of care




Expanded KP leadership in understanding and addressing social needs within our community



# Moving from Person, to Population, to Policy



A night sky with a bright starburst in the upper left quadrant and silhouetted mountains at the bottom. The text is overlaid on the right side of the image.

Action without vision is only  
passing time, vision without  
action is merely daydreaming,  
but vision with action can  
change the world.

*-Nelson Mandela*

# HIT Commons Considering - What is Needed?

## Oregon Community Information Exchange

### Multidisciplinary Community Partners Network

- Resource Directory—
  - Serves as a data repository of shared community resources and
  - Connects health care, human and social services partners in real-time to improve the health and well being of communities
- Integrated Technology Platform—
  - Supports closed loop referrals and bidirectional exchange of information

## Exploring the HIT Commons' Potential Role

- HIT Commons has a broad stakeholder base and history of leveraging needed technology platforms in a utility-type model, where all contribute and all benefit
- HIT Commons Governance Board has approved staff work to explore what role HIT Commons could play
- HIT Commons role(s) could include leading implementation of a statewide network platform and/or governance, convening and adoption, and supporting effective use of the network

# Oregon Community Information Exchange: Next Steps

- Environmental Scan
  - Gather information and synthesize projects and experiences of other communities
  - Interview key stakeholders in Oregon
- Align with OHA work on SDoH
- Develop a proposal to present to HIT Commons Board later this year

Questions? Contact [HITinfo@hitcommons.org](mailto: HITinfo@hitcommons.org)

**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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