2022 Health IT Report to Oregon's Health IT Oversight Council (HITOC)

HITOC Education Session

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Oregon Health Authority - Office of Health Information Technology

EDUCATION SESSION OUTLINE

- Introduction to the 2022 Health IT Report to Oregon's Health IT Oversight Council
- Overview of EHR Data Brief
- Overview of HIE Data Brief
- Questions

REPORT CONTEXT

- HITOC deliverable; updated 2019 report
- Based on currently available data
  - Data limitations
  - CCO Roadmap data collection requirement
- Additional resource documents
  - *Health Information Exchange Overview*
  - *HIE in Oregon: A Tale of Two Worlds*
  - *Office of Health IT Programs and Initiatives*
  - *2017 Behavioral Health HIT Scan and Report and the Behavioral Health HIT Workgroup Recommendations*
  - *CIE Issue Brief*; OHA's *CIE Overview* and *CIE Workgroup* websites
  - *2021 CCO HIT Roadmap* Summaries: Supporting EHR Adoption, Supporting HIE

REPORT OVERVIEW

Health IT information has been compiled across a variety of sources to summarize Oregon's HIT landscape. This report updates the 2019 report and includes:

Electronic Health Records (EHR) Data Brief
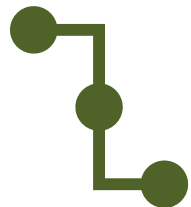
Health Information Exchange (HIE) Data Brief

An executive summary with a high-level overview of the landscape

Key concepts for Oregon

Data summarizing what is known about Oregon's HIT environment

Considerations for HITOC

Includes information for PHYSICAL, BEHAVIORAL, and ORAL health providers.

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CENTERING HEALTH EQUITY

- Health equity is a priority for Oregon
- Health IT supports OHA's strategic goal of eliminating health inequities by 2030
  - EHR adoption is foundational
  - HIE supports care coordination for vulnerable populations
  - Community Information Exchange (CIE) can help eliminate barriers and more efficiently connect people to resources
  - HIE and CIE support individuals transitioning across systems
- House Bill 4150 (2022)
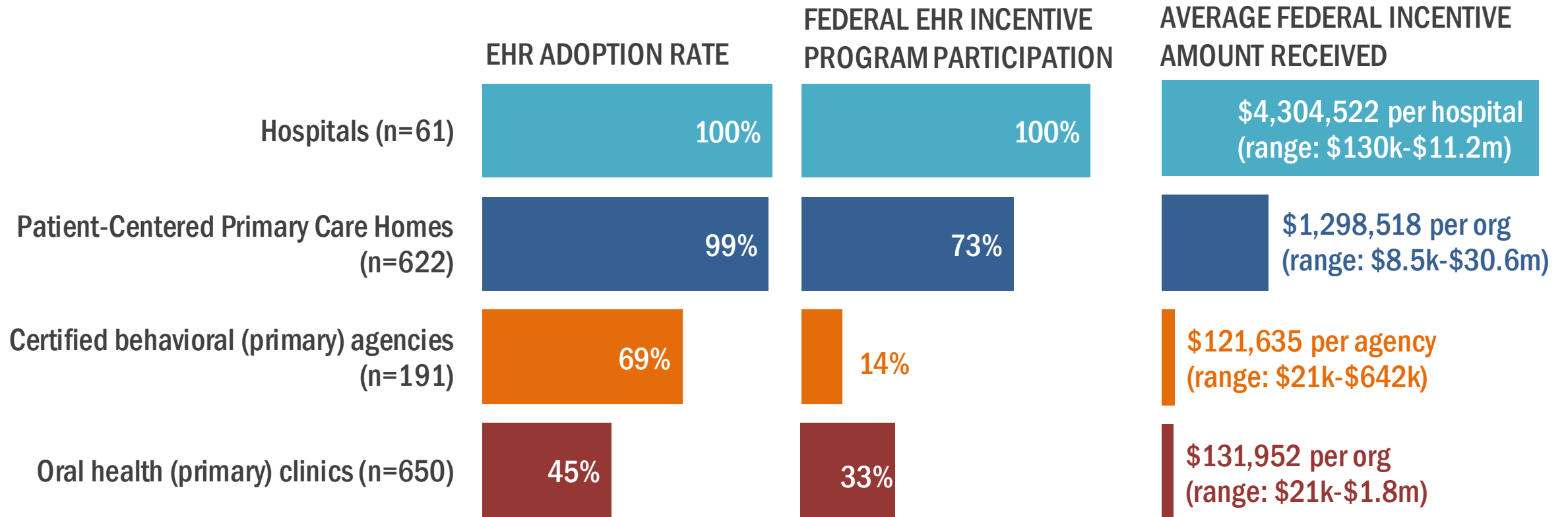 - Directs HITOC to convene a group to explore options for statewide CIE

OREGON HIT DATA BRIEF: ELECTRONIC HEALTH RECORDS

Oregon's health system transformation relies on health IT, and electronic health records (EHRs) are the foundational health IT tool.

- EHRs allow providers to electronically collect, store, and use clinical information, which helps providers:

  - participate in information sharing and care coordination

  - contribute clinical data for quality reporting and population health efforts

  - engage in value-based payment arrangements

- EHRs also collect other data, including screening, assessment, and demographic information.

- EHRs can help providers share information with patients, their families, and their caregivers.

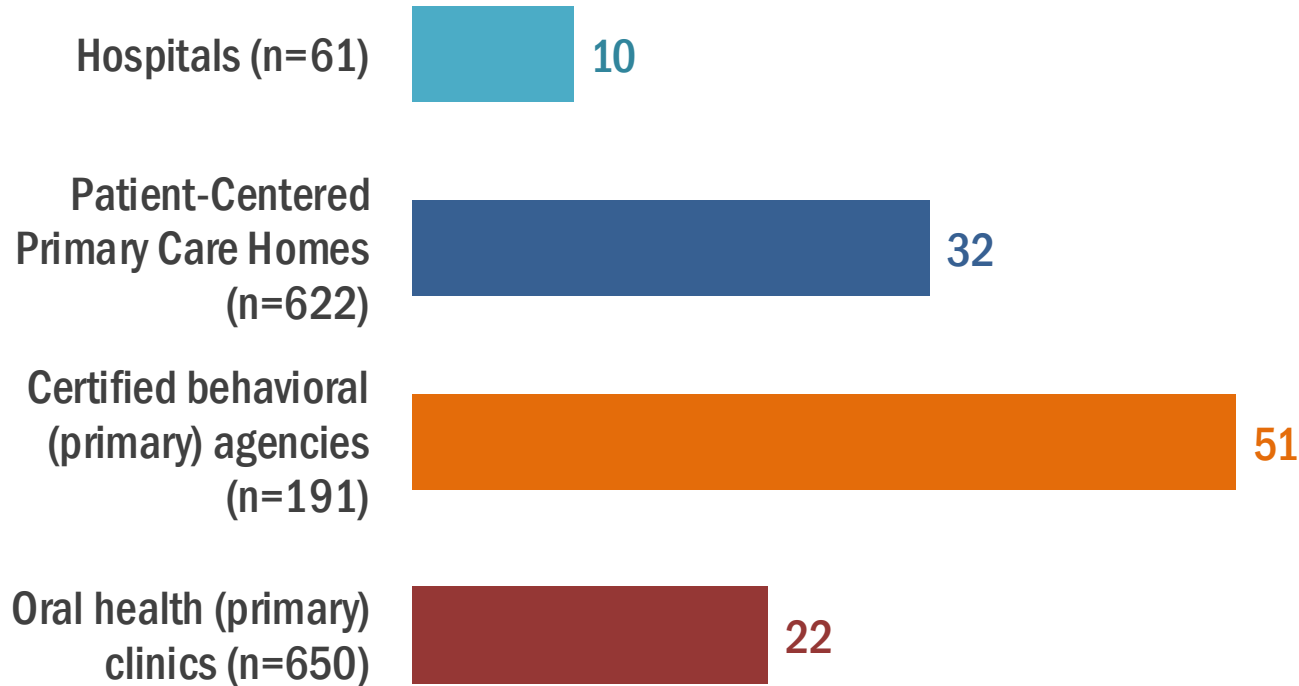# OREGON EHR ADOPTION IS VERY HIGH OVERALL, BUT DIGITAL DIVIDES EXIST.

	EHR ADOPTION RATE	FEDERAL EHR INCENTIVE PROGRAM PARTICIPATION	AVERAGE FEDERAL INCENTIVE AMOUNT RECEIVED
Hospitals (n=61)	100%	100%	$4,304,522 per hospital (range: $130k-$11.2m)
Patient-Centered Primary Care Homes (n=622)	99%	73%	$1,298,518 per org (range: $8.5k-$30.6m)
Certified behavioral (primary) agencies (n=191)	69%	14%	$121,635 per agency (range: $21k-$642k)
Oral health (primary) clinics (n=650)	45%	33%	$131,952 per org (range: $21k-$1.8m)

Note: 'Primary' behavioral and oral health entities are those that are unaffiliated with a larger physical health organization

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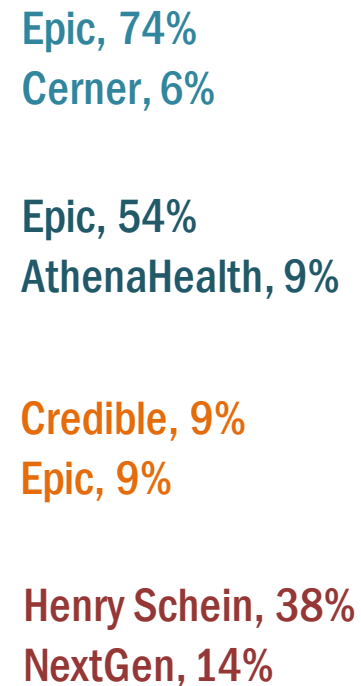
OREGON EHR ADOPTION IS VERY HIGH OVERALL, BUT DIGITAL DIVIDES EXIST.

NUMBER OF DIFFERENT EHR VENDORS

Provider Type	Count
Hospitals (n=61)	10
Patient-Centered Primary Care Homes (n=622)	32
Certified behavioral (primary) agencies (n=191)	51
Oral health (primary) clinics (n=650)	22

TOP EHR VENDORS

Hospitals:
Epic, 74%
Cerner, 6%

Patient-Centered Primary Care Homes:
Epic, 54%
AthenaHealth, 9%

Certified behavioral (primary) agencies:
Credible, 9%
Epic, 9%

Oral health (primary) clinics:
Henry Schein, 38%
NextGen, 14%

EHR VENDORS THAT OFFER 2015 CEHRT PRODUCT

- Hospitals: 100%
- Patient-Centered Primary Care Homes: 87%
- Certified behavioral (primary) agencies: 46%
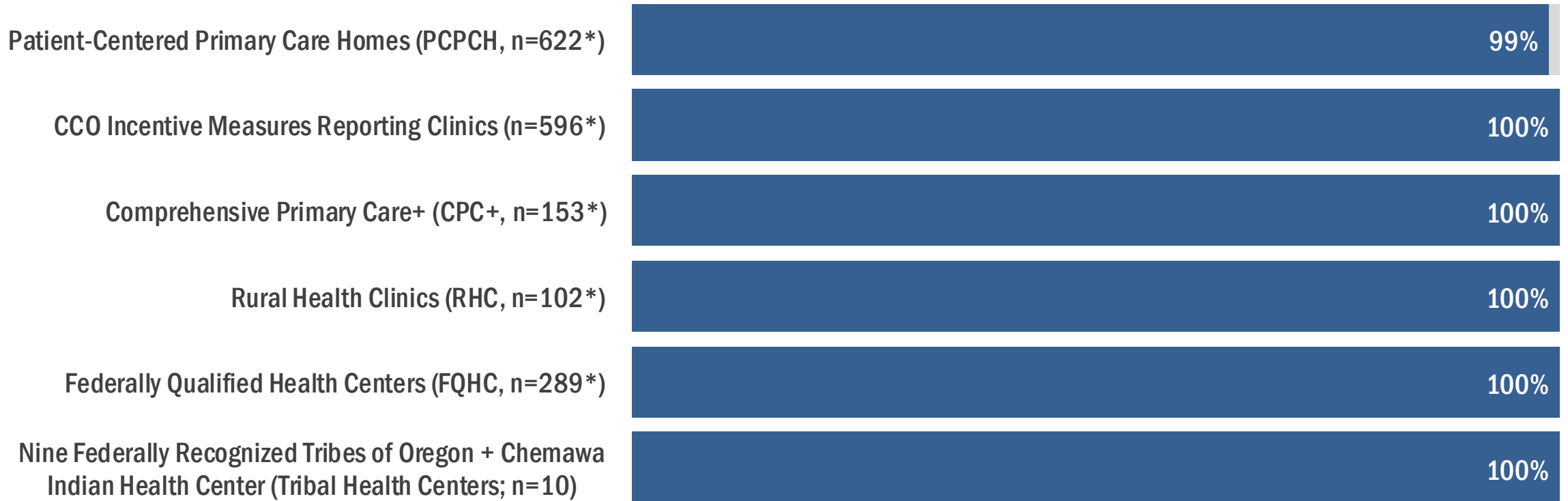- Oral health (primary) clinics: 18%
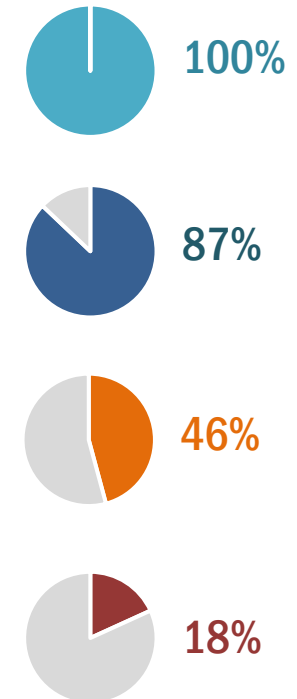
There are more than 145 EHR products in use across provider types.

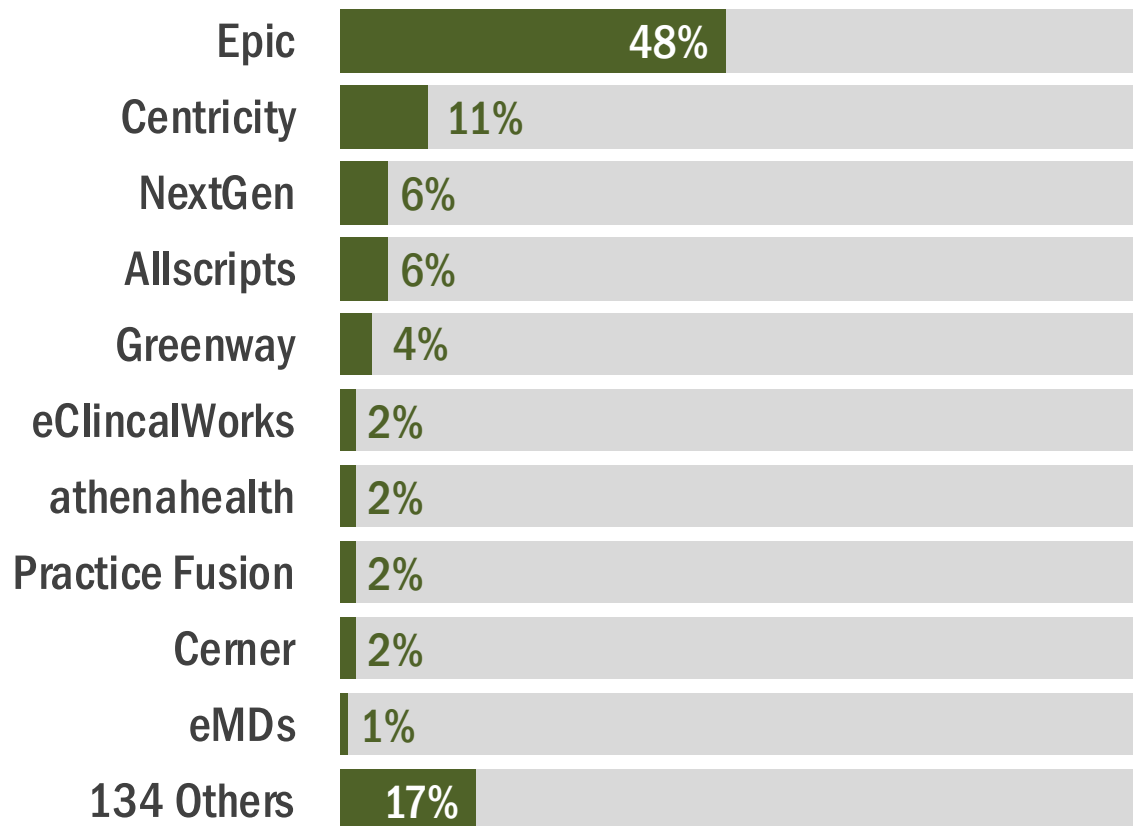# ALMOST ALL PHYSICAL HEALTH 'KEY' CLINICS IN OREGON HAVE ADOPTED EHRS.
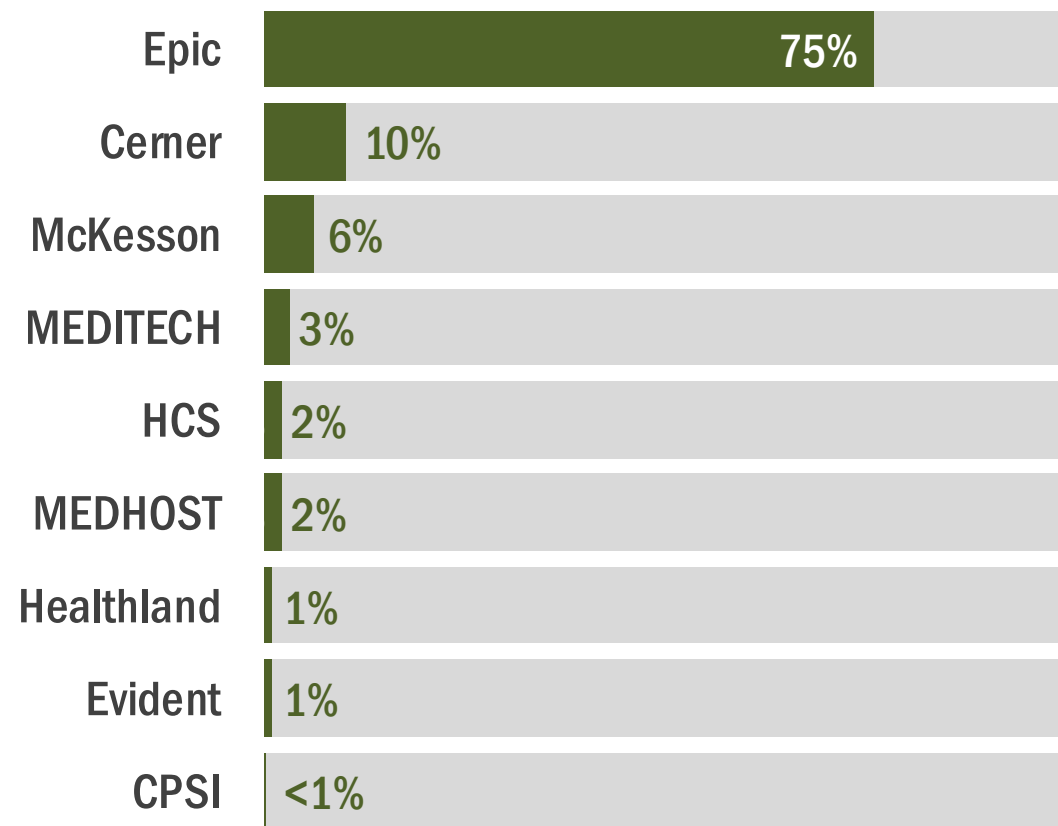
PERCENTAGE OF KEY CLINICS WITH AN EHR

Clinic Type	Percentage
Patient-Centered Primary Care Homes (PCPCH, n=622*)	99%
CCO Incentive Measures Reporting Clinics (n=596*)	100%
Comprehensive Primary Care+ (CPC+, n=153*)	100%
Rural Health Clinics (RHC, n=102*)	100%
Federally Qualified Health Centers (FQHC, n=289*)	100%
Nine Federally Recognized Tribes of Oregon + Chemawa Indian Health Center (Tribal Health Centers; n=10)	100%

OREGON PROVIDERS USE OVER 145 DIFFERENT EHR VENDORS.

ELIGIBLE PROFESSIONALS (n=8,090)

Vendor	Percentage
Epic	48%
Centricity	11%
NextGen	6%
Allscripts	6%
Greenway	4%
eClincalWorks	2%
athenahealth	2%
Practice Fusion	2%
Cerner	2%
eMDs	1%
134 Others	17%

HOSPITALS (by number of beds, n=6,660)

Vendor	Percentage
Epic	75%
Cerner	10%
McKesson	6%
MEDITECH	3%
HCS	2%
MEDHOST	2%
Healthland	1%
Evident	1%
CPSI	<1%

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- **Epic is widely used but not universal.** The majority of providers use a handful of EHR vendors, but there are over 145 different EHR products in use. Depending on Epic alone for electronic health information sharing would leave critical gaps.

- **Some smaller providers have benefitted from purchasing collaboratives or other third party hosted EHRs**, including OCHIN Epic (for safety net clinics), local Independent Physician Associations, and Community Connect models where EHRs hosted by health systems are shared with unaffiliated clinics.

- **EHRs vary significantly in their capacity to support OHA's policy goals.** This includes their capacity for health information exchange, patient engagement, quality reporting, compliance reporting for licensed behavioral health agencies, and data analytics.
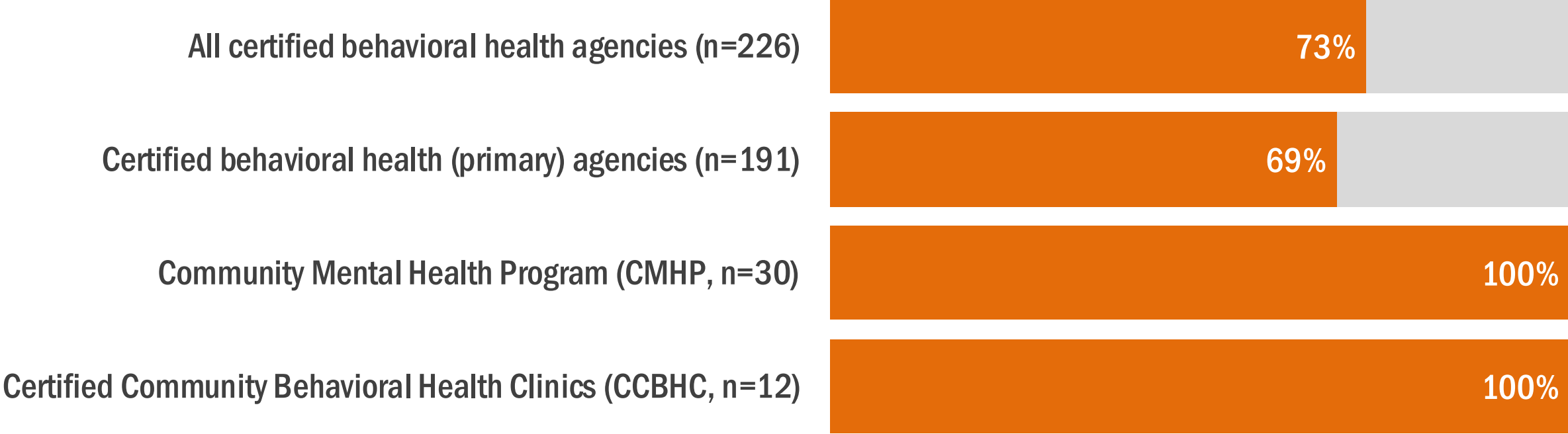
KEY EHR CONCEPTS

- **Federal EHR certification standards (CEHRT) promote more robust EHRs that better meet OHA's policy goals**. 2015 CEHRT requirements include improved health information exchange and patient engagement capabilities. Rates of 2015 CEHRT adoption are currently increasing in Oregon.

- While federal incentive programs have changed, **several programs require or promote adoption of CEHRT**, including primary care programs (MIPS, Comprehensive Primary Care Plus, PCPCH) and the Certified Community Behavioral Health Clinic (CCBHC) program. These programs may drive continued CEHRT adoption and offer opportunities for aligning incentives and program requirements.

# TWO-THIRDS OF BEHAVIORAL HEALTH AGENCIES HAVE ADOPTED AN EHR.

All Community Mental Health Programs (CMHPs) and Certified Community Behavioral Health Clinics (CCBHCs) are using an EHR.

All certified behavioral health agencies (n=226)	73%
Certified behavioral health (primary) agencies (n=191)	69%
Community Mental Health Program (CMHP, n=30)	100%
Certified Community Behavioral Health Clinics (CCBHC, n=12)	100%
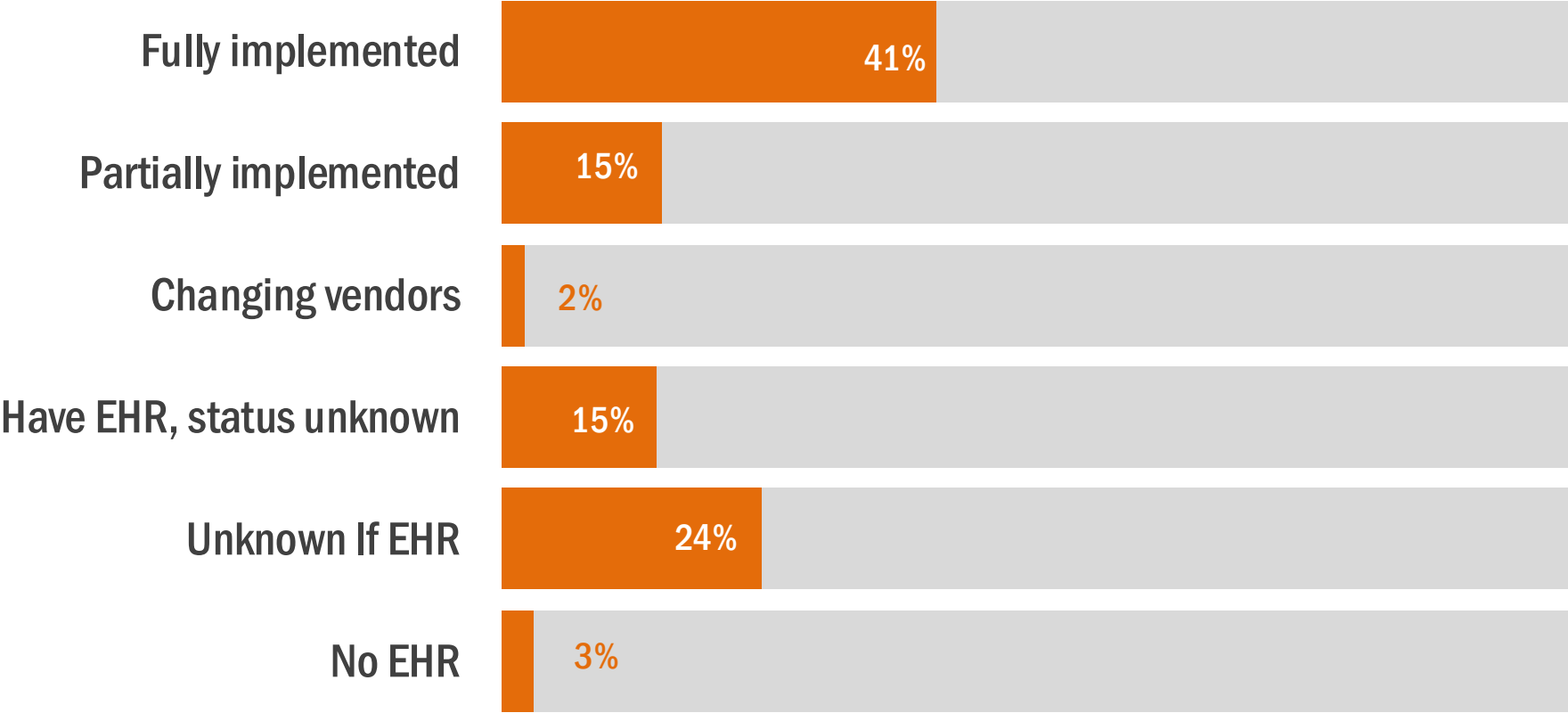
CHALLENGES IN EHR ADOPTION FOR BEHAVIORAL HEALTH AGENCIES

✓ Need for clarification and support around 42 CFR Part 2 and its implications.
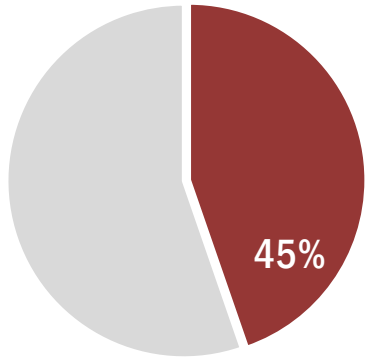
✓ Behavioral health providers manage more funding sources that have significant reporting burdens that EHRs often do not support.
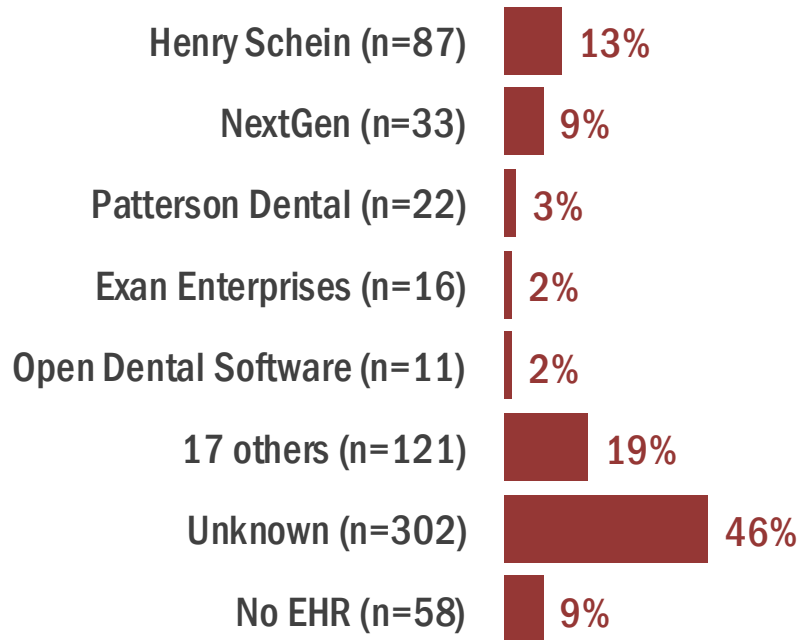
✓ Oregon's behavioral health system needs better, more accurate data to meet reporting expectations, advocate for their needs, secure funding, and engage in VBP.

MORE INFORMATION IS NEEDED ON ORAL HEALTH PROVIDER EHR ADOPTION.
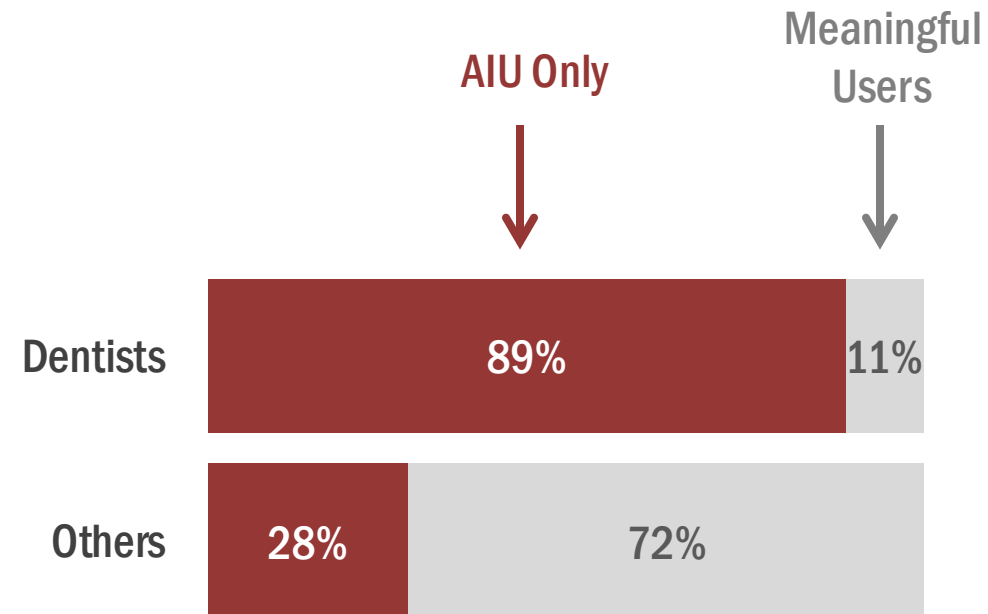
45%

Almost half (n=650) of oral health clinics have reported an EHR through the 2021 Oregon Health IT Survey, participation in MEHRIP, or participation in other programs.

EHR vendors among oral health clinics not affiliated with a larger physical health organization (n=650)

Vendor	Percentage
Henry Schein (n=87)	13%
NextGen (n=33)	9%
Patterson Dental (n=22)	3%
Exan Enterprises (n=16)	2%
Open Dental Software (n=11)	2%
17 others (n=121)	19%
Unknown (n=302)	46%
No EHR (n=58)	9%

Most (89%) dentists only attested for adopt/implement/upgrade (AIU).

AIU Only   **Meaningful Users**

	AIU Only	Meaningful Users
Dentists	89%	11%
Others	28%	72%

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- **Provider satisfaction is increasing but challenges still remain with EHRs,** which can be burdensome and not aligned with provider workflows. Providers often report that EHRs contribute to provider burnout due to increased workload and reduced interpersonal interaction.

- **The high cost of EHRs,** including both the financial cost and the cost of staffing and maintenance, **contributes to lower EHR adoption rates among smaller organizations** with fewer resources.

DIGITAL DIVIDE: THE 'TWO WORLDS'

- **EHR foundations cannot be separated from HIE strategies.**
  - Lack of access to high functioning EHRs fuels the ongoing **digital divide.**

    A. MEHRIP → dominant EHR vendor → 2015 CEHRT → access to HIE and integrated functionality (larger physical health organizations +) versus

    B. No MEHRIP → non-dominant EHR vendor → not CEHRT → limited to no access to HIE or integrated functionality (small physical health organizations, specialists, behavioral health, oral health, rural/frontier +)

- **Although physical, behavioral, and oral health providers are participating in health information exchange at increasing rates, this substantial digital divides persist.**

Disparity impacts some more significantly than others, but ultimately affects the whole health care system.

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OREGON HIT DATA BRIEF: HEALTH INFORMATION EXCHANGE

Electronic health information sharing, or health information exchange (HIE), is an important tool for supporting health equity and Oregon's health care transformation objectives of high quality, coordinated care and paying for value instead of volume.

Using patient data to coordinate PHYSICAL, BEHAVIORAL, ORAL health care

Using patient data for population management and value-based payment

Using patient data to address the social determinants of health

EXAMPLES OF HIE TOOLS IN USE IN OREGON

- Hospital event notifications (Collective Platform)

- Nationwide query-based networks (Carequality, CommonWell)

- Vendor-driven query-based networks (Epic Care Everywhere)

- Regional HIE (Reliance eHealth Collaborative)

- Direct Secure Messaging

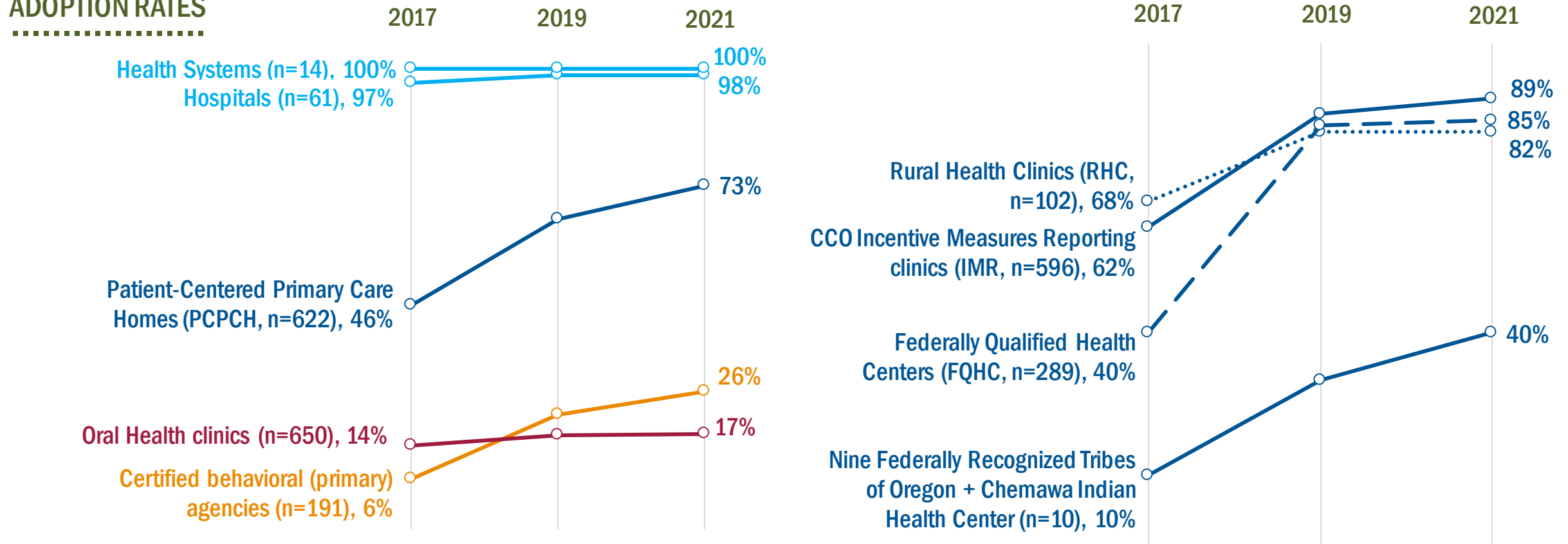- High value data efforts (Prescription Drug Monitoring Program Integration)

COLLECTIVE MEDICAL PLATFORM (AKA EDIE/PREMANAGE)

- **Hospital event notifications system.** Oregon's statewide infrastructure to share critical information across the healthcare system.

- **Built upon real-time, standardized hospital data for both the emergency department (ED) and inpatient settings.**

- **ED setting:** notifies ED about high-risk patients at the point of care (frequent utilization and/or controlled substance prescribing, care guidelines on record).

- **Ambulatory setting:** access to real-time hospital event information for the broader care continuum to coordinate care and share care guidelines for individuals at risk for high utilization.
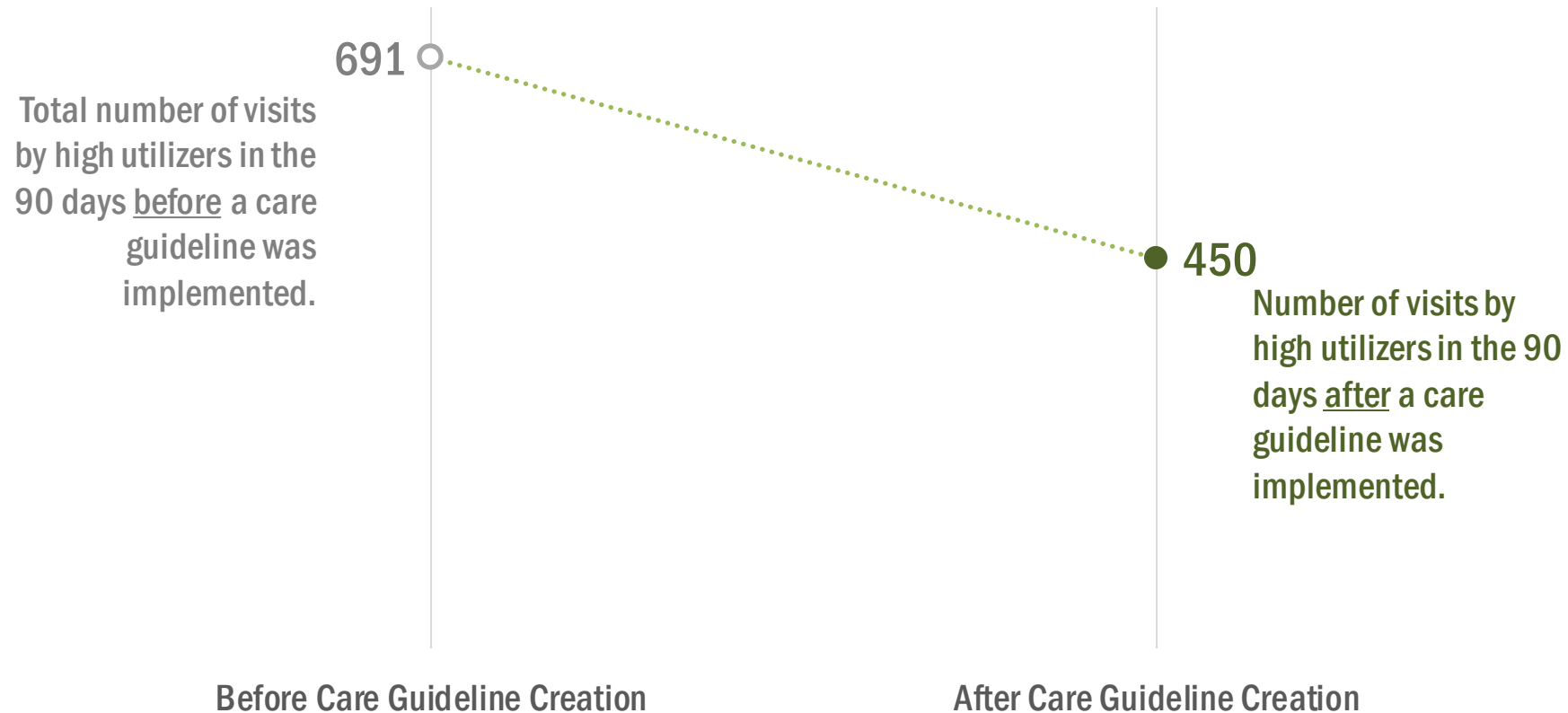
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MANY ORGANIZATIONS HAVE REAL-TIME ACCESS TO HOSPITAL AND EMERGENCY DEPARTMENT EVENT NOTIFICATIONS FOR THEIR PATIENTS

COLLECTIVE ADOPTION RATES

2017   2019   2021

Health Systems (n=14), 100%
Hospitals (n=61), 97%

100%
98%

Patient-Centered Primary Care Homes (PCPCH, n=622), 46%

73%

Oral Health clinics (n=650), 14%

26%

Certified behavioral (primary) agencies (n=191), 6%

17%

2017   2019   2021

Rural Health Clinics (RHC, n=102), 68%

89%
85%
82%

CCO Incentive Measures Reporting clinics (IMR, n=596), 62%

Federally Qualified Health Centers (FQHC, n=289), 40%

40%

Nine Federally Recognized Tribes of Oregon + Chemawa Indian Health Center (n=10), 10%

Additional entities using Collective include payers, skilled nursing facilities, state agencies/offices on aging and disabilities, and regional HIEs.

VISITS DECREASED BY 35% IN THE 90 DAYS FOLLOWING AN INITIAL CARE GUIDELINE CREATION.

691 ○

Total number of visits by high utilizers in the 90 days <u>before</u> a care guideline was implemented.

● 450

Number of visits by high utilizers in the 90 days <u>after</u> a care guideline was implemented.

Before Care Guideline Creation

After Care Guideline Creation

For the period July 2020 – June 2021

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QUERY-BASED CLINICAL DOCUMENT EXCHANGE

Query-based exchange: networks concentrate on exchange of care summary documents, primarily Continuity of Care Documents (CCDs)

- **Nationwide query-based networks:** Carequality, CommonWell, eHealth Exchange

- **EHR vendor-driven query-based networks:** Epic Care Everywhere

MAJOR HOSPITALS, HEALTH SYSTEMS, AND AFFILIATED PROVIDER GROUPS HAVE ON-DEMAND ACCESS TO CARE SUMMARIES
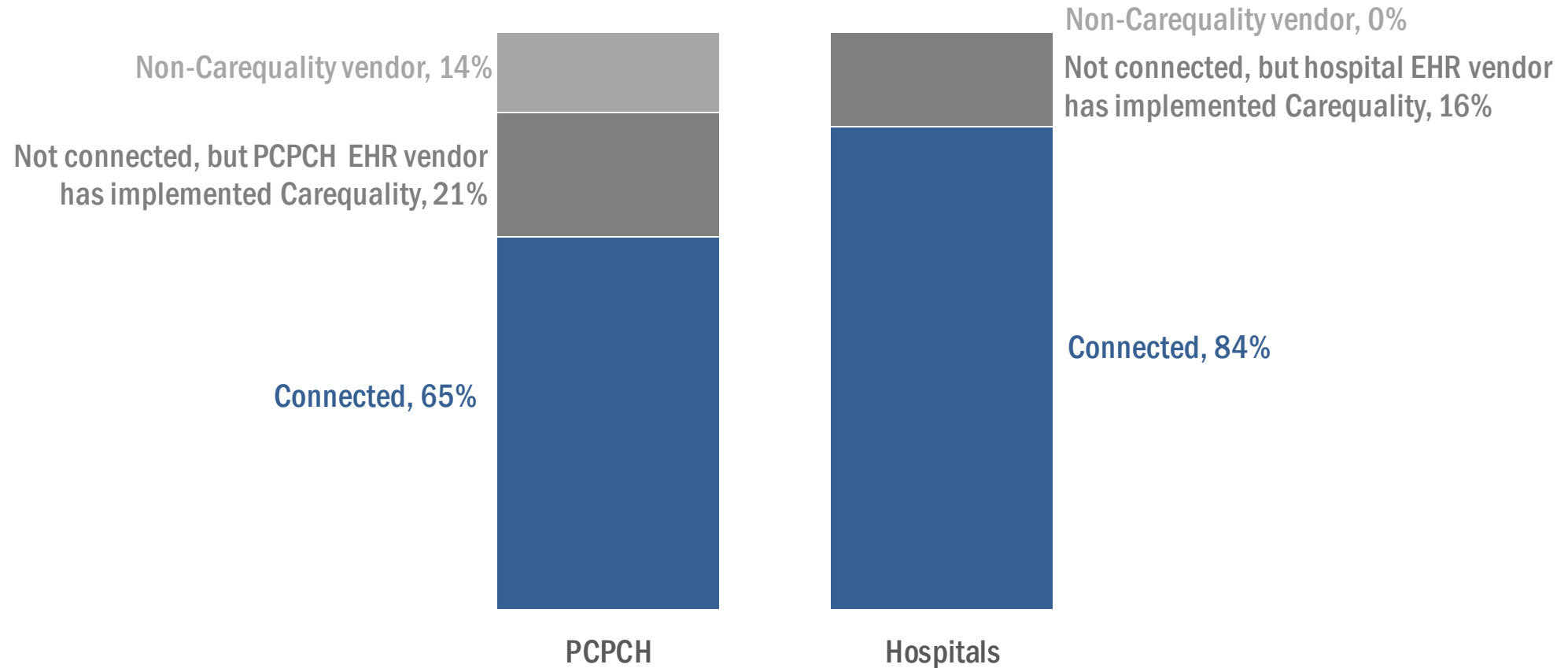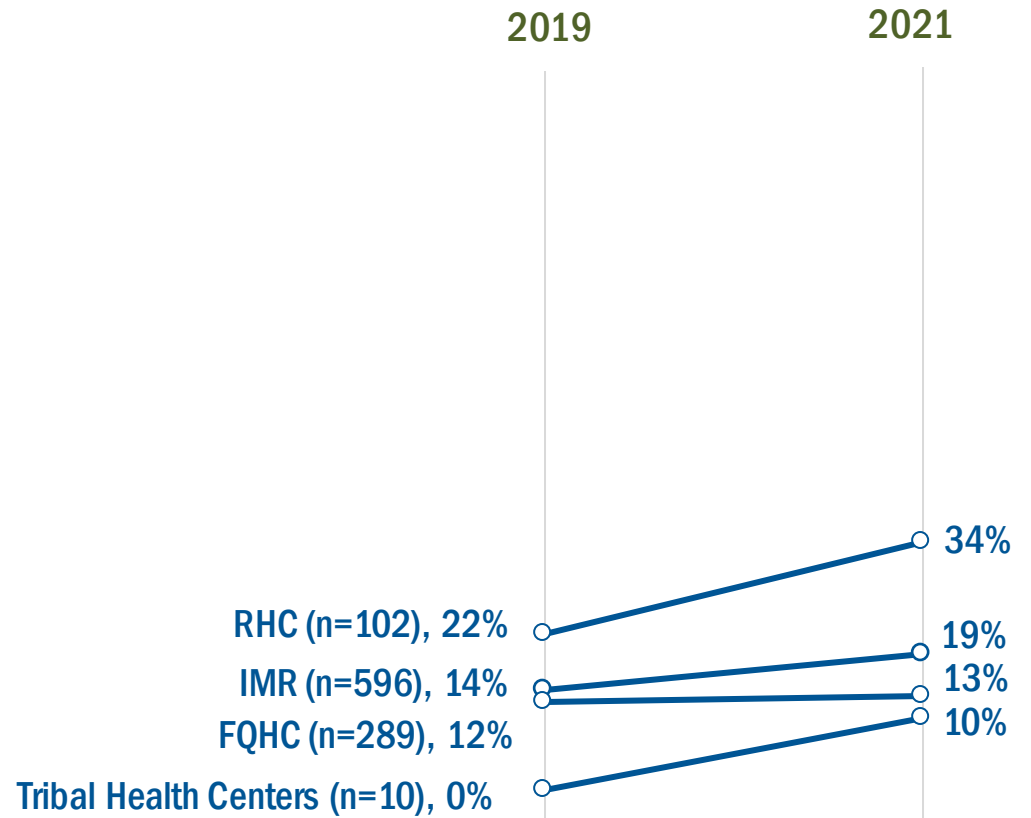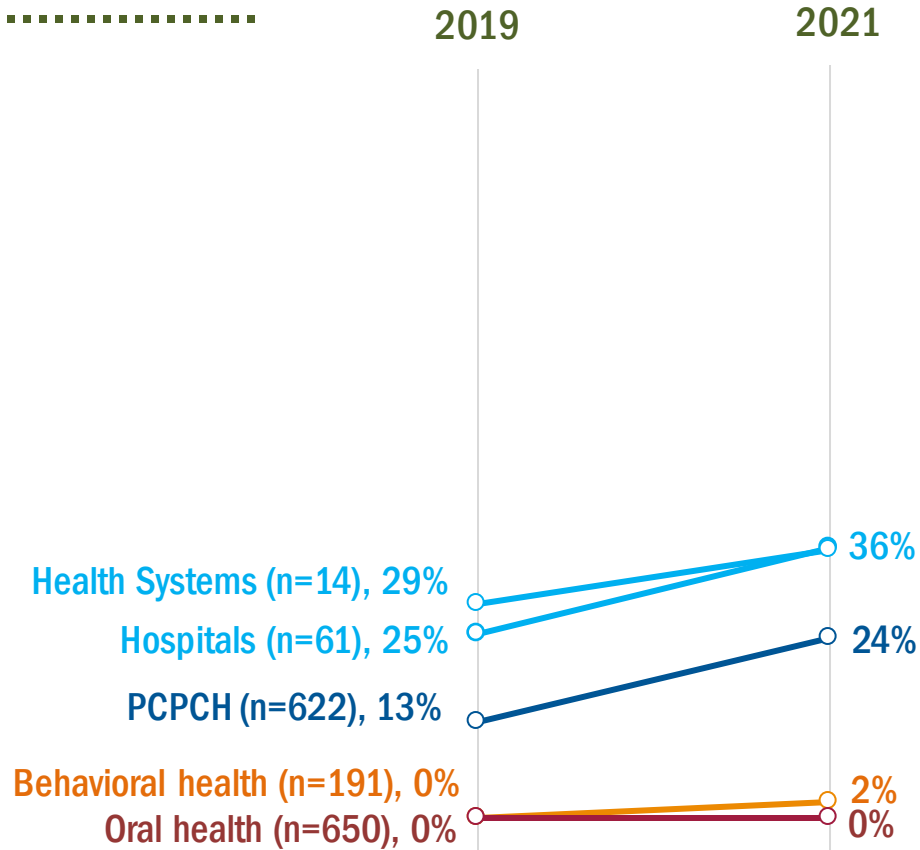
CAREQUALITY ADOPTION RATES
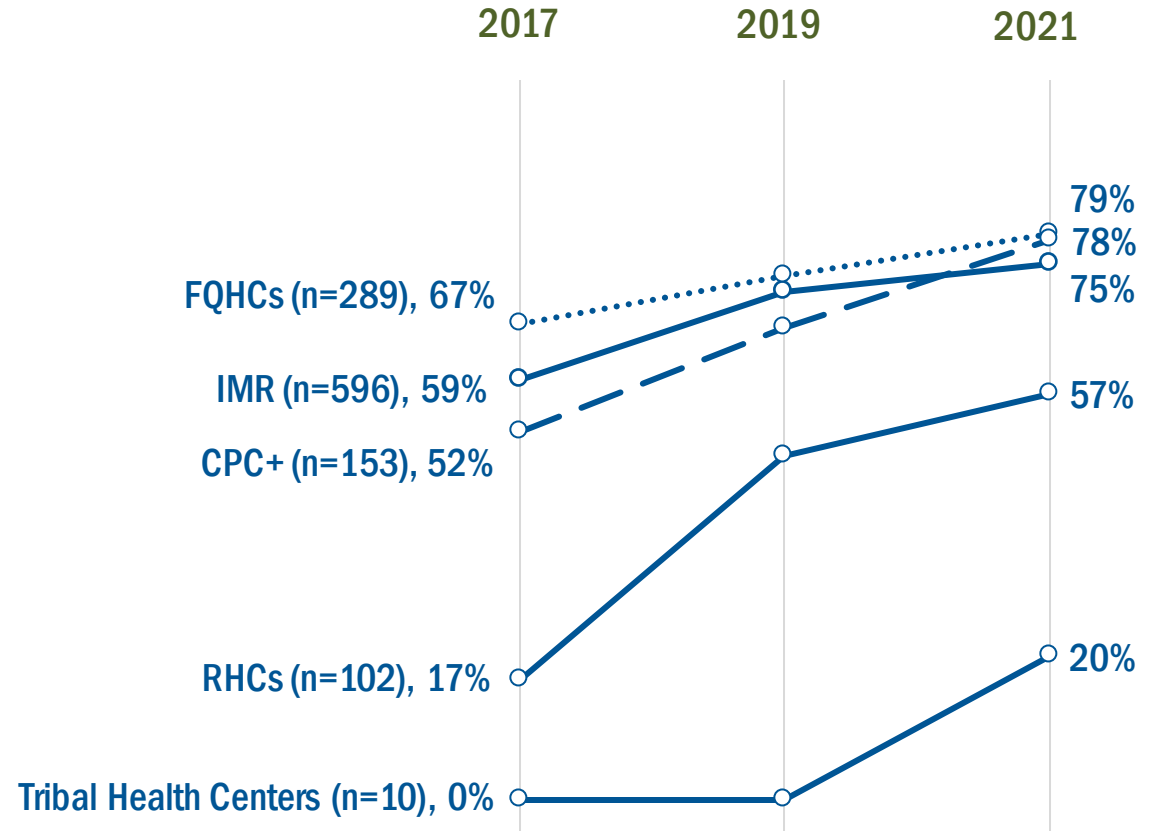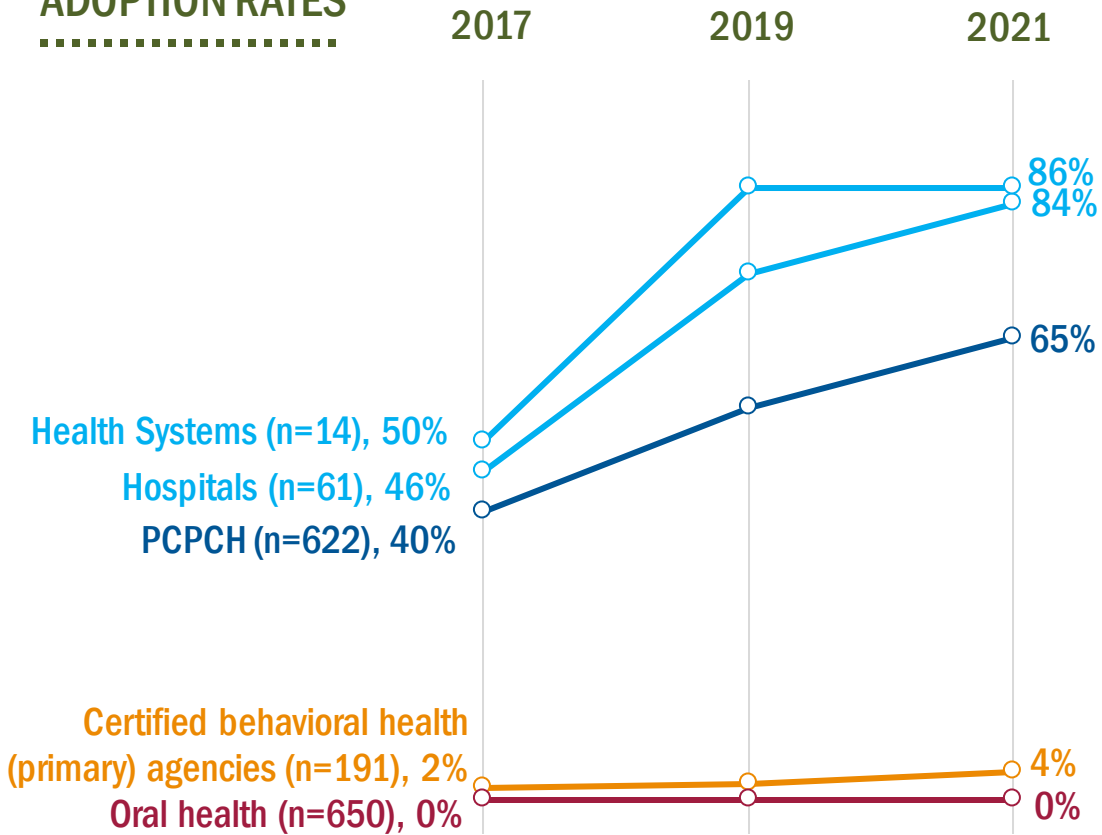
2017   2019   2021

86%
84%

65%

Health Systems (n=14), 50%
Hospitals (n=61), 46%
PCPCH (n=622), 40%

Certified behavioral health (primary) agencies (n=191), 2%
Oral health (n=650), 0%

4%
0%

2017   2019   2021

79%
78%
75%

FQHCs (n=289), 67%

IMR (n=596), 59%

CPC+ (n=153), 52%

57%

RHCs (n=102), 17%

20%

Tribal Health Centers (n=10), 0%

PCPCH: Patient-Centered Primary Care Homes; FQHC: Federally Qualified Health Centers; IMR: CCO Incentive Measures Reporting clinics; CPC+: Comprehensive Primary Care Plus; RHCs: Rural Health Clinics
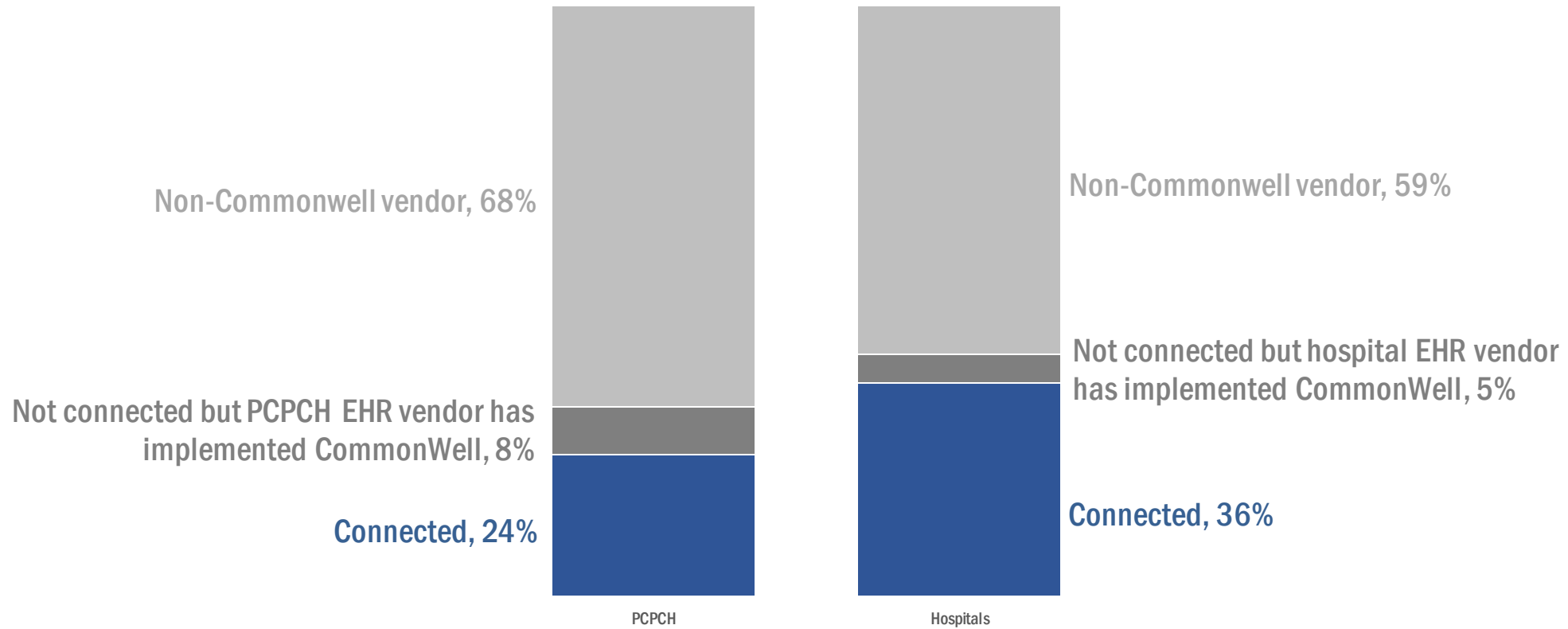
POTENTIAL OREGON CAREQUALITY CONNECTIVITY

Non-Carequality vendor, 14%

Non-Carequality vendor, 0%

Not connected, but PCPCH EHR vendor has implemented Carequality, 21%

Not connected, but hospital EHR vendor has implemented Carequality, 16%

Connected, 84%

Connected, 65%

PCPCH

Hospitals

# MAJOR HOSPITALS, HEALTH SYSTEMS, AND THEIR AFFILIATED PROVIDER GROUPS HAVE ON-DEMAND ACCESS TO CARE SUMMARIES

COMMONWELL ADOPTION RATES

2019   2021

Health Systems (n=14), 29% → 36%
Hospitals (n=61), 25% → 36%
PCPCH (n=622), 13% → 24%
Behavioral health (n=191), 0% → 2%
Oral health (n=650), 0% → 0%

2019   2021

RHC (n=102), 22% → 34%
IMR (n=596), 14% → 19%
FQHC (n=289), 12% → 13%
Tribal Health Centers (n=10), 0% → 10%

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Non-Commonwell vendor, 68%

Non-Commonwell vendor, 59%

Not connected but hospital EHR vendor has implemented CommonWell, 5%

Not connected but PCPCH EHR vendor has implemented CommonWell, 8%

Connected, 24%

Connected, 36%

PCPCH

Hospitals

- **Large organizations often depend on nationwide query-based networks and vendor-driven query-based networks which provide clinical document exchange with mostly other large organizations.** Those organizations require other tools to meet other HIE needs. Most smaller organizations, including many serving diverse populations, cannot access nationwide query-based networks and vendor-driven query-based networks.
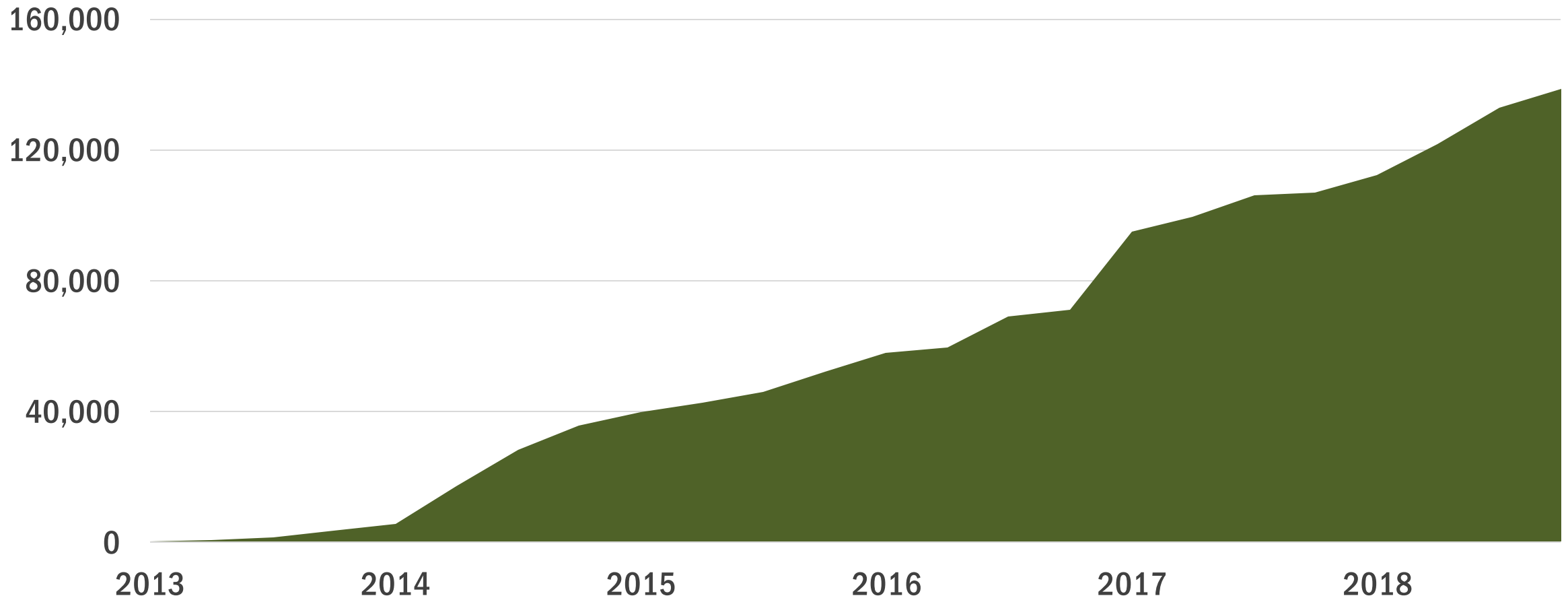
REGIONAL HIE

- Regional HIEs typically create a consolidated collection of health information showing all the care an individual received in the community ("community health record"), in addition to providing other HIE functions (e.g., lab results, alerts/notifications).

- Unlike nationwide and vendor-driven query-based networks, a regional HIE is EHR vendor agnostic, making it accessible to a wider array of providers.
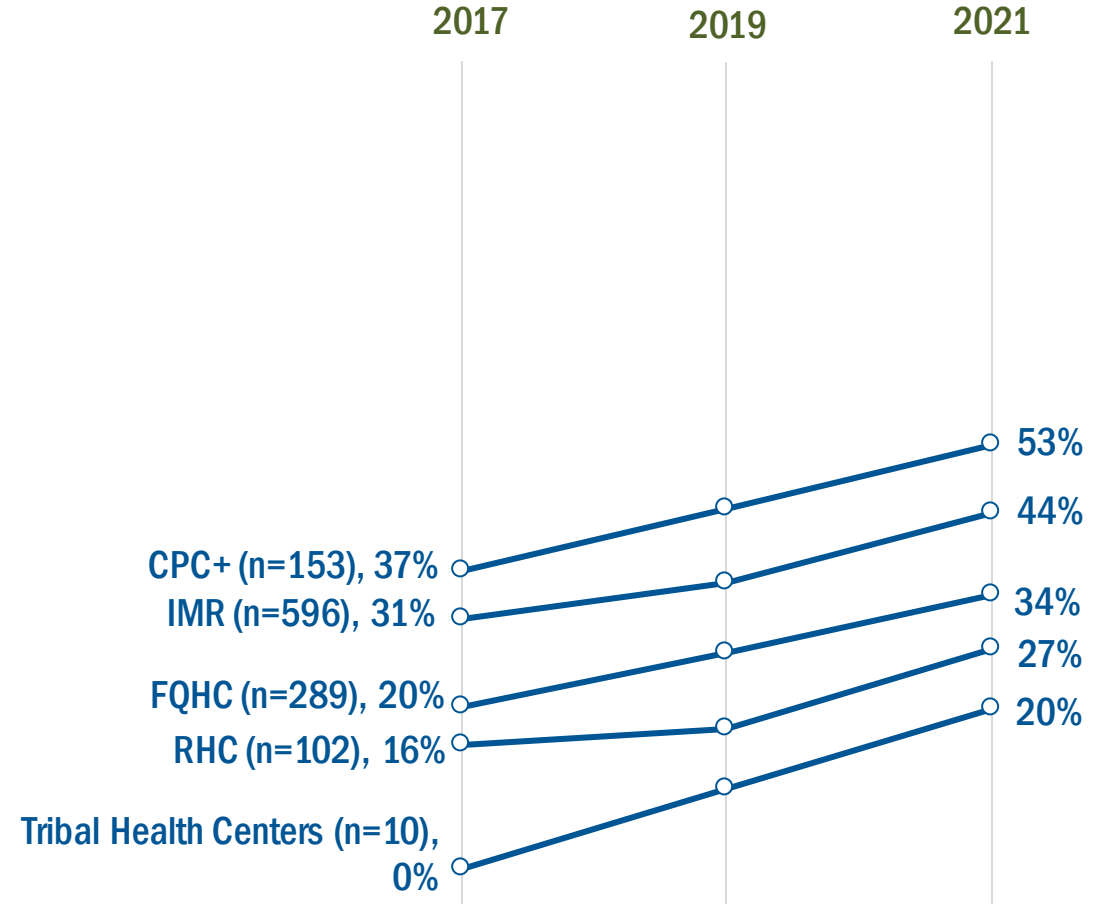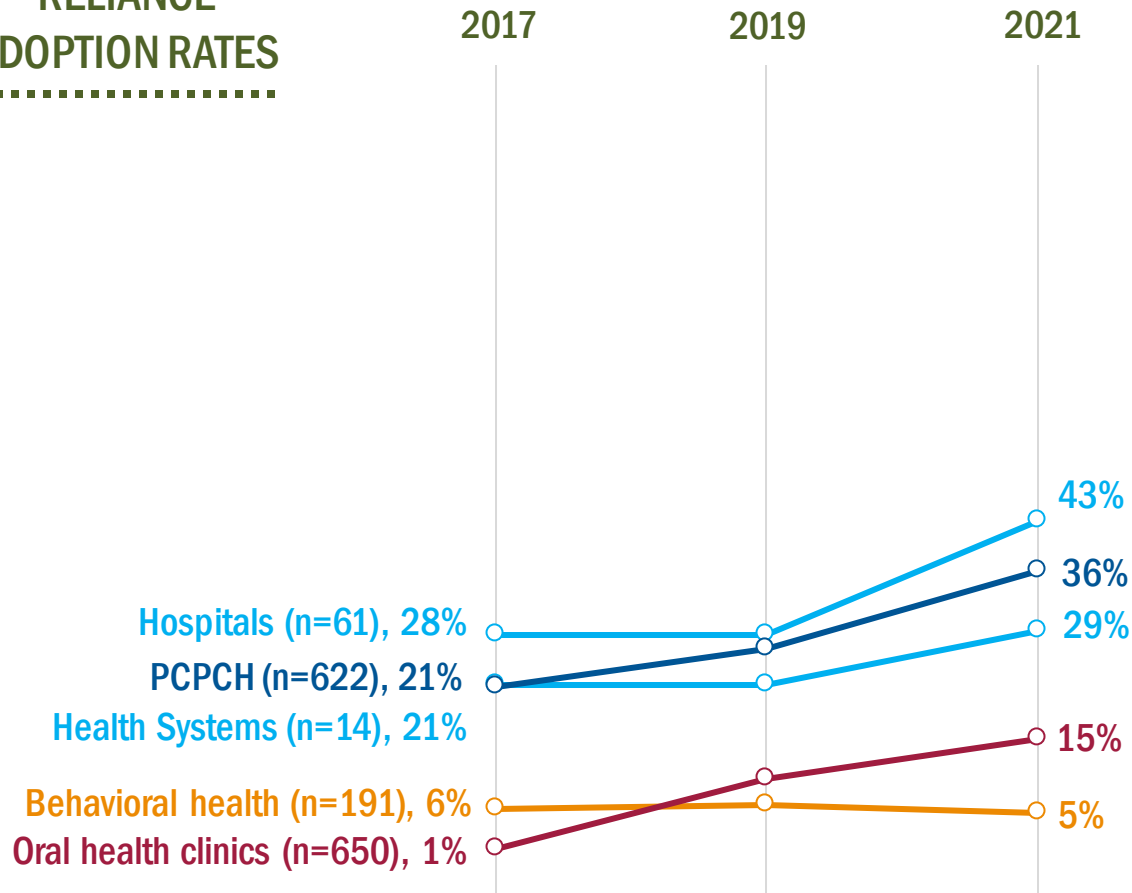
- Reliance eHealth Collaborative is Oregon's only regional HIE.

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REGIONAL HIE IS AVAILABLE IN TWO-THIRDS OF THE COUNTIES IN OREGON AND SERVES AN IMPORTANT ROLE IN THEIR COMMUNITIES.
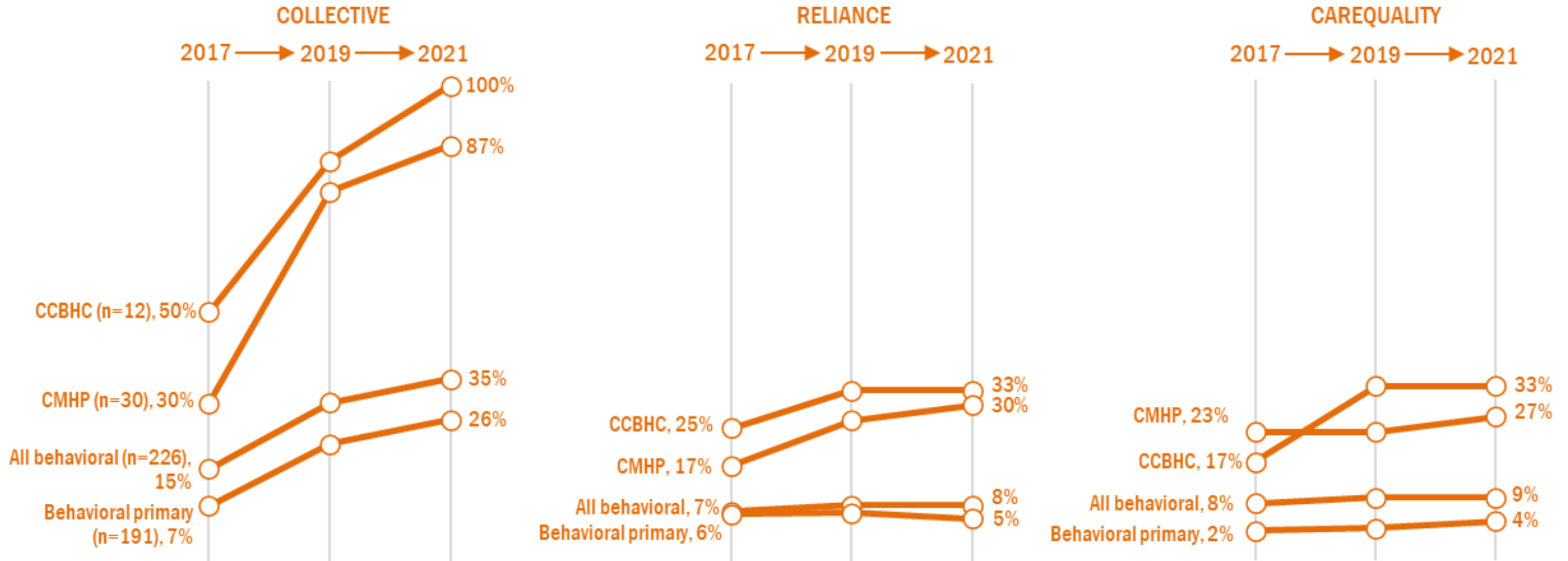
RELIANCE ADOPTION RATES

2017   2019   2021

2017   2019   2021

Hospitals (n=61), 28%
PCPCH (n=622), 21%
Health Systems (n=14), 21%

Behavioral health (n=191), 6%
Oral health clinics (n=650), 1%

43%
36%
29%

15%
5%

CPC+ (n=153), 37%
IMR (n=596), 31%

FQHC (n=289), 20%
RHC (n=102), 16%

Tribal Health Centers (n=10), 0%

53%
44%
34%
27%
20%

PCPCH: Patient-Centered Primary Care Homes; FQHC: Federally Qualified Health Centers; IMR: CCO Incentive Measures Reporting clinics;
CPC+: Comprehensive Primary Care Plus; RHCs: Rural Health Clinics

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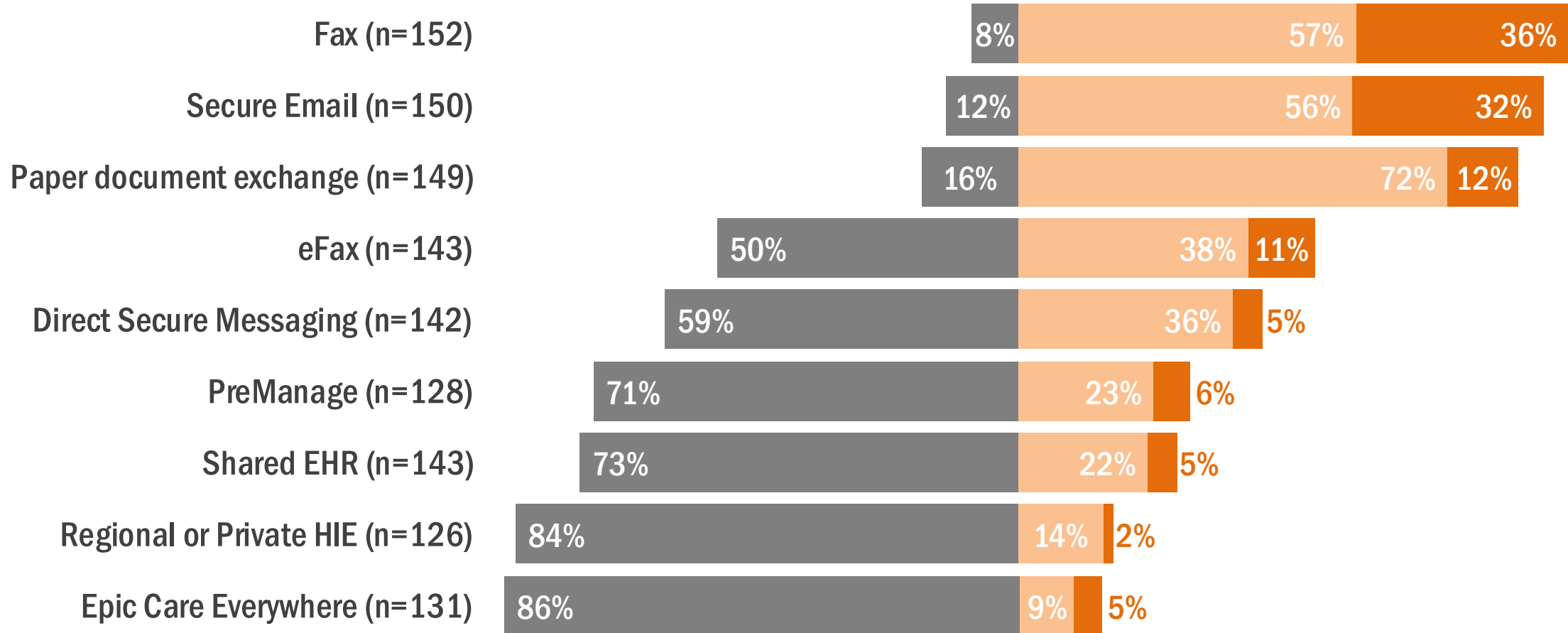
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BEHAVIORAL HEALTH AGENCIES ARE INVESTING IN HIE TOOLS

CCBHC: Certified Community Behavioral Health Clinics; CMHP: Community Mental Health Programs; All behavioral: all organizations with an OHA-certified behavioral health program; Behavioral primary: certified behavioral health organizations unaffiliated with a larger physical health organization
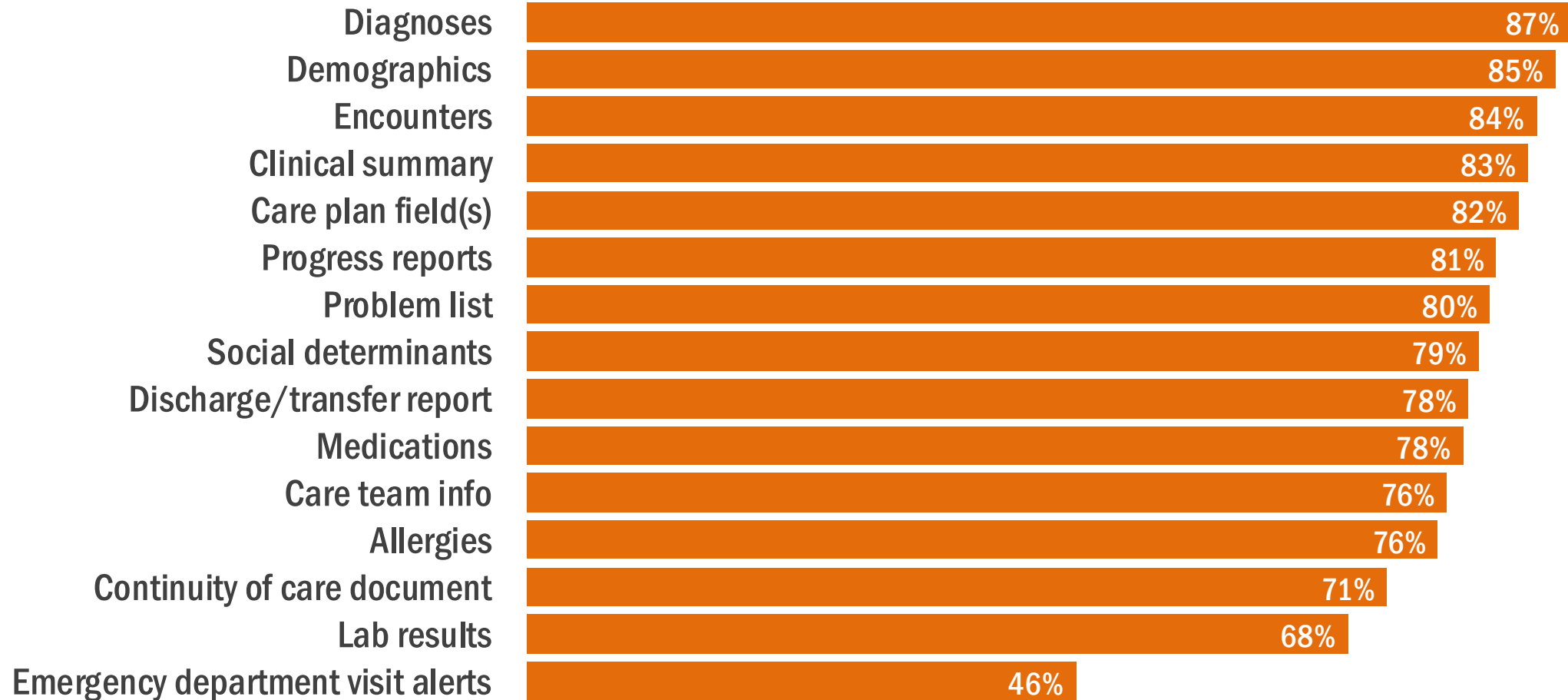
MOST BEHAVIORAL HEALTH CLINICAL INFORMATION IS STILL BEING SHARED VIA FAX, SECURE EMAIL ATTACHMENTS, AND PAPER DOCUMENTS.

Legend: ■ None of the time ■ Some of the time ■ Most of the time

Method	None of the time	Some of the time	Most of the time
Fax (n=152)	8%	57%	36%
Secure Email (n=150)	12%	56%	32%
Paper document exchange (n=149)	16%	72%	12%
eFax (n=143)	50%	38%	11%
Direct Secure Messaging (n=142)	59%	36%	5%
PreManage (n=128)	71%	23%	6%
Shared EHR (n=143)	73%	22%	5%
Regional or Private HIE (n=126)	84%	14%	2%
Epic Care Everywhere (n=131)	86%	9%	5%

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- Federal regulations that provide special protection relating to certain substance use disorder treatment information (42 CFR Part 2) are challenging to interpret and result in reduced information sharing, even when such sharing is allowable under the regulation. **42 CFR Part 2 remains a barrier to behavioral health participation in HIE, due to perceptions as well as the regulation itself.**
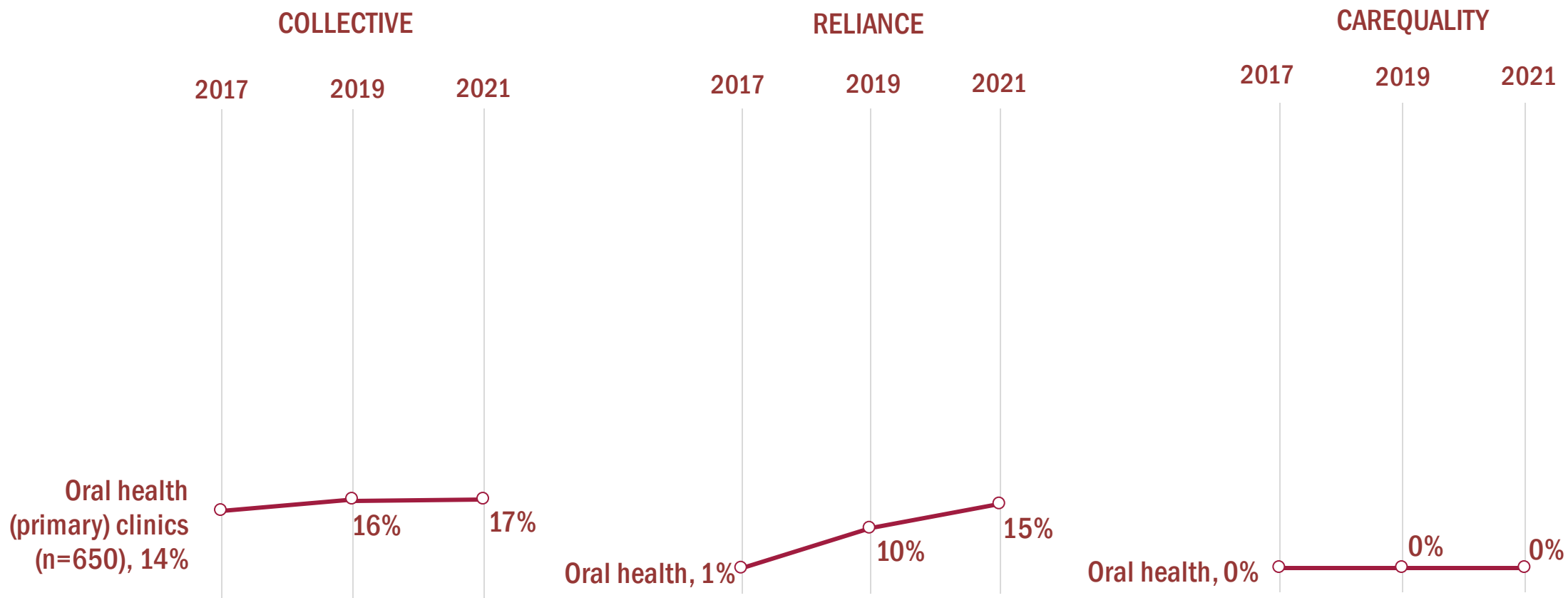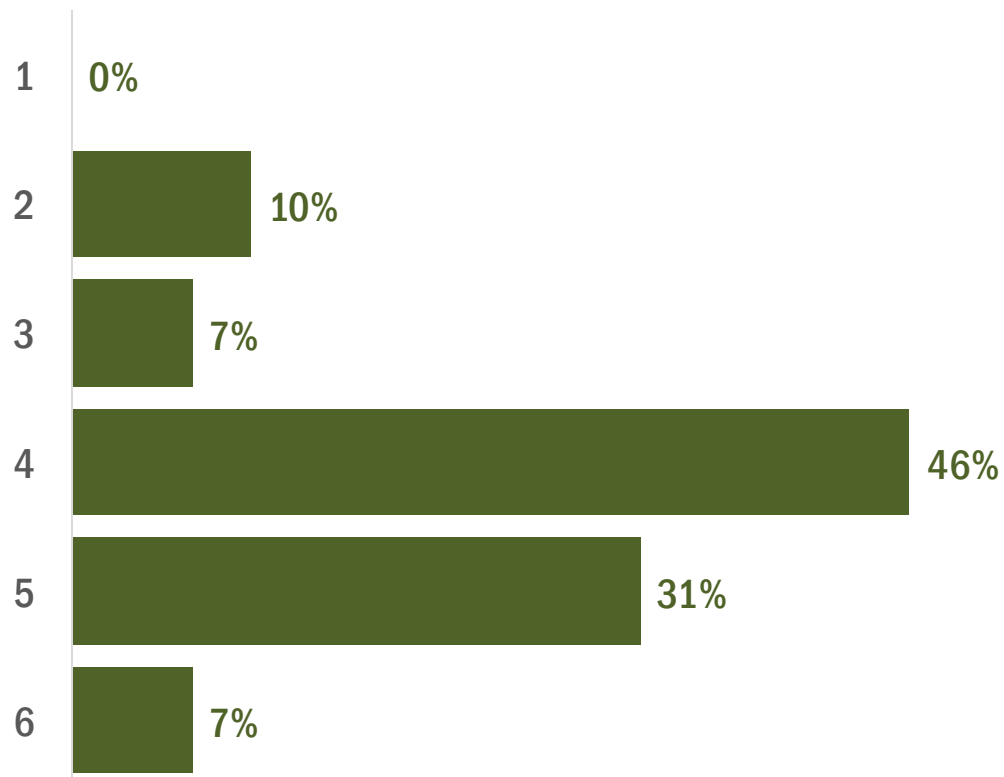
PROVIDERS USE HIE TOOLS FOR A WIDE VARIETY OF TASKS.

NETWORK	Care Summary Exchange	Lab/ Radiology Results	Longitudinal Patient Record	Alerts and Notifications	E-Referrals	Analytics/ Advanced Data Services (may support VBP)
Collective (formerly PreManage)				●		
Reliance eHealth Collaborative	●	●	●	●	Available regionally	●
Carequality	●					
CommonWell	●					
eHealth Exchange	●					
Patient Centered Data Home	●			●		

PDMP INTEGRATION

- Accessing Oregon's Prescription Drug Monitory Program (PDMP) information helps providers make more informed prescribing decisions.

- Oregon's PDMP registry
  - Collects prescription fill data for controlled substances (schedule II-IV)
  - Is used by authorized prescribers and their delegates, and pharmacists
  - Improves prescribing practices, patient safety and health outcomes

- Access to the PDMP is available via a web portal or through PDMP Integration

- PDMP Integration gives access to the PDMP data from within users' electronic workflow (EHR, HIE, or pharmacy management system)
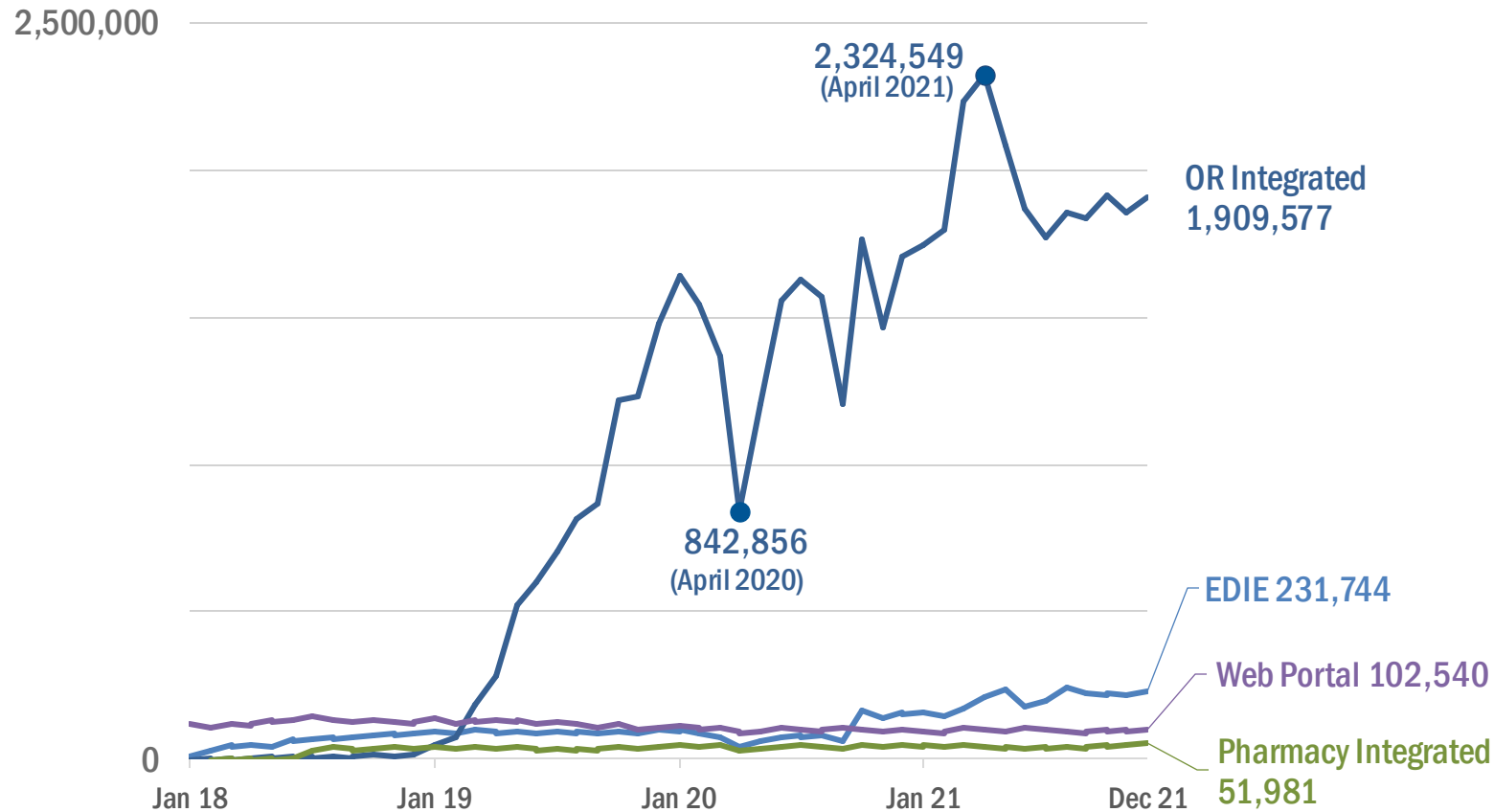
REFLECTIONS: EHR

Oregon has very high rates of EHR adoption overall, and HITOC's strategies must reckon with the remaining "digital divide".

- Physical health providers have the highest rates of EHR adoption; significantly higher than national rates.

- EHR adoption has also increased, but more modestly, among behavioral and oral health providers.

- Adoption of 2015 Certified EHR Technology, which better supports HIE needs and patients' access to their own data, is highest among physical health providers.

REFLECTIONS: HIE

Oregon has seen massive HIE growth over the last five years.

Providers are adopting HIE tools at higher rates

Access to hospital notifications has increased dramatically

Access to care summaries has increased

Regional HIE tools have contributed to improved information sharing

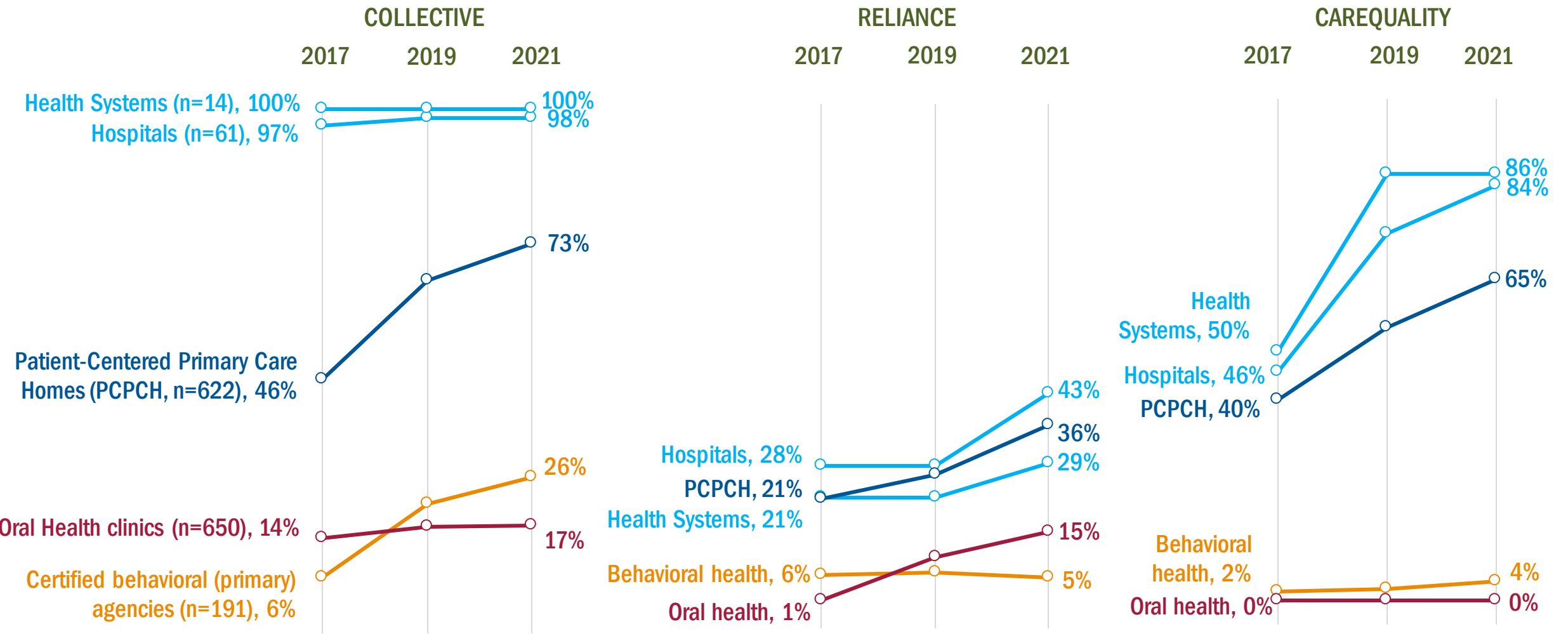PDMP information is more accessible and therefore more used in care decisions

Investments are being made in HIT tools to address social determinants of health

QUESTIONS?

THANK YOU!

APPENDIX SLIDES

ADOPTION OF VARIOUS HIE TOOLS IS INCREASING IN OREGON.

COLLECTIVE

2017   2019   2021

Health Systems (n=14), 100% — 100%
Hospitals (n=61), 97% — 98%

Patient-Centered Primary Care Homes (PCPCH, n=622), 46% — 73%

Oral Health clinics (n=650), 14% — 26%

Certified behavioral (primary) agencies (n=191), 6% — 17%

RELIANCE

2017   2019   2021

Hospitals, 28% — 43%
PCPCH, 21% — 36%
Health Systems, 21% — 29%

Behavioral health, 6% — 15%
Oral health, 1% — 5%

CAREQUALITY

2017   2019   2021

86%
84%
65%

Health Systems, 50%
Hospitals, 46%
PCPCH, 40%

Behavioral health, 2% — 4%
Oral health, 0% — 0%

Oregon Health Authority - Office of Health Information Technology

Oregon Health Authority

IN THE PAST 7 YEARS, OREGON HAS SEEN UNPRECEDENTED GROWTH IN HIE.

2014

2022

2014		2022
Emergency Department Information Exchange (EDie) implementation just beginning	**1**	Many Oregon organizations have real-time access to hospital and emergency department event notifications for their patients from hospitals in Oregon and its bordering states
Primary method for moving care summaries is Direct secure messaging or EHR-based tools	**2**	Major hospitals, health systems, and their affiliated provider groups have on-demand access to care summaries for care their patients receive outside their system
Five regional HIEs (one in development) cover about 40% of Oregon counties; limited services available	**3**	One regional HIE is available in two-thirds of Oregon's counties and serves an important role in those communities
Virtually no electronic data sharing among different provider types, with fax being the primary method	**4**	Behavioral health and oral health providers are using HIE; they also share important patient information with physical health providers

Oregon Health Authority

IN THE PAST 7 YEARS, OREGON HAS SEEN UNPRECEDENTED GROWTH IN HIE.

2014

Virtually no connections among disparate networks

Although Oregon's Prescription Drug Monitoring Program (PDMP) was launched in 2011, there was no EHR integration

Health IT for population management is in its infancy; value-based payment is not a major part of Oregon's landscape

2022

5 Providers use multiple HIE networks; some networks have connected to each other

6 Providers can access opioid prescription data more easily; providers with health IT integration access it at much higher rates

7 Providers use clinical data entered, stored, and shared by health IT to better manage populations and target interventions. This also supports the dramatic increase in value-based payment arrangements.