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

Oregon Health Authority
Office of Health Information Technology

May 2022

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This report is the work of the Oregon Health Authority's Office of Health IT, which staffs HITOC, conducts other health IT policy work, and operates the Oregon Health IT Program, which has brought millions of federal dollars to Oregon for health IT programs and partnerships that support health system transformation and health equity. This report was developed by the following key Office of Health IT staff: Marta Makarushka, Lead Policy Analyst; Joe Mitchell-Nelson, Research Analyst; Susan Otter, Director of Health IT, Oregon Health Authority (OHA) and includes prior work contributed by Scott Jeffries, Research Analyst and Francie Nevill, HITOC Lead Analyst.

Resources: For further information please http://healthit.oregon.gov
If you have questions about this report, please contact OHIT.info@dhsoha.state.or.us.

INTRODUCTION AND PURPOSE

This 2022 Health IT Report to Oregon's Health IT Oversight Council (HITOC) supports several of HITOC's responsibilities (see below) including its strategic planning work and updates a similar 2019 report with data collected in 2021.

What is health IT? Health IT is technology that stores, retrieves, shares, or uses health information, such as diagnoses, medications, allergies, records of doctors' visits, hospital admissions, lab results, and more. Health care providers, health plans, Oregon's Medicaid coordinated care organizations (CCOs)*, health systems, hospitals, clinics, and other organizations use health IT to manage their businesses and take care of patients. Patients, families, and caregivers use health IT to see their health information, communicate with their providers, and manage health conditions. Organizations can use health IT to identify and address health inequities.

Oregon's Health IT Oversight Council (HITOC) was created by the Oregon legislature to ensure that health information technology (health IT) supports health system transformation. HITOC is an advisory committee of the Oregon Health Policy Board and is responsible for:

- Exploring health IT policy issues
- Crafting Oregon's health IT strategy
- Overseeing Oregon Health Authority's (OHA) health IT efforts
- Assessing the Oregon health IT landscape
- Reporting on Oregon's health IT progress
- Monitoring/reporting on federal health IT law and policy changes

OVERVIEW

This report consists of two health IT data briefs: Electronic Health Records (EHR) and Health Information Exchange (HIE), as well as considerations for HITOC. EHRs and HIE are foundational to all other health IT efforts. **This report touches only briefly on other important health IT issues**, including patient experiences of health IT, health IT opportunities to address social determinants of health, health IT implications and opportunities for health equity, and health IT for population management and value-based payment (VBP). Work to address these important issues is ongoing under HITOC, and where known resources exist, this report will cite them.

Each data brief presents the following:

- 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, including challenges and information gaps

This report references supplemental documents:

- *Health Information Exchange Overview* or *HIE Overview*
- *HIE in Oregon: A Tale of Two Worlds*
- *Office of Health IT Programs and Initiatives*
- *Behavioral Health HIT Scan and Report and the Behavioral Health HIT Workgroup Recommendations*
- *CIE Issue Brief*
- *CCO 2021 HIT Roadmaps:* Since 2020, CCOs have been required to submit annual HIT Roadmaps describing their efforts to support their contracted providers' HIT needs. *Summaries:* Supporting EHR Adoption Summary and Supporting HIE Summary

Currently, most of the available information on health IT is about organizations participating in federal and state programs. There are many **physical**, **behavioral** and **oral** health organizations that do not participate in such programs. Information on health IT use by participating programs is also limited and may not be a complete or current picture of health IT use among these organizations.

*A coordinated care organization is a network of all types of health care providers (physical, addictions and mental health, and dental) who work together in their local communities to serve people who receive health care coverage under Medicaid.

CENTERING HEALTH EQUITY

Health equity is a priority for Oregon.
Achieving health equity is a priority for the Oregon Health Policy Board, the Oregon Health Authority (OHA) and the Governor. The OHA has committed to its strategic goal of eliminating health inequities by the year 2030.

Health IT's role in supporting health equity/ addressing health inequity includes:

- Health IT and health information exchange (HIE) supports care coordination for vulnerable populations. For example, real-time hospital event data can help care managers quickly identify and take action to support individuals who may be falling through the cracks of our health care system;
- Collecting data on an individuals' race, ethnicity, language, disability, sexual orientation and gender identity allows for inequities to be identified and can help patients to receive care from culturally or linguistically appropriate providers;
- Community information exchange (CIE) supports electronically connecting individuals to the social services they need (see below);
- HIE (and CIE) supports better informed care for individuals who are transitioning across systems (e.g., foster care, psychiatric facilities, corrections); ensuring the information about a person is available when it's needed.

OHA Health Equity Definition: Oregon will have established a health system that creates health equity when all people can reach their full health potential and well-being and are not disadvantaged by their race, ethnicity, language, disability, age, gender, gender identity, sexual orientation, social class, intersections among these communities or identities, or other socially determined circumstances.

Achieving health equity requires the ongoing collaboration of all regions and sectors of the state, including tribal governments to address:

- The equitable distribution or redistribution of resources and power; and
- Recognizing, reconciling and rectifying historical and contemporary injustices

COMMUNITY INFORMATION EXCHANGE

Community information exchange (CIE) is a network of collaborative partners using a multidirectional technology platform to connect people to the services and supports they need.

- Partners may include human and social service, health care, and other organizations.
- Technology functions must include closed loop referrals, a shared resource directory, and informed consent.

CIEs allow users to search for social services, document screenings, and make referrals to social services/ community-based organizations (CBOs) and others, and allow the user to see when a person received services ("closing the loop"). CIEs help:

- Eliminate many of the barriers between people and the services designed to support them by more efficiently connecting people to resources. CIEs help connect these separate services, and this connection is integral to addressing health inequities and the overall well-being of individuals;
- Support more person centered and trauma informed care by reducing the need for redundant screening;
- Provide data on resource needs, gaps, and identifying where services are provided. This information can inform future policy changes and investments in social services and supports.

House Bill (HB) 4150 (2022) directs HITOC to convene a group with specific representation to explore options to accelerate, support and improve secure, statewide CIEs that would allow the seamless coordination of health care and social services across all delivery systems, prioritizing health equity, confidentiality, and the security of information. HITOC chartered a CIE Workgroup to provide recommendations to HITOC and OHA on CIE strategies. HITOC will submit a draft report to the legislature in September 2022 focusing on legislative recommendations and a final report in January 2023.

CCO adoption and support is underway with 15 out of 16 CCOs sponsoring CIE in their regions. For more information, please see OHA's *CIE Issue Brief*.

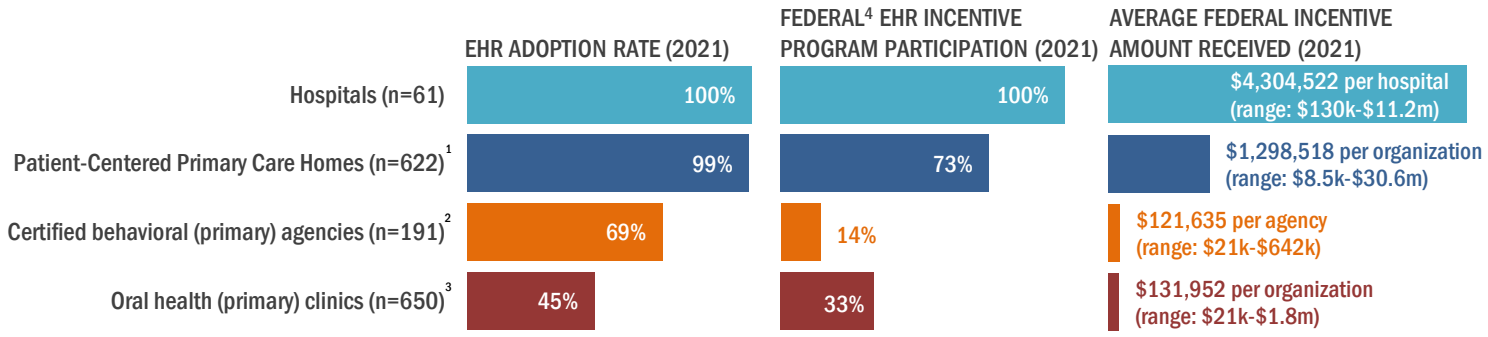
OREGON HIT DATA BRIEF: ELECTRONIC HEALTH RECORDS

EXECUTIVE SUMMARY

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. This helps providers participate in information sharing and care coordination, contribute clinical data for quality reporting and population health efforts, and engage in value-based payment (VBP) arrangements. EHRs also collect other data, including screening, assessment, and demographic information. Finally, EHRs can help providers share information with patients, their families, and their caregivers.

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

Oregon has high rates of EHR adoption when compared to other states. However, when we compare EHR adoption rates of **PHYSICAL**, **BEHAVIORAL**, and **ORAL** health providers, a clear digital divide remains.



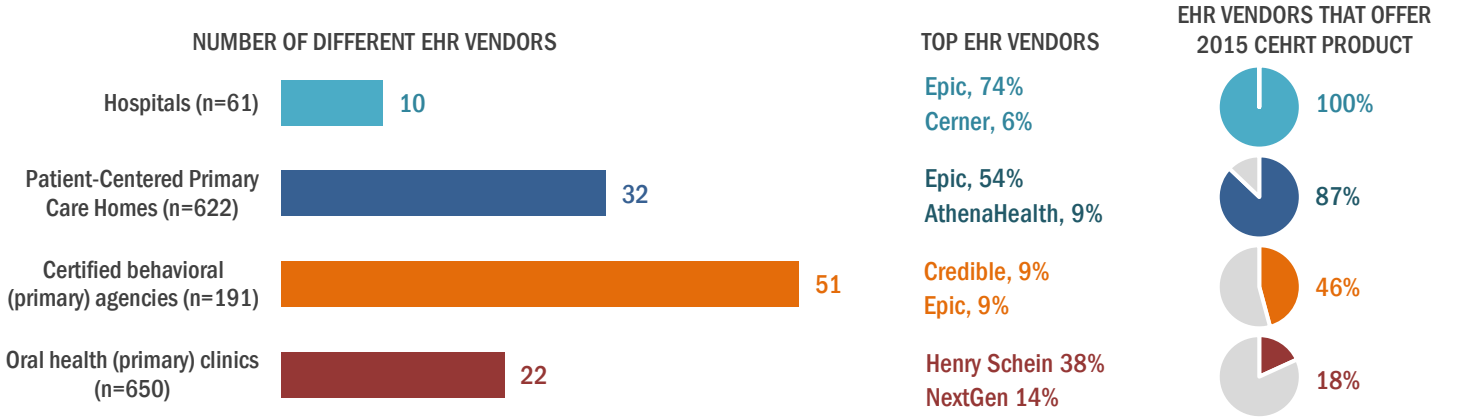
Note: 'Primary' behavioral and oral health entities are those that are unaffiliated with a larger physical health organization

2/10/2022

Physical health providers (represented by Patient-Centered Primary Care Homes, or PCPCHs) use a variety of EHR products, though the vast majority use only a handful of dominant vendors. Most vendors offer products which meet the most recent federal certification standards (2015 CEHRT[5]). PCPCHs have also benefited, along with hospitals, from high rates of participation in the federal Medicare and Medicaid EHR Incentive Programs.

Behavioral health providers use a wider array of products and no one vendor dominates; about half offer 2015 CEHRT. Most providers face challenges with configuring their EHRs for mandated reporting and struggle with managing specially protected information related to substance use treatment. Many are ineligible for the federal Medicare and Medicaid EHR Incentive Programs. For more information, including EHR adoption for all behavioral health providers (including those that are part of a larger physical health organization), see pages 10-11.

Oral health providers have the smallest pool of EHRs designed to meet their needs, and less than a quarter offer 2015 CEHRT, though this is likely an underrepresentation as limited oral health information is currently available. About one fourth of providers participated in the Medicaid EHR Incentive Program, most for only one year.



Source: Program participation data collected by Office of Health IT[6]

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PROGRAM CHANGES AND TRANSITIONS

The Medicaid & Medicare EHR Incentive Programs have led to an increase in adoption and meaningful use of certified EHR technology (CEHRT), bringing more than $500 million to all Oregon hospitals and nearly 8,500 providers.[7] These programs have changed over time…

2016 The Medicaid EHR Incentive Program (MEHRIP) peaked in 2016, which was the last year a provider could start the multi-year program (participation can continue through 2021).

2017 Medicare EHR Incentive Program transitioned in the 2017 program year to the Merit-based Incentive Payment System (MIPS), created by the MACRA legislation.[8] MIPS incentivizes adoption and meaningful use of the latest certified EHR technology and has a broad reach across Oregon's physical health providers who serve Medicare patients, including primary care and specialists. Many Medicaid providers serve Medicare patients and are eligible for MIPS.

2019 All eligible hospitals in Oregon have completed MEHRIP participation. MEHRIP program year 2019 requires 2015 CEHRT.

2021 MEHRIP ends as planned in 2021. Safety net clinics and pediatricians are unlikely to participate in MIPS.

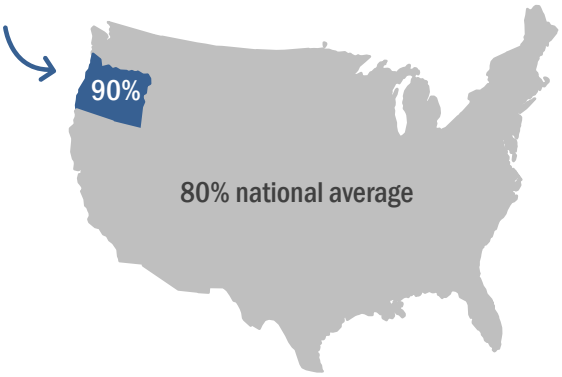
KEY EHR CONCEPTS FOR OREGON

- **Epic is widely used but not universal**. The majority of providers use a handful of EHR vendors, but there are more than 145 different EHR products in use. Depending on Epic alone for electronic health information sharing would leave critical gaps.
- **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[9].
- **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.
- **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.[10]
- While federal incentive programs have changed as described above, **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.
- **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.
- **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.[11]

"Getting an EHR as comprehensive as we need is challenging…" – Behavioral Health Provider

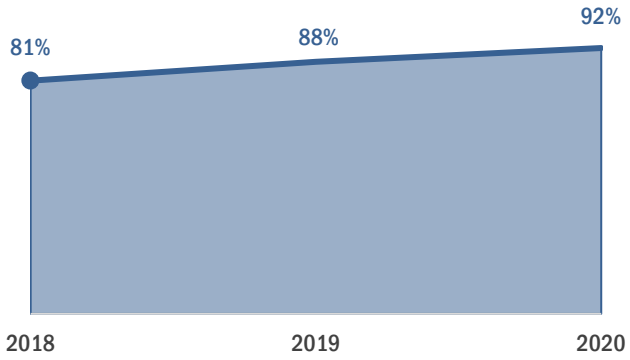
OREGON SURPASSES THE NATIONAL AVERAGE IN PHYSICAL HEALTH EHR ADOPTION RATES.

Based on a 2017 national survey, **90% of Oregon office-based physicians have adopted certified EHRs,** which is significantly more than the 80% national average.[12]



Source: National Electronic Health Records Survey, National Center for Health Statistics

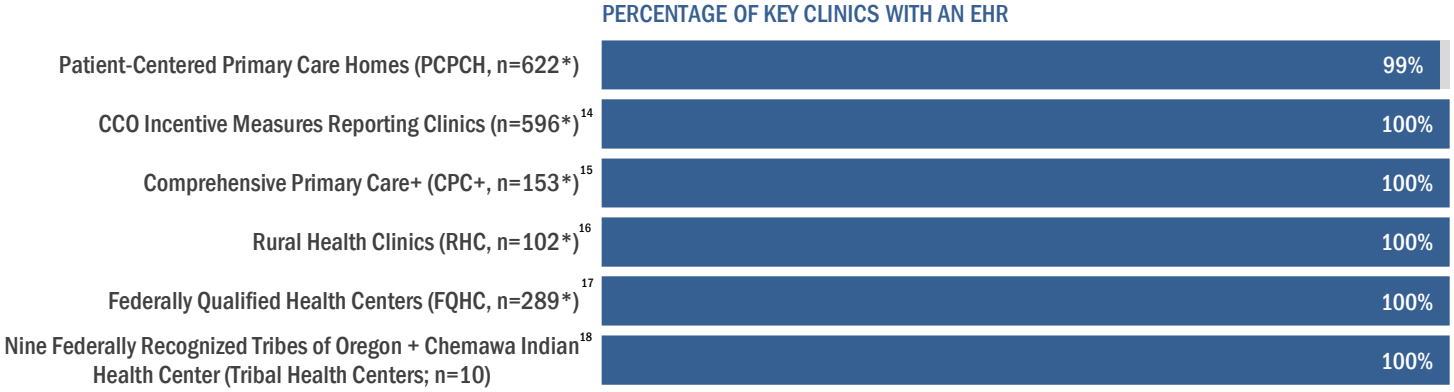
At least 92% of CCO members received care from a primary care provider with an EHR in 2020. CCOs do not report on all providers, so the true number is likely higher.[13]



Source: Office of Health IT, OHA 2/10/2022

'Key' clinics: Key clinics are those that participate in specific federal and state programs that include funding to support health care transformation efforts, including HIT implementation and use. OHA relies on these clinics to deliver on health care transformation for the Oregonians they serve.

Almost all physical health key clinics in Oregon have adopted EHRs.

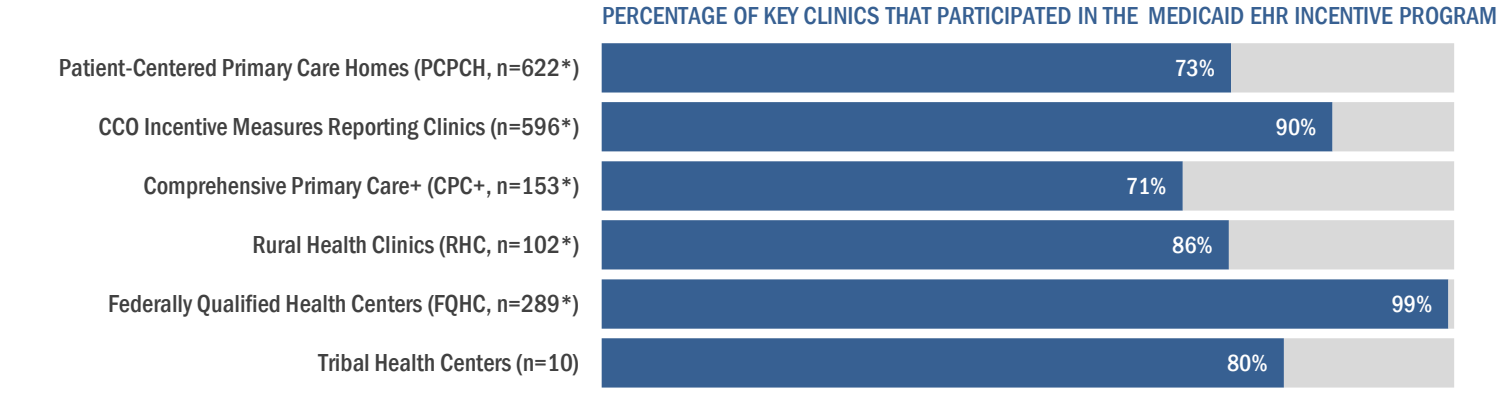


Source: Program participation data collected by Office of Health IT 2/10/2022

*Reported per clinic (rather than organization)

Note: Key clinics can fall into more than 1 category. There are a total of 1,019 unique 'key' clinics represented.

Key clinics had high Medicaid EHR Incentive Program participation rates.



Source: Program participation data collected by Office of Health IT 2/10/2022

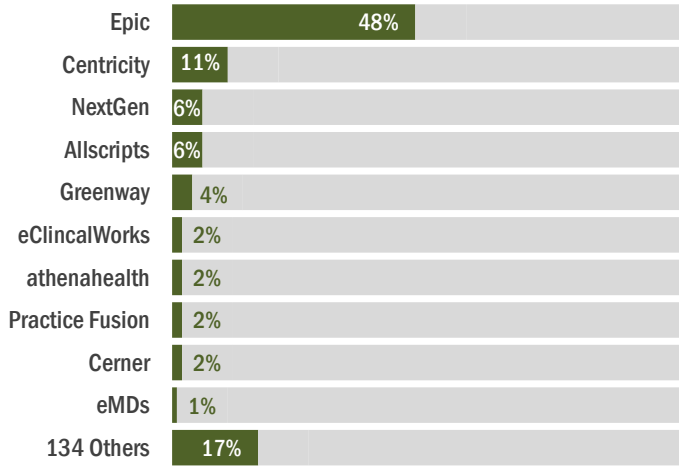
*Reported per clinic (rather than organization)

Note: Key clinics can fall into more than 1 category. There are a total of 1,019 unique 'key' clinics represented.

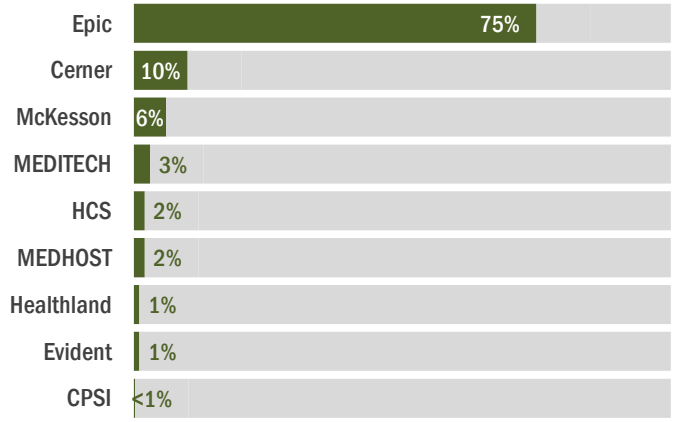
OREGON PROVIDERS USE OVER 145 DIFFERENT EHR VENDORS.

Epic is the most commonly used EHR in Oregon, but providers participating in the Medicaid/Medicare EHR Incentive Programs use over 145 different EHR vendors (144 by Eligible Professionals, 9 by Eligible Hospitals, with 6 overlapping for a total of 147). These providers are primarily physical health providers but include some oral health and behavioral health providers.

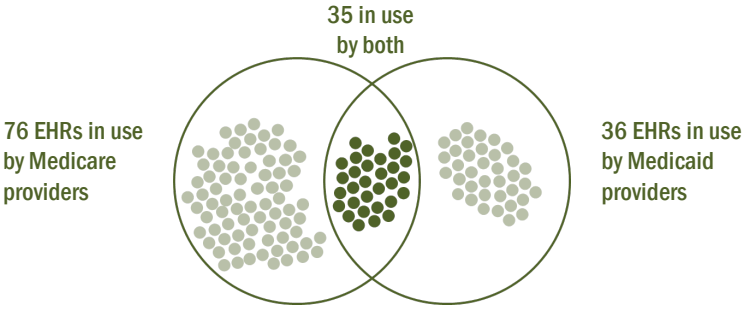
ELIGIBLE PROFESSIONALS (n=8,090)[19]



ELIGIBLE HOSPITALS ('weighted' by number of beds, n=6,660)[20]



76 of the 147 EHR vendors are reported by Medicare participants only, whereas 36 are reported by Medicaid only and 35 are reported by both. This is likely due to the fact that Medicare providers are more likely to be specialty care providers, and specialty providers use a wider variety of EHRs.

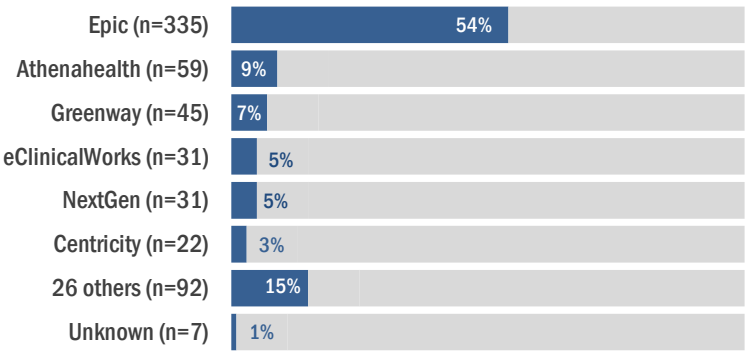


Source: Medicaid and Medicare EHR Incentive Programs
Includes all attestations since program year 2013[21] through 10/9/2019

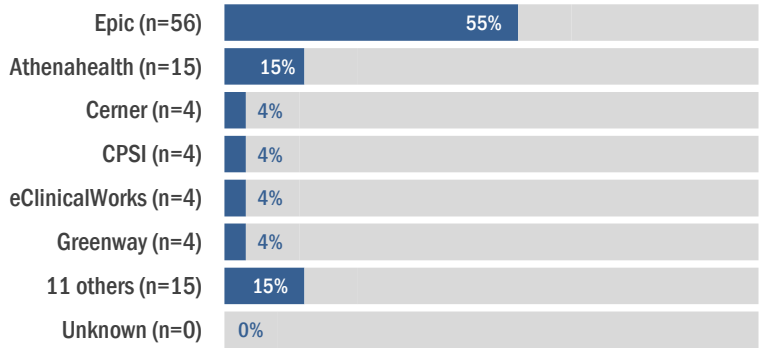
THERE ARE AT LEAST 30 EHR VENDORS IN USE AMONG PHYSICAL HEALTH KEY CLINICS.

The EHR landscape among key clinics, which are mostly primary care facilities, **is also dominated by Epic**.

PCPCH CLINICS (n=622*)



RURAL HEALTH CLINICS (n=102*)



*Reported per clinic (rather than organization)
Source: Program participation data collected by Office of Health IT
2/10/2022

SOME LARGE HEALTH ORGANIZATIONS PROVIDE SUPPORT FOR SMALLER HEALTH ORGANIZATIONS.

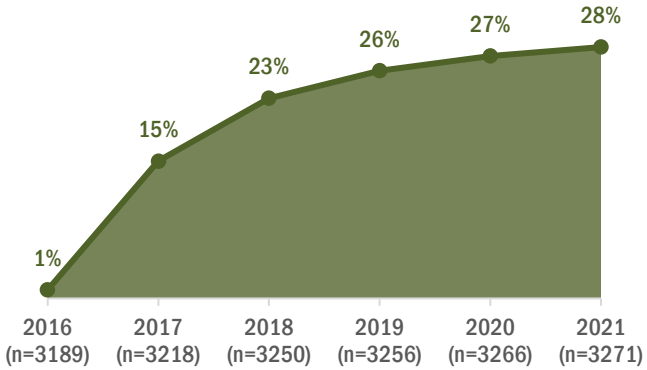
Some large health systems have provided EHR support for smaller hospitals or providers through Epic's Community Connect. Some Independent Practice Associations (IPAs) have supported EHR adoption for their members. OCHIN makes Epic available to Oregon's Federally Qualified Health Centers and Rural Health Centers, which are critical safety net clinics.

HEALTH ORGANIZATION	SERVING	VENDOR
OCHIN	FQHCs and RHCs across Oregon	Epic
Mid Valley IPA	Salem area	NextGen
AllCare IPA (formerly MRIPA)	Southern coast	Allscripts
Central Oregon IPA	Central Oregon and Gorge	Other supports
Epic Community Connect	Various health systems	Epic

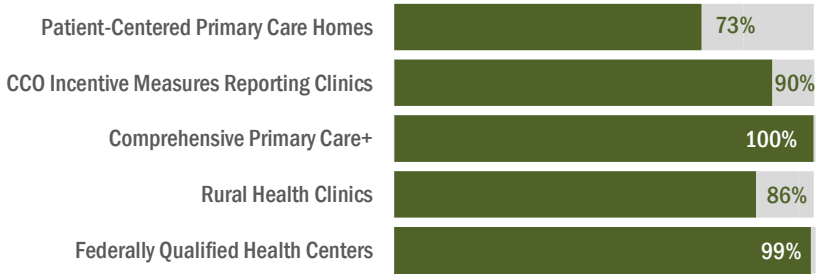
2015 CEHRT ADOPTIONS RATES ARE INCREASING, THOUGH MORE SLOWLY THAN ANTICIPATED.

Adoption of 2015 CEHRT, a more technologically advanced EHR, means providers are **better able to share information for care coordination and to engage with patients, and, when appropriate, their families and caregivers** (see 2015 CEHRT Highlights below). Changing requirements have driven increased adoption of 2015 CEHRT from year to year, with **28% of eligible professionals reporting 2015 CEHRT in their most recent MEHRIP participation year.**[22] Adoption of 2015 CEHRT is higher among key clinics, particularly CPC+ which required 2015 CEHRT for participation.

2015 CEHRT ADOPTION:
ELIGIBLE PROFESSIONALS SINCE 2013



2015 CEHRT ADOPTION:
KEY CLINICS



Source: Medicaid EHR Incentive Programs
Includes all attestations since program year 2013 through 2/10/2022

2015 CEHRT Highlights

- Supports **patient electronic access** to health information through new functionalities and a range of potential technologies that allow patients greater flexibility and choice in how they access and share their health information.
- Able to **record sexual orientation and gender identity, as well as social, psychological, and behavioral data** (e.g., education level, stress, depression, and alcohol use).
- Includes **data segmentation privacy requirements** to support the exchange of sensitive health information.
- **Improves patient safety** by applying enhanced user-centered design principles to health IT.

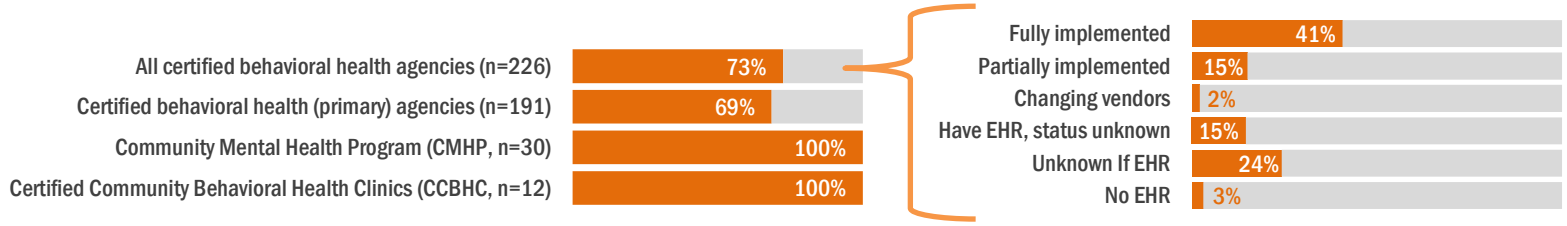
EHR ADOPTION AMONG BEHAVIORAL HEALTH PROVIDERS IS MODERATELY HIGH WITH SOME CHALLENGES.

EHR adoption among Oregon's behavioral health agencies (those that offer at least one OHA-certified program) is moderately high. However, only a third have fully implemented their EHRs, and many agencies have found their EHR does not adequately support their needs. Behavioral health agencies have had limited access to financial incentives, which has likely contributed to these challenges. They have expressed the need for financial support, shared learning opportunities, and education to help them select and implement EHRs.

73% OF ALL CERTIFIED BEHAVIORAL HEALTH AGENCIES HAVE ADOPTED AN EHR.

All Community Mental Health Programs (CMHPs) and Certified Community Behavioral Health Clinics (CCBHCs) are using an EHR. OHA relies on these clinics to deliver on health care transformation for the Oregonians they serve.

Of all certified behavioral health agencies (n=226), **two in five agencies have fully adopted their EHR,** meaning that all patient data is tracked electronically and not on paper.

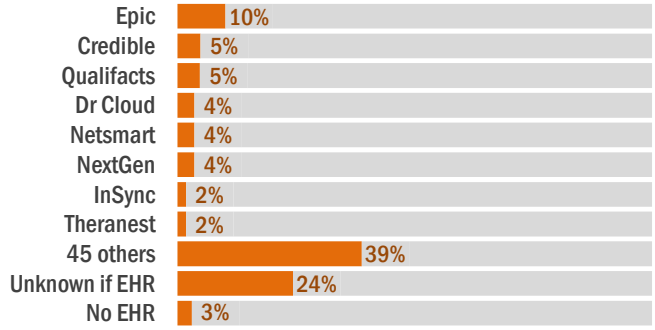


Source: OHA surveys and other EHR data collected by Office of Health IT [23]
2/10/2022

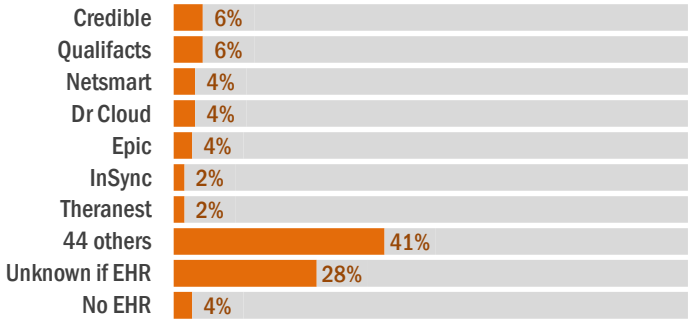
BEHAVIORAL HEALTH PROVIDERS USE ABOUT 50 DIFFERENT EHR VENDORS.

Like Oregon providers overall, **behavioral health providers use a wide variety of EHRs and therefore face information sharing challenges**. For behavioral health agencies not part of a large physical health organization, the top EHR vendors are Credible, Qualifacts, Netsmart, and Dr Cloud.

EHR VENDORS AMONG ALL BEHAVIORAL HEALTH AGENCIES (n=226)



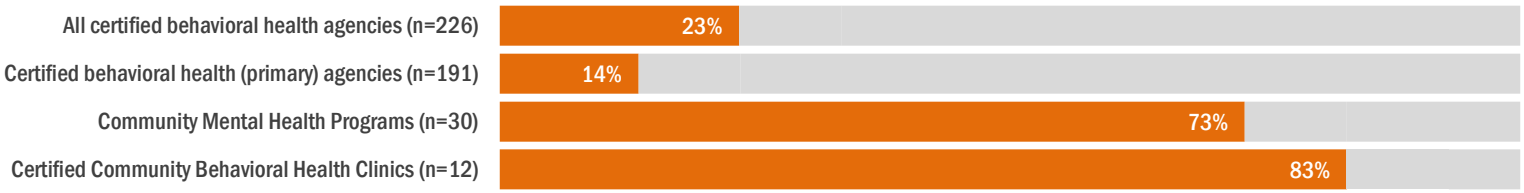
EHR VENDORS AMONG BEHAVIORAL HEALTH AGENCIES THAT ARE NOT PART OF A LARGE PHYSICAL HEALTH ORGANIZATION (n=191)



Source: OHA surveys and other EHR data collected by Office of Health IT
2/10/2022

Behavioral health Medicaid EHR Incentive Program participation was limited because most behavioral health providers were not "eligible providers" according to program rules. Only 14% of certified behavioral health agencies (not part of a large physical health organization) participated. Their average incentive payments were a fraction of the average for physical health provider payments. Participation rates were higher for CMHPs and CCBHCs.

BEHAVIORAL HEALTH MEDICAID EHR INCENTIVE PROGRAM PARTICIPATION



Source: Medicaid EHR Incentive Program
2/10/2022

CHALLENGES IN EHR ADOPTION FOR BEHAVIORAL HEALTH AGENCIES

OHA's Behavioral Health HIT Workgroup convened in fall 2018 to review the findings put forth in OHA's 2017 Behavioral Health HIT Scan Report and develop recommendations to address the health IT needs of Oregon's behavioral health system. Top challenges identified include:

- Need for clarification and support around 42 CFR Part 2 and its implications.
- Behavioral health providers manage funding sources that have significant reporting burdens which 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.

LOOKING AHEAD FOR BEHAVIORAL HEALTH AGENCIES

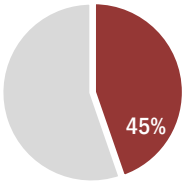
Behavioral health organizations need EHRs that meet their unique information capture and management needs. These EHRs must be interoperable and support behavioral health reporting requirements, such as electronic metrics reporting.

Support needs identified in the Workgroup report include:

- Help navigating the EHR vendor landscape
- EHR market analysis
- Shared learning opportunities
- Financial incentives
- HIT education
- Support from larger, better resourced organizations

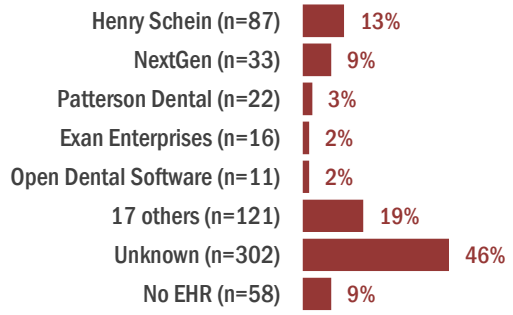
MORE INFORMATION IS NEEDED ON ORAL HEALTH PROVIDER EHR ADOPTION.

OHA currently has limited information on oral health EHR adoption. The oral health clinics included in this section are those that contract with a Medicaid dental care organization (DCO) or CCO. The sources of EHR information are the 2021 Oregon Health IT Survey, the Medicaid EHR Incentive Program (MEHRIP), and other program participation data collected by the Office of Health IT. Many oral health providers not captured in these sources may still have an EHR.



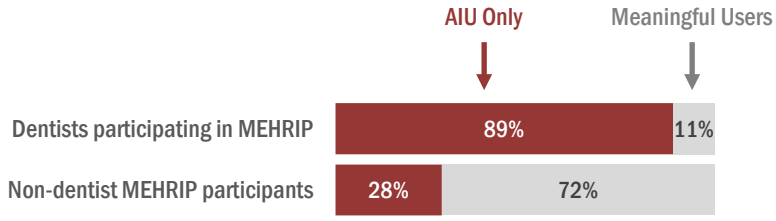
Almost half (n=650) of oral health clinics have reported an EHR through the 2021 Oregon Health IT Survey, participation in MEHRIP, or participation in other programs.

EHR VENDORS AMONG ORAL HEALTH CLINICS NOT AFFILIATED WITH A LARGER PHYSICAL HEALTH ORGANIZATION (n=650)



Source: Program participation data collected by Office of Health IT 2/10/2022

MEHRIP participation data indicates that **most** (89%) **dentists only attested for adopt/implement/upgrade (AIU),** not returning and demonstrating meaningful use of their EHRs, compared to 28% of other provider types.



Source: Medicaid EHR Incentive Program 2/10/2022

More information is needed about oral health EHR adoption rates and EHR functionality, including to what extent oral health EHRs support sharing health information among oral health providers and other types of providers (like physical, behavioral, and other providers).

OREGON HIT DATA BRIEF: HEALTH INFORMATION EXCHANGE

HEALTH INFORMATION EXCHANGE POLICY CONTEXT AND EXECUTIVE SUMMARY

Electronic health information sharing, or health information exchange (HIE)[8], 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. See *HIE Overview*.

HIE supports better coordinated care by helping providers across different organizations and disciplines share clinical data. To coordinate care, a person's physical, behavioral, and oral health providers must be able to share information. HIE can provide real-time access to patient information at the point of care, promoting safer and better-informed clinical decisions, especially when it is easily accessible within the clinician's workflow. HIE also supports referrals, notifications about critical health events, and access to prescription or other important clinical patient information.

HIE supports population health management and value-based payment (VBP)*. Oregon's health care transformation model is moving toward making most payments through value-based arrangements – 70% of CCO payments by 2024. In addition to supporting care for individual patients, HIE helps:

- providers, CCOs, and health plans share clinical data for large sets of patients, which can support analytics, population management, and value-based payment arrangements.
- organizations gather clinical and demographic data to identify patients at risk for poor health outcomes and assess the effectiveness of interventions. This data could also identify and track health inequities.
- CCOs, health plans, and primary care clinics manage value-based payment arrangements by ensuring clinical information is available. Additional health IT tools and analytics activities are needed to manage value-based payment arrangements.

Including CCOs/health plans in HIE increases its potential complexity. It also provides an opportunity for CCOs/health plans to coordinate and financially support shared HIE solutions.

In the next five years, HIE has the potential to better support complex care coordination, including addressing social determinants of health and helping to eliminate health inequities. When providers and health plans/CCOs share information about care goals, plans of care, and information about risks and social factors, they can impact health outcomes. Connecting health care and social services sectors through health IT has the potential to support better health outcomes and could help policymakers better understand social determinants of health gaps so public investments can be allocated to ensure that social services needs are being met. HIE can help organizations better understand outcomes (and address them) for populations likely to face health inequities.

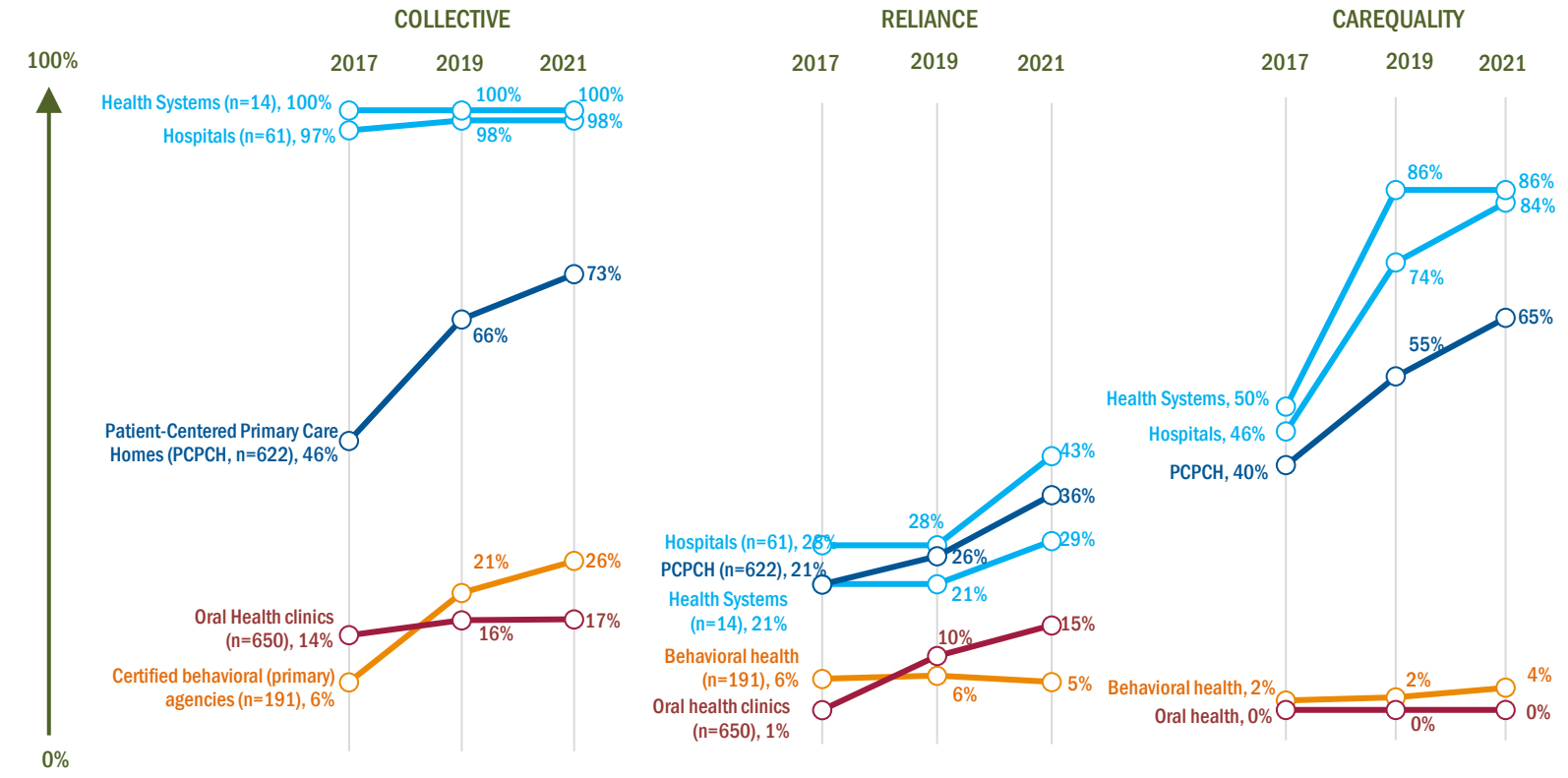
*Value Based Payment: Payment to a provider that explicitly rewards value, by moving away from traditional volume-based health care payments to payments based on value that support positive member health outcomes and cost savings. Whereas the traditional fee-for-service payment model results in a fragmented system and unnecessary costs, transitioning to VBP increases flexibility and incentives for providers to deliver patient-centered, whole person care.

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

2014		2022
Emergency Department Information Exchange (EDIE) implementation just beginning[24]	1	Many Oregon organizations have real-time access to hospital and emergency department event notifications for their patients from hospitals in Oregon and bordering states (p. 16-17)
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 (p. 18-20)
Five regional HIEs (one in development) cover about 40% of Oregon counties; limited services available[25]	3	One Regional HIE is active in two-thirds of Oregon's counties and serves an important role in those communities (p. 21)
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 (pgs. 22-23)
Virtually no connections between disparate networks	5	Providers use multiple HIE networks; some networks have connected to each other (p. 24-25)
Although Oregon's Prescription Drug Monitoring Program (PDMP) was launched in 2011, there was no EHR integration	6	Providers can access opioid prescription data more easily; providers with health IT integration access it at much higher rates (p. 26-28)
Health IT for population management is in its infancy; value-based payment is not a major part of Oregon's landscape	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. (p. 28)

ADOPTION OF VARIOUS HIE TOOLS IS INCREASING IN OREGON.

Overall, HIE in Oregon has increased significantly, with major gains in hospital event notifications through Collective (EDIE/PreManage)[26] and nationwide query-based networks such as Carequality. Hospitals and health systems have the highest adoption rates, and physical health providers' rates have also increased. Behavioral and oral health providers are participating but at lower rates.



Source: Program participation data collected by Office of Health IT 3/3/2022

Oregon has seen a dramatic increase in HIE since 2009. The HIE environment has evolved, including national efforts influencing Oregon's HIE landscape, vendor-based efforts, expanded services and geographic areas for existing regional HIEs, and new regional HIEs. (See *HIE Overview*.)

2009

HITOC's first HIE environmental scan[27] noted nine regional HIE efforts in Oregon, as well as several hosted EHRs (which also allow providers to share clinical data) and the development of Epic Care Everywhere. Although eHealth Exchange (then known as "Nationwide Health Information Network"), a nationwide query-based network, launched in 2004, in 2009 its focus was federal agencies, so it did not impact Oregon's providers.

Public Health Immunization Registry begins bi-directional exchange with pediatrician offices.

2011

ONC prioritizes state HIE funding for Direct secure messaging, which later became a requirement under Meaningful Use/EHR Incentive Programs. Oregon launches CareAccord, which provides Direct secure messaging through a web portal for organizations whose EHRs do not offer it, or who lack an EHR (ended March 2018).

2013

CommonWell (a nationwide query-based network) launches.

Oregon's regional HIEs include Jefferson HIE, Gorge Health Connect, and Central Oregon HIE. IHN-CCO launches their Regional Health Information Collaborative (RHIC). Many regional HIE efforts envisioned in 2009 did not develop by 2013.

2015

Carequality (a nationwide query-based network) launches. All Oregon hospitals commit to implementing EDIE, and implementation begins.

Oregon launches the EDIE Utility, a public/private partnership and joint funding/governance model. All hospitals are live on EDIE within 15 months. CCOs become first adopters of PreManage.

2017

Oregon's Office of Public Health makes integrated Prescription Drug Monitoring Program (PDMP) access available.

2018

OHA and the Oregon Health Leadership Council establish the HIT Commons as a public/private partnership, using a joint funding model. EDIE Utility becomes a project of the HIT Commons and extends its investment in EDIE for three years. HIT Commons launches the PDMP Integration initiative to fund statewide integrated access for prescribers and pharmacists.

OHA and partners begin exploration of community information exchange (CIE), which would connect health care and social services providers.

2019

Oregon's HIE Onboarding Program supports onboarding critical Medicaid physical, behavioral and oral health providers to Reliance eHealth Collaborative in several regions. More than half of CCOs are participating. (Program ended Sept. 2021 as planned with the end of federal HITECH Act funding.)

2020

COVID pandemic contributed to broad adoption of CIE by CCOs and other partners. HIE played a role in sharing state COVID data with health care system and payers.

- **EHR foundations cannot be separated from HIE strategies.** Access to robust, certified EHRs is a major driver of HIE opportunities.

- **Although physical, behavioral, and oral health providers are participating in health information exchange at increasing rates, substantial digital divides persist.** These digital divides are complex but run largely along lines of access to resources, creating two "worlds." This disparity impacts some more significantly than others, but ultimately affects the whole health care system. See *HIE in Oregon: A Tale of Two Worlds*.

- **Oregon providers typically need multiple HIE tools to meet all their HIE needs**. Providers use HIE tools for sharing clinical information for patient care, value-based payment, population management, analytics, and more. These needs are too complex to be met by any single tool available today; providers are likely to continue to need multiple tools over the next five years. See *HIE Overview*.

- **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. Smaller organizations, including many serving diverse populations, are on smaller EHRs that do not participate in nationwide query-based networks and vendor-driven query-based networks. See *HIE in Oregon: A Tale of Two Worlds*.

- **CCOs, health plans, health systems and hospitals play a major role in funding some HIE efforts.** Clinics typically pay little to no costs to participate in Collective and Reliance eHealth Collaborative.

- Federal regulations that provide special protection relating to 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.**

- **The focus on social determinants of health brings exciting new health IT opportunities to address health inequities**. Better coordination between health care and social services has the potential to improve health outcomes by addressing social determinants of health such as housing and food insecurity. Community information exchange efforts are quickly evolving across Oregon, bringing new opportunities and in some cases, new challenges.[28]

- **Organizations in Oregon will likely face major transitions over the next five years due to federal changes.** Implementation of new regulations and the national Trusted Exchange Framework and Common Agreement are creating uncertainty in the marketplace. The need for regulatory clarity is in tension with the need to make decisions now for patient care and health system transformation.[29]

- **The COVID pandemic highlighted the importance of connecting across public health, health care organizations, and CCOs and health plans.** HIE played a role in sharing COVID case and vaccine data with new partners. CCOs, health plans, hospitals, primary care and behavioral health providers partnered with state and local public health agencies to respond to the pandemic, and support individuals who needed to isolate or quarantine, or who needed access to vaccines.

1 Many Oregon organizations have real-time access to hospital and emergency department event notifications for their patients from hospitals in Oregon and bordering states.

Oregon has invested in Collective which includes the Emergency Department Information Exchange (EDIE) and its companion product, PreManage, for emergency department (ED) and hospital event notifications. PHYSICAL health providers have significantly higher Collective (formerly EDIE/PreManage) adoption rates than **BEHAVIORAL** health providers. **ORAL** health providers have low Collective adoption rates but may receive ED notifications from other sources like a Dental Care Organization (DCO).

- All health systems, nearly all hospitals, and most **physical** health key clinics have adopted Collective (formerly EDIE/PreManage).
- Though rates of Collective adoption have increased among **behavioral** health agencies since 2017, adoption rates remain low except for agencies with Community Mental Health Programs and Certified Community Behavioral Health Clinics (see p. 21).
- Though few **oral** health providers/clinics are currently connected to Collective, all Medicaid DCOs are using Collective to coordinate follow up care for members recently admitted to the ED. DCOs report preferring this workflow rather than having individual clinics directly access Collective.[30]
- All CCOs and most major health plans in Oregon use Collective to coordinate member care. Additionally, nearly all make Collective available to their contracted (primary, behavioral, and oral) providers.

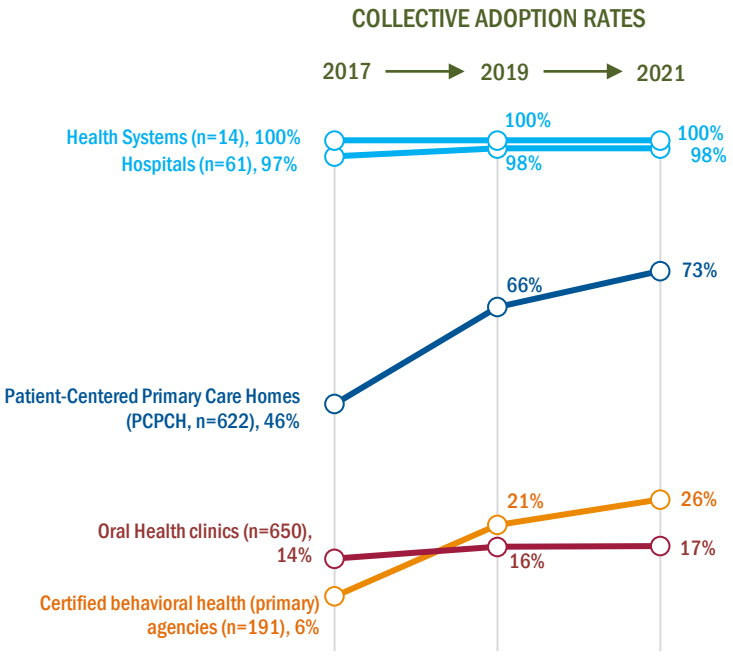
HITOC Strategies in Support of Hospital Event Notifications

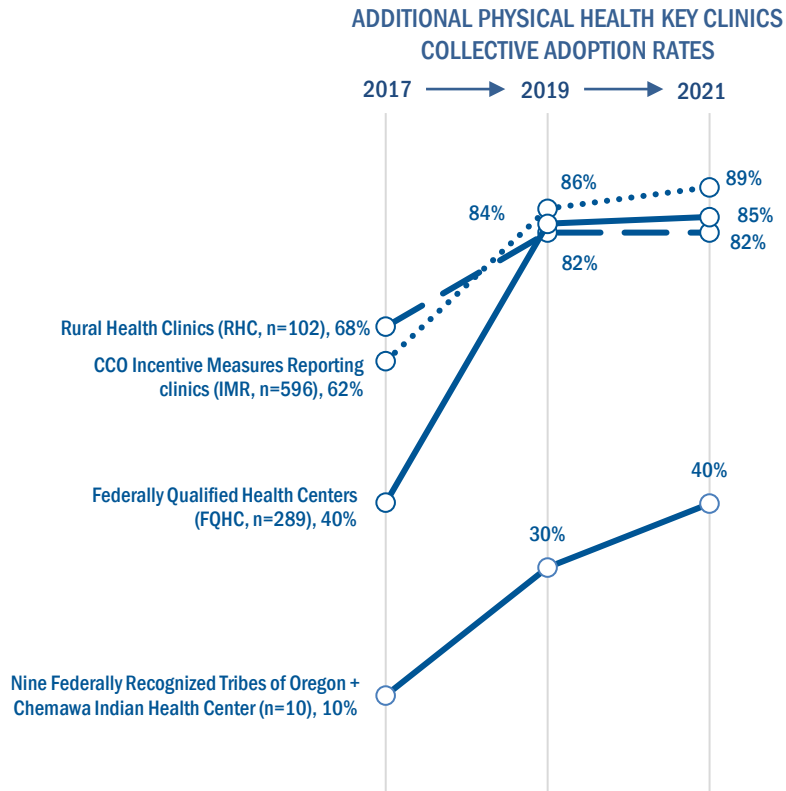
Collective Platform (formerly EDIE/PreManage) sends real-time hospital notifications. It allows providers to enter care guidelines for their patients.

OHA's Medicaid Collective Subscription is funded by OHA and available at no cost to Medicaid-serving entities.

HIT Commons is a public/private partnership established to accelerate and advance health information technology adoption and use across Oregon.

See Oregon Health Leadership Council EDIE Website





Source: Program participation data collected by Office of Health IT 2/10/2022

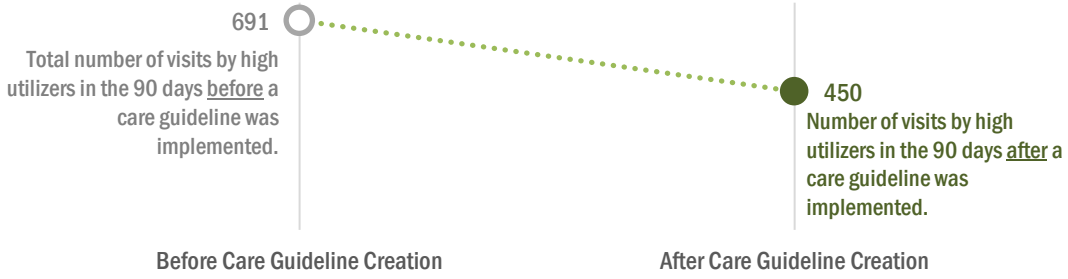
Additional types of Oregon entities are using Collective (formerly PreManage) to improve care including the following entity types:

- **35 social service agencies**, including all ODHS Type B Area Agencies on Aging, Aging & People with Disabilities field offices, and Intellectual & Developmental Disabilities offices[31]
- **109 skilled nursing facilities**
- **1 corrections facility**
- **33 payers/risk bearing groups**, including all CCOs, most health plans, and all Dental Care Organizations (DCOs)
- **Reliance eHealth Collaborative, Oregon's regional health information exchange organization**

Source: Collective Medical Technologies
2/10/2022

Collective (formerly EDIE/PreManage) use is an important contributor to reduction in emergency department visits for individuals who are high utilizers of ED services.[32]

ED visits by high utilizers decreased by 35% in the 90 days following the initial creation of a care guideline.[33]



Note: A 'high utilizer' is defined as a patient who seeks medical attention at an emergency department five or more times in 12 months.
Source: Apprise Health Insights, Quarterly EDIE Analytics Dashboards
12/17/2021

PROFILE OF SUCCESS: HIT COMMONS

The broad success of two HIT Commons initiatives: Collective (formerly EDIE/PreManage) and the Prescription Drug Monitoring Program Integration initiative can offer insight for HITOC. Common factors include:

- Narrow, defined scope
- Clear return on investment and value
- Relatively low cost, with OHA sponsorship to support CCO/Medicaid participation
- Early adopters shared their successes
- Shared governance
- Careful nurturing and collaboration, including regional collaboratives

2 Major hospitals, health systems, and their affiliated provider groups have on-demand access to care summaries for care their patients received outside their system.

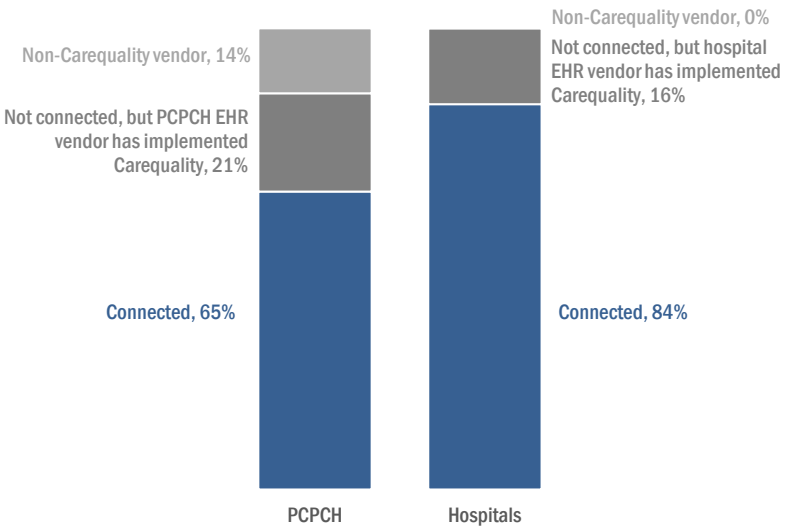
Many providers access care summaries via a query-based network (either nationwide or vendor-based). **Carequality**, **CommonWell**, and **eHealth Exchange** (nationwide networks), and **Epic's Care Everywhere** (vendor-based network) help providers exchange care summaries, which are clinical documents that summarize care a patient received from other providers. This can help clinicians make better care decisions. Many EHRs can deliver this information within the provider's workflow. Most query-based network participation is driven by a provider's EHR vendor; eHealth Exchange is the exception. (See *HIE Overview* for details about query-based networks and an overview of their advantages and limitations.)

Carequality, a nationwide query-based network, has a strong presence in Oregon. Currently, most EHR vendors that have implemented Carequality are physical health vendors. **Physical health** entities, therefore, have significantly higher Carequality access rates than **behavioral health**; **oral health** providers are not connected except those that are part of a larger physical health organization.

- A majority of hospitals, health systems, and **physical** health key clinics can access Carequality. Access rates are lower among other physical health entities.
- Carequality access has increased slightly among **behavioral** health agencies since 2017, but only for agencies that are part of a larger physical health organization and two Certified Community Behavioral Health Clinics using a participating vendor.
- **Oral** health provider access to Carequality is exclusively among those that are part of a larger physical organization. No standalone oral health clinics are connected to Carequality.

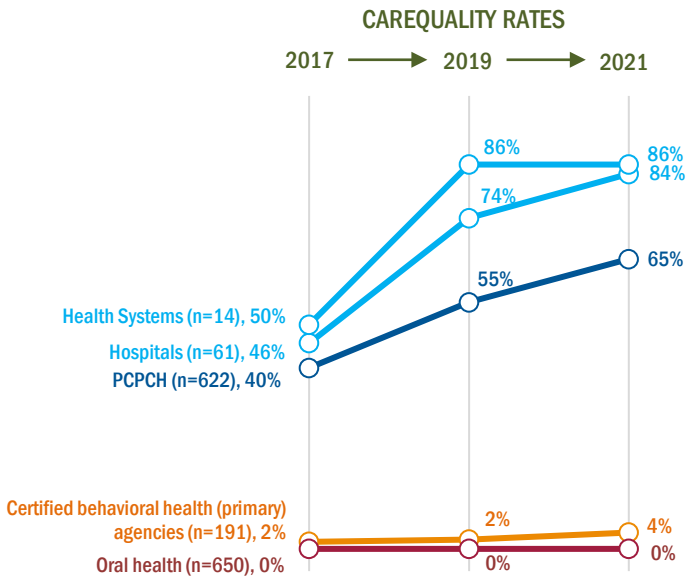
Potential Oregon Carequality Connectivity

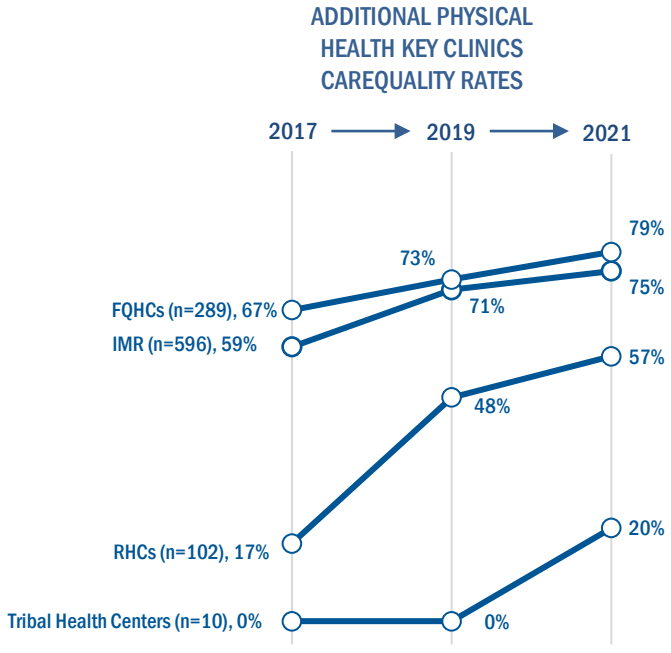
The chart represents **actual** and **potential** Carequality access if all PCPCHs and hospitals that are using a vendor that has implemented Carequality* were to have access. Potential Carequality access rate is 86% among PCPCHs and 100% among hospitals.



Source: Program participation data collected by Office of Health IT 2/10/2022

*Vendors implementing Carequality: AllScripts, athenahealth, Cerner, CPSI, eClinicalWorks, Epic, Greenway, NextGen, Physician's Computer Company

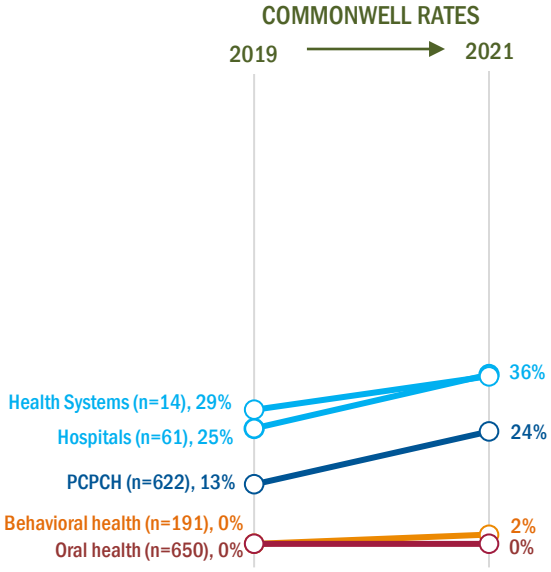




Source: Program participation data collected by Office of Health IT 2/10/2022

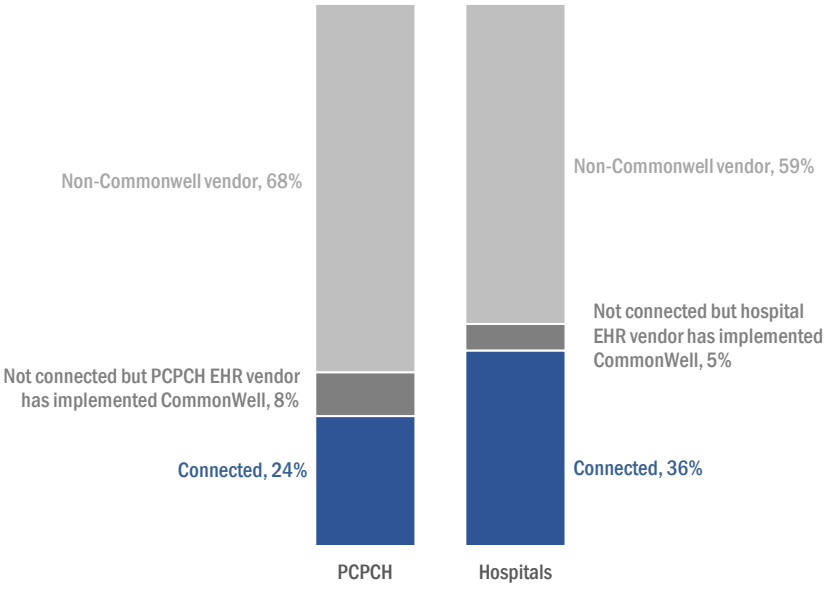
CommonWell, like Carequality, is a nationwide query-based network that exchanges clinical documents and access is dependent on a provider's EHR vendor (See *HIE Overview*). There are fewer EHR vendors participating in CommonWell, however CommonWell is a Carequality implementer, which supports more connections.

- About a third of hospitals, health systems, and some **physical** health key clinics are connected to CommonWell. Connection rates are lower among other physical health entities.
- CommmonWell access has increased slightly among **behavioral** health agencies since 2019, both for agencies that are and are not part of a larger physical health organization using a participating vendor.
- **Oral** health provider access to CommonWell is exclusively among those that are part of a larger physical organization. No standalone oral health clinics are connected to CommonWell.

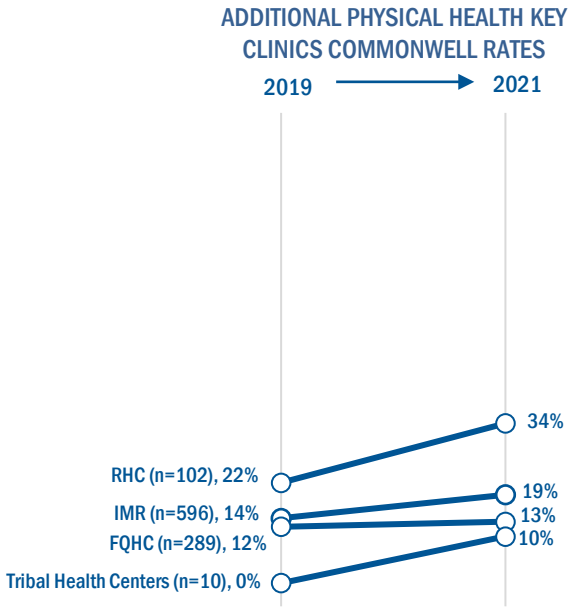


Potential Oregon CommonWell Connectivity

The chart represents **actual** and **potential** CommonWell access if all PCPCHs and hospitals that are using a vendor that has implemented CommonWell* were to have access. Potential CommonWell access rate is 32% among PCPCHs and 41% among hospitals.



Source: Program participation data collected by Office of Health IT 2/10/2022
*Vendors implementing CommonWell: Aprima, athenahealth, Cerner, CPSI, eClinicalWorks, Greenway, Meditech



Source: Program participation data collected by Office of Health IT 2/10/2022

eHealth Exchange, another nationwide query-based network, is also used in Oregon. (See *HIE Overview*). See page 25 for health systems who are eHealth Exchange participants. OCHIN and Reliance eHealth Collaborative are also participants. eHealth Exchange connected to Carequality in 2020.

Epic's Care Everywhere, a vendor-driven query-based network, has a strong presence in Oregon because of Epic's dominance. (See page 25 for health systems using Epic.) Not all Epic users have implemented Care Everywhere, and OHA does not currently have data on which Epic users have done so. (See *HIE Overview*.)

Direct secure messaging is another method that providers can use to exchange care summaries. It is similar to secure e-mail. Direct Secure Messaging is HIPAA-compliant and specifically designed to exchange patient health information across different EHR networks.

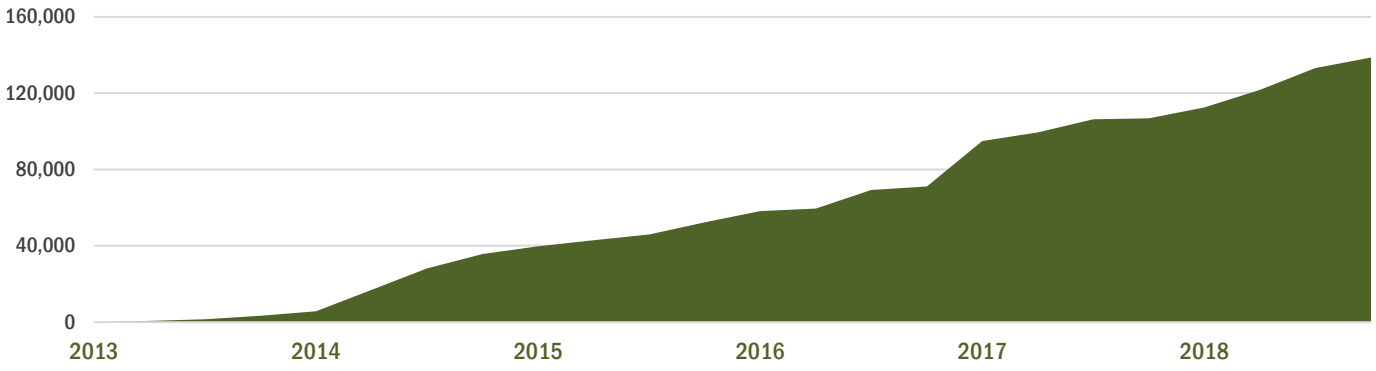
Direct secure messaging availability continues to increase nationally, reinforced by federal EHR incentive programs requirements. Use has focused on transition of care summaries to meet federal EHR incentive program requirements. There are ongoing efforts to introduce Direct secure messaging for other use cases. See *HIE Overview*.

HITOC HIE Strategy

OHA's Flat File Directory (FFD) assisted organizations with identifying Direct secure messaging addresses across the state to support use of Direct, including to meet federal Meaningful Use requirements for sharing Transitions of Care summaries. (see *Office of Health IT Website*) Given CMS' 2020 Interoperability and Patient Access final rule requirement for providers to include their digital contact information in the National Plan and Provider Enumeration System, the FFD was no longer needed.

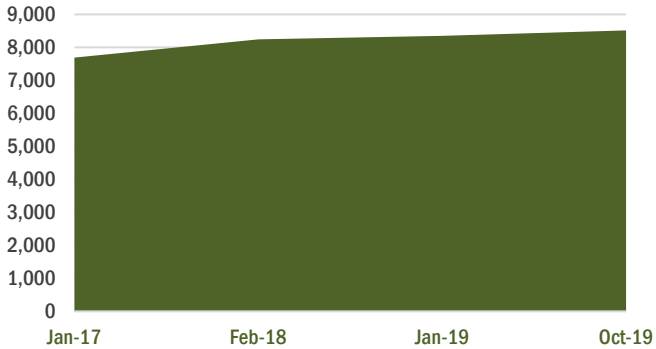
Health care organizations served by national DirectTrust accredited Health Information Service Providers (HISPs) and the Oregon Flat File Directory have steadily increased.

HEALTH CARE ORGANIZATIONS SERVED BY NATIONAL DIRECTTRUST HISPS

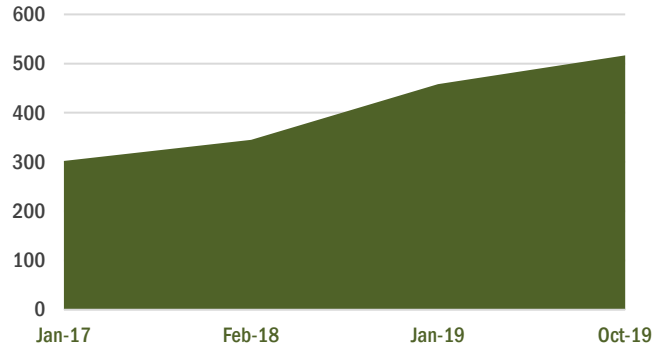


Source: DirectTrust Metrics 4th Quarter 2019
1/17/2019

PROVIDERS IN OREGON FLAT FILE DIRECTORY



FACILITIES IN OREGON FLAT FILE DIRECTORY



Note: Flat File Directory participating facilities were part of 55 unique organizations
Source: Oregon Flat File Directory, OHA
10/18/2019

3 One regional HIE is active in two-thirds of Oregon's counties and serves an important role in those communities.

In Oregon, there is one regional HIEs: Reliance eHealth Collaborative. It includes a community health record, which brings together information from many participating providers into a unified record for each patient, as well as other HIE functions. Participants include physical, behavioral and oral providers as well as CCOs and health plans, local public health, and one corrections facility.

Unlike nationwide and vendor-driven query-based networks, a regional HIE is EHR vendor agnostic, making it accessible to a wider array of providers. Regional HIEs are often sponsored by health plans/CCOs and hospitals, because regional HIEs allow them to access clinical information for the patients they serve, improving opportunities for value-based payment and other functions.

Reliance eHealth Collaborative

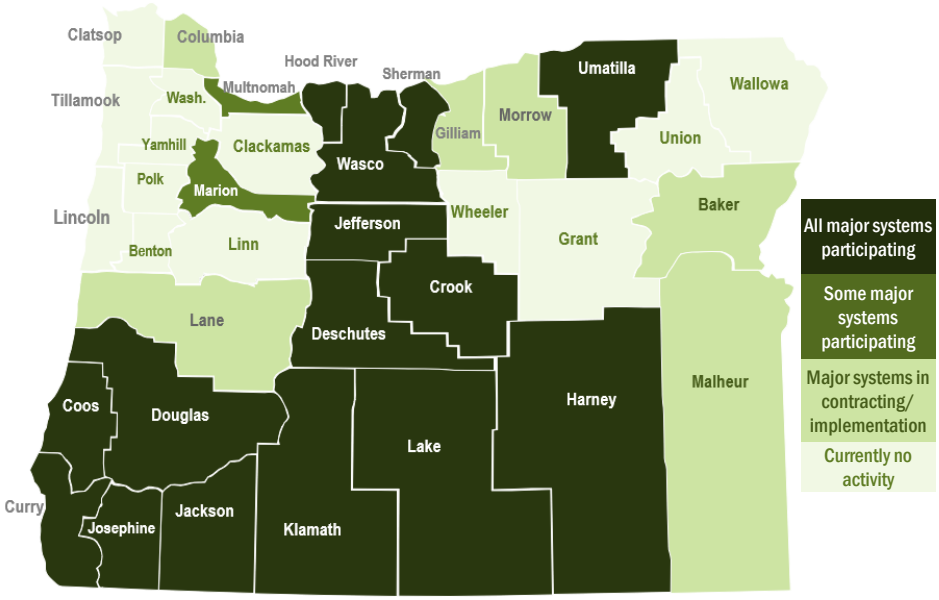
- **2011** Jefferson HIE is formed as a collaboration between Providence, Asante, and four CCOs in Southern Oregon
- **2015** Jefferson HIE merges with Gorge Health Connect
- **2016** Jefferson HIE becomes the vendor for Central Oregon HIE
- **2017** Jefferson HIE renamed Reliance eHealth Collaborative, connects to eHealth Exchange and Collective
- Reliance eHealth Collaborative becomes a member of the Strategic Health Information Exchange Collaborative (SHIEC) Patient Centered Data Home, which connects Reliance to multiple regional HIEs outside Oregon.

Core services: community health record, regional eReferrals, orders and results delivery, hospital and clinical event notifications, data analytics/reporting, Direct messaging (HISP)

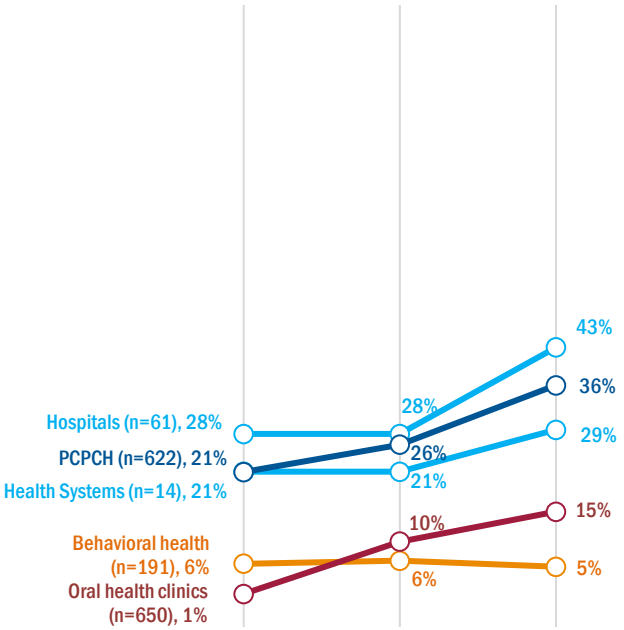
Major participants (https://reliancehie.org/participants/):

CCOs and Commercial Health Plans: PacificSource Gorge, PacificSource Central Oregon, AllCare, Jackson Care Connect, Cascade Health Alliance, Advanced Health, Umpqua Health Alliance, Cambia Health Solutions

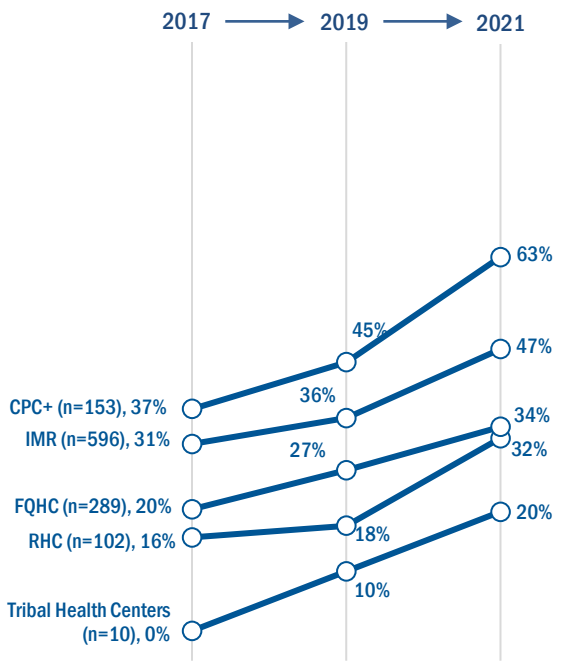
Hospitals/health systems: Asante Health System, Coquille Valley Hospital District, Harney District Hospital, Lake Health District, Legacy Health System, Lower Umpqua Hospital District, Mid-Columbia Medical Center, Providence, Sky Lakes, St. Charles Health



RELIANCE ADOPTION RATES



ADDITIONAL PHYSICAL HEALTH KEY CLINICS RELIANCE ADOPTION RATES



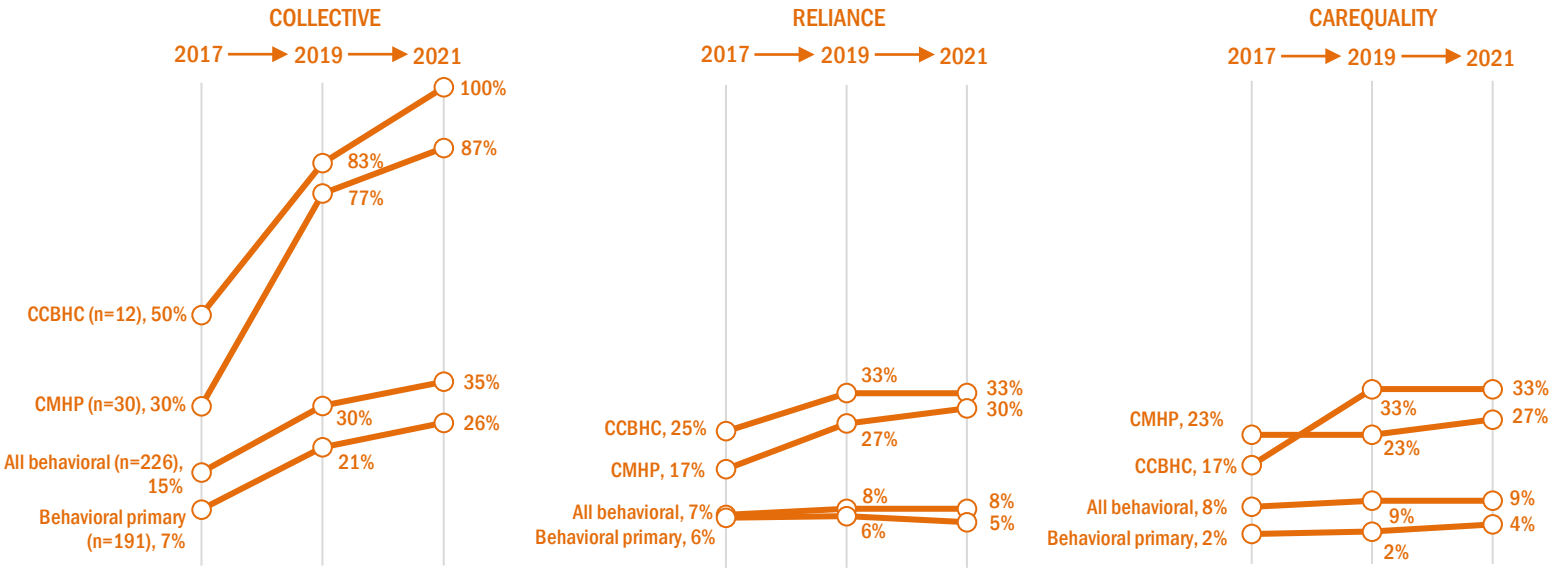
Source: Participant data self-reported by Reliance 2/10/2022

HITOC HIE Strategy

OHA's HIE Onboarding Program leveraged significant federal funding to onboard key Medicaid providers to Reliance's regional HIE. (see OHA's HIE Onboarding Program webpage)

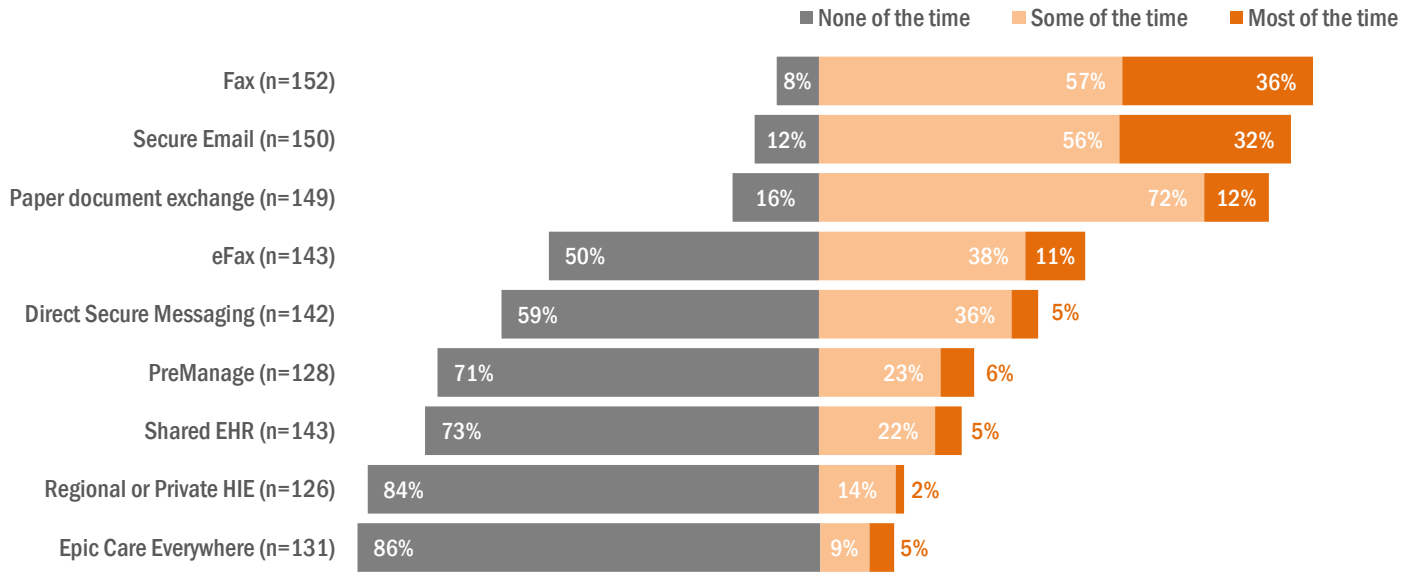
4 Behavioral health and oral health providers are using HIE; they also share important patient information with physical health providers.

Behavioral health agencies need HIE and are investing in HIE tools.
In addition to sharing information via Collective (formerly PreManage) care guidelines, some behavioral providers have access to physical health patient information in regional HIE community health records. Some behavioral health providers are also able to share information electronically (via Regional HIE or Carequality, for example), making it available to their patients' other care providers, including physical and other behavioral health care providers.



Source: Program participation data collected by Office of Health IT
3/3/2022

Behavioral health agencies are sharing clinical information with other behavioral health providers, hospitals, laboratories, pharmacies, payers, government agencies, and others. However, most of this sharing is still happening via fax, secure email attachments, and paper documents.

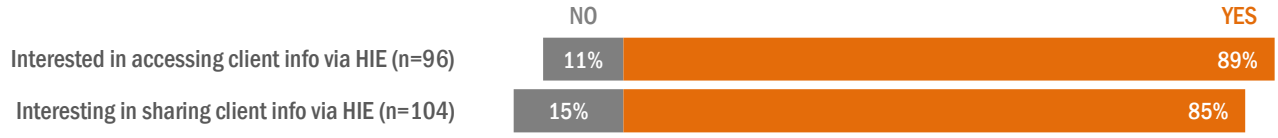


"The technical capabilities of the least technologically advanced trading partner tend to drive the exchange method." -Behavioral Health Agency

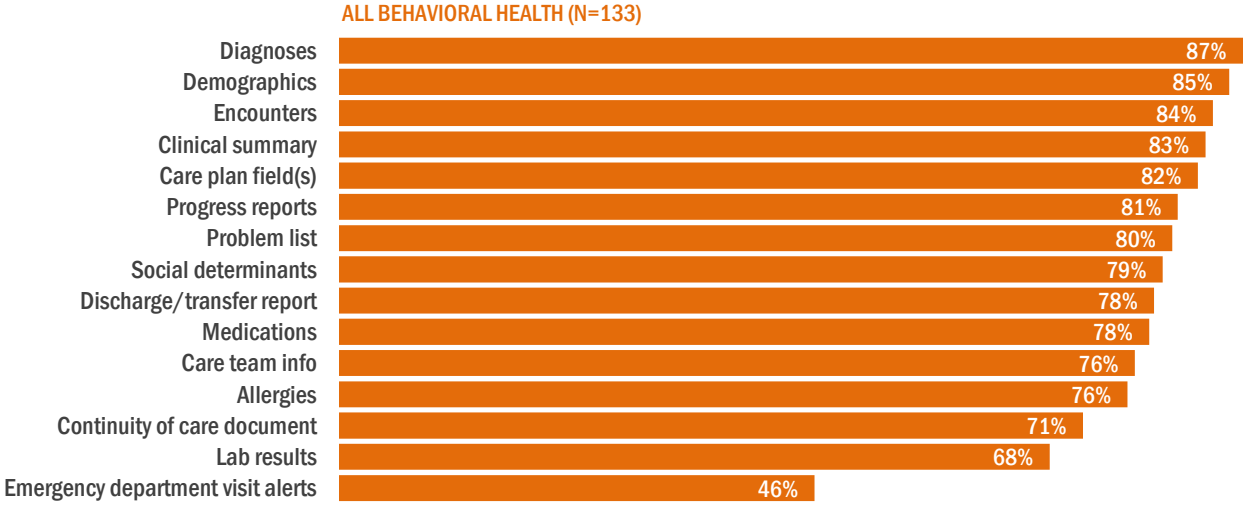
"I'm sort of amazed that we still do as much faxing as we do today, because it's such an old technology, but everybody asks for a fax." -Behavioral Health Agency

Source: Office of Health IT surveys, 2017-2019
7/11/2019

Behavioral health agencies are interested in using regional HIEs.



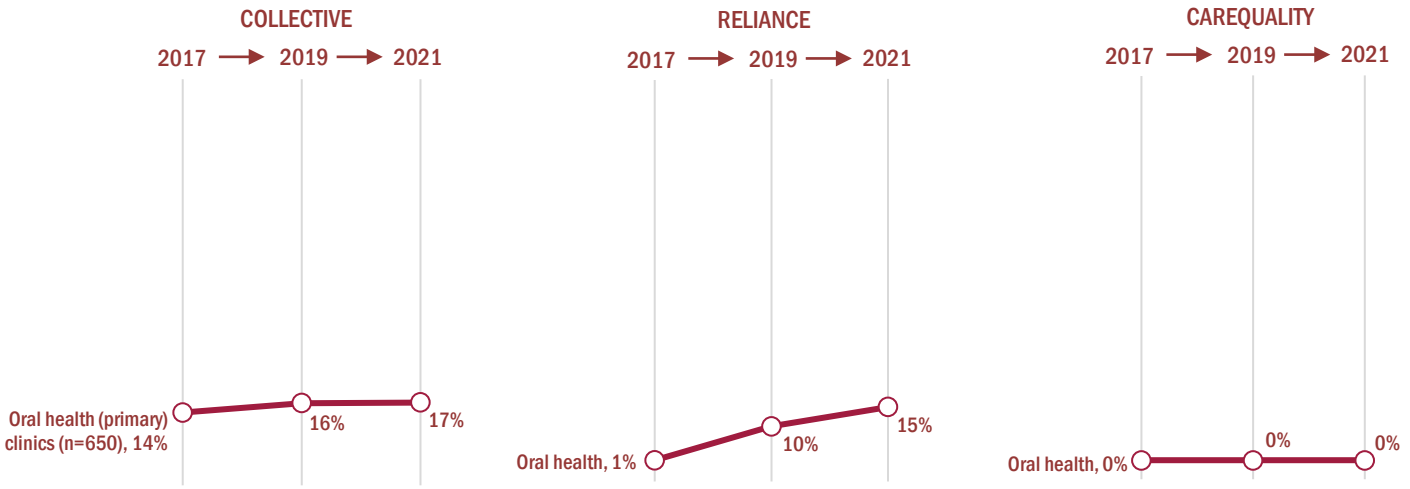
Behavioral health agencies capture data electronically. Many behavioral health agencies are electronically capturing the most needed patient information. Much of this information is of interest to other members of the patients' care team. Increasing behavioral health providers' access to and use of HIE would allow this information to be used by other providers.



Note: Percentages for all categories are approximately 10% higher for behavioral health agencies that are part of larger physical health organizations than for behavioral health-only agencies.
Source: Office of Health IT surveys, 2017-2019
7/11/2019

More information is needed on oral health provider HIE adoption and use.

Current data shows oral health providers using HIE at very low rates. Dental Care Organizations (DCOs) use the Collective Platform (PreManage) to redirect non-urgent ED use for 'tooth pain' or oral issues to Primary Dental Provider. Though most dental clinics themselves are not active users of PreManage, DCOs are taking the lead on coordinating follow up care for members recently admitted to the ED.



Source: Program participation data collected by Office of Health IT
2/10/2022

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

At the national level, several query-based networks completed or began work to connect to one another. In Oregon, multiple health information networks are connected to each other, and more began discussions about future connections.

2017 Reliance eHealth Collaborative connects to Collective.

CommonWell joins Carequality.

Reliance eHealth Collaborative connects to eHealth Exchange and Collective. Reliance becomes a member of the Strategic Health Information Exchange Collaborative (SHIEC) Patient Centered Data Home, which connects Reliance to multiple regional HIEs outside Oregon. See *HIE Overview*.

2018 Oregon's Prescription Drug Monitoring Program (PDMP) connects to Collective (EDIE) and Reliance.

2020 eHealth Exchange joined Carequality.

Providers use HIE tools for a wide variety of tasks:
Sharing clinical information to aid care decisions, value-based payment support, population management, analytics, and more. These needs are too complex to be met by any single tool; there is currently no such tool on the market, and it is unlikely that there will be in the next 5 years. (See *HIE Overview*)

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	●			●		

Complex care coordination lacks HIE support.
Currently, there is no tool that focuses on complex care coordination, so most care coordination relies on phone calls and faxing (with supportive health IT), which is resource-intensive and difficult to scale. The need for better tools is so significant that organizations are using the Collective Platform to support complex care coordination, although it was not designed for that function and likely will not completely fill the gap.

All Oregon hospitals participate in more than one method of HIE (including Direct secure messaging), with 61% participating in four or five methods.

NUMBER OF HIE METHODS IN USE BY OREGON HOSPITALS

Note: HIE methods include Direct secure messaging, EDIE/Collective, Reliance, Carequality, CommonWell, and eHealth Exchange.

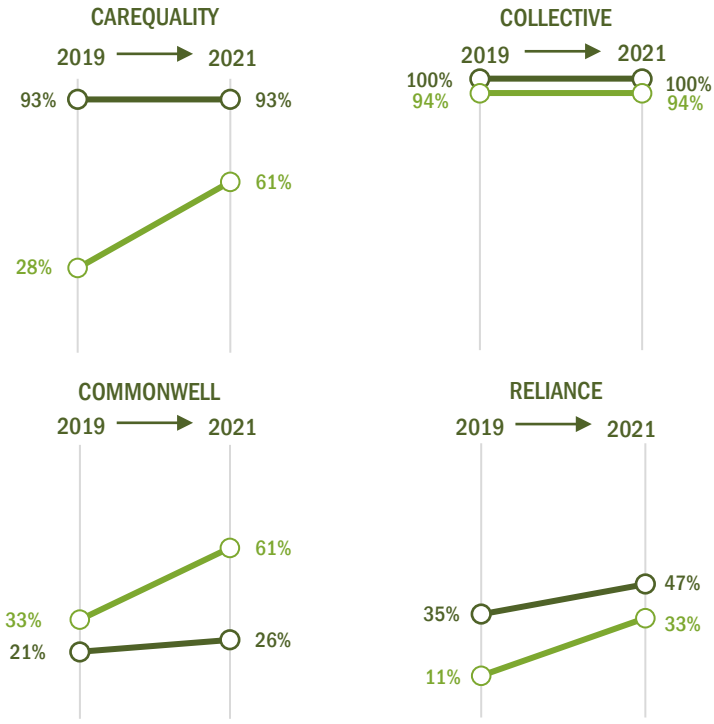
More than one third of Oregon hospitals participate in Reliance (regional HIE) and a nationwide query-based network to meet their HIE needs.

HOSPITAL PARTICIPATION IN REGIONAL AND/OR NATIONWIDE HIE

		Participate in Nationwide Network		
		Yes	No	Total
Participate in Reliance	Yes	38%	5%	43%
	No	48%	10%	57%
	Total	85%	15%	

Note: National networks are Carequality, CommonWell, and eHealth Exchange.
Source: Program participation data collected by Office of Health IT, 2/10/2022

Many **hospitals not associated with a health system** (n=18)† have joined Reliance and national HIEs since 2019. **Hospitals associated with a health system** (n=43) have largely held steady.



HEALTH SYSTEM	Reliance	Carequality	CommonWell	eHealth Exchange	Collective	Direct Secure Messaging
		Nationwide HIEs				
Adventist*		●	●		●	●
Asante*	●	●		●	●	●
Capella		●	●		●	●
Catholic Health Initiatives					●	●
Good Shepherd*					●	●
Kaiser Permanente*		●		●	●	●
Legacy*	●	●		●	●	●
OHSU*		●	●	●	●	●
PeaceHealth*		●		●	●	●
Providence*	●	●		●	●	●
Saint Alphonsus		●	●		●	●
Salem Health*		●		●	●	●
Samaritan*		●		●	●	●
St. Charles*	●	●	●	●	●	●
HEALTH SYSTEMS TOTAL	21%	86%	36%	64%	100%	100%

†Hospitals not part of a health system: Bay Area Hospital, Blue Mountain Hospital, Cedar Hills Hospital, Columbia Memorial Hospital, Coquille Valley Hospital, Curry Health Network, Grande Ronde Hospital, Harney District Hospital, Lake Health District, Lower Umpqua Hospital, McKenzie Willamette Medical Center, Mid-Columbia Medical Center, Morrow County Health District, Santiam Medical Group, Shriners Hospitals for Children, Sky Lakes, Southern Coos Hospital & Health Center, Wallowa Memorial Hospital

*Denotes health system uses Epic and could be exchanging data via Care Everywhere

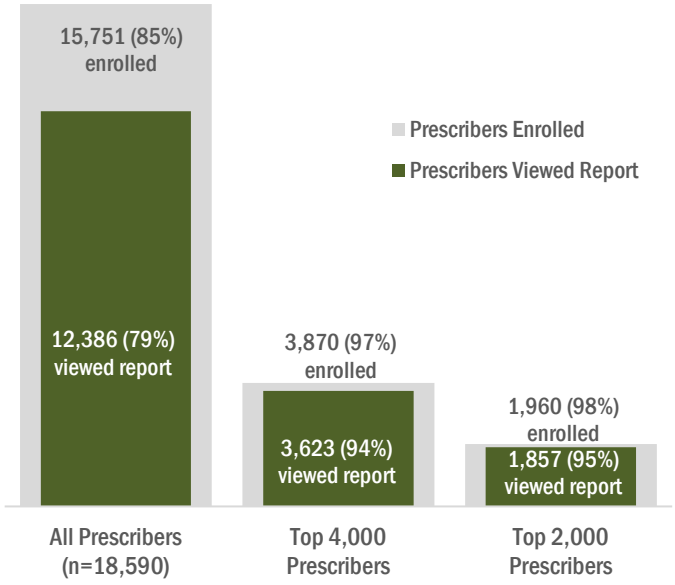
Source: Program participation data collected by Office of Health IT, 2/10/2022

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

Accessing Oregon's Prescription Drug Monitoring Program (PDMP) information helps providers make more informed prescribing decisions and is a critical tool to help address Oregon's opioid crisis.

PDMP enrollment is increasing among top prescribers.

The number of PDMP reports viewed is also rising.[34]



Source: Oregon Health Authority, Prescription Drug Monitoring Program 2/10/2022

Prescribers and pharmacists can now access Prescription Drug Monitoring Program (PDMP) information within their health IT without having to go to a separate web portal outside their workflow ("integration"). **A wide variety of entities have integrated PDMP into their EHR/HIT**, including physical health key clinics. Integration allows EHRs to automatically query the PDMP and return available data for their patients.

LIVE WITH INTEGRATED PDMP ACCESS (2022 Q1)	
Total prescribers	16,688
Integrated entities	355
EDIE facilities	33
Pharmacy chains	8
Pharmacy sites	398

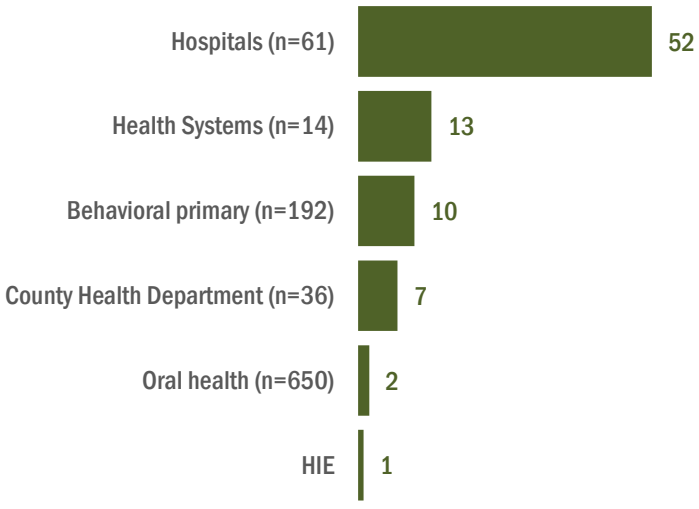
Source: Oregon Health Authority, Prescription Drug Monitoring Program 4/10/2022

HITOC HIE Strategy

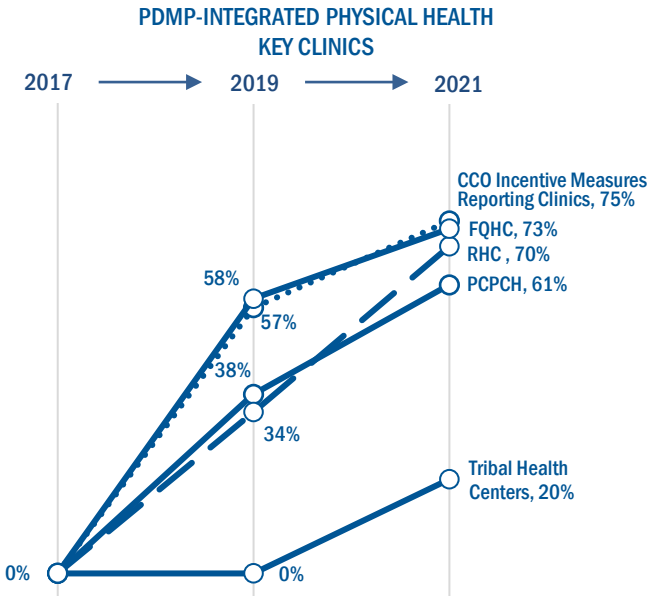
HIT Commons: PDMP Integration Initiative

The PDMP Integration initiative connects EDIE, health information exchanges (HIEs), electronic medical/health records, and pharmacy management systems to Oregon's PDMP registry. PDMP data is brought directly into prescriber and pharmacist health IT for "one-click" access to controlled substance prescription data. This initiative is jointly funded by OHA, hospitals, and health plans and is carried out by the HIT Commons.

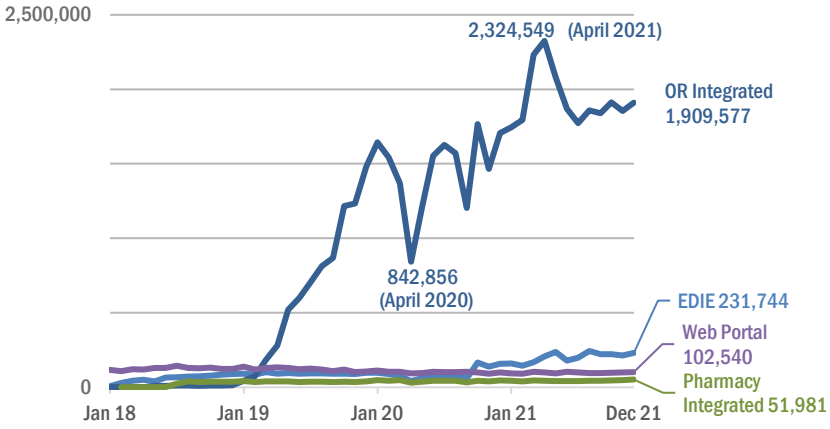
A wide variety of entities have integrated PDMP into their EHR.



Source: Oregon Health Authority, Prescription Drug Monitoring Program 2/10/2022

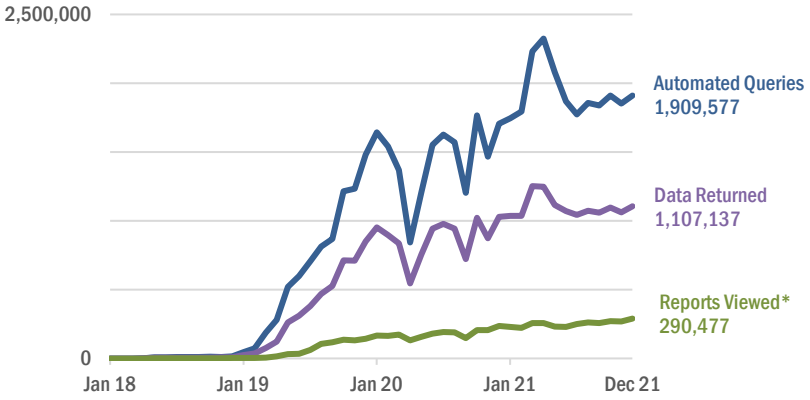


Source: Oregon Health Authority, Prescription Drug Monitoring Program 2/10/2022



Due to their automation, **query rates via integrated EHRs/HIT have increased significantly**, while the number of queries via web portal, EDIE, and integrated pharmacies have remained steady.

These high rates of **automated queries yield significantly higher rates of data available to providers** at the point of care.



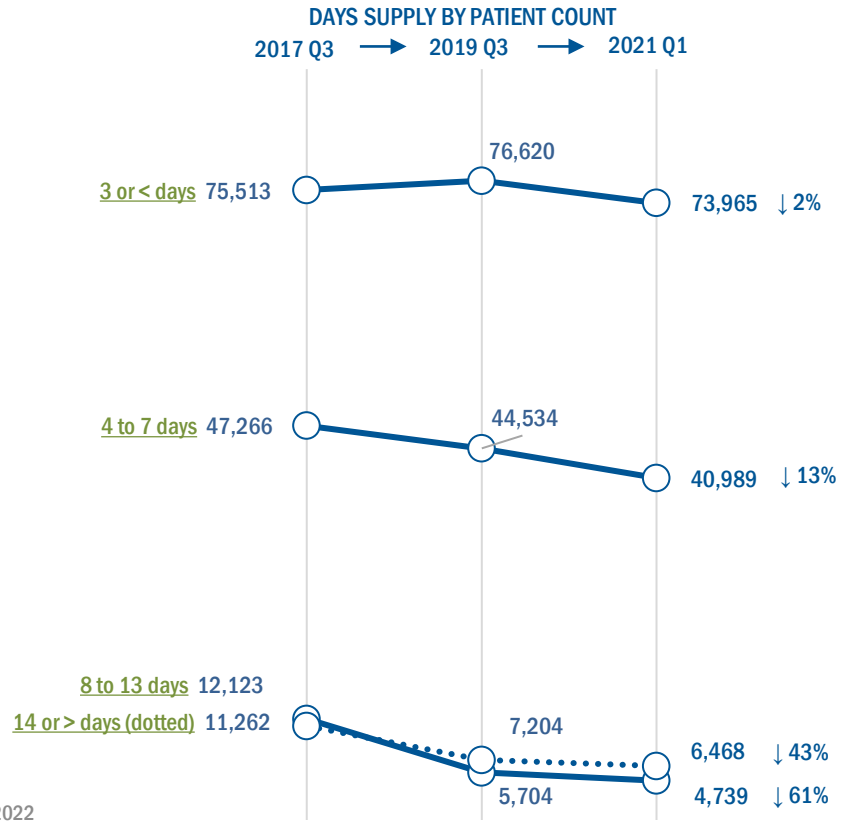
22% of prescribers are clicking on and viewing PDMP reports when a query returns PDMP data for a patient being seen. Access to PDMP data at the point of care supports providers making informed prescription decisions for improved patient outcomes.

*Reports viewed data for December 2021 is for 5,256 prescribers at 245 facilities.
Source: Oregon Health Authority, Prescription Drug Monitoring Program
2/10/2022

An expected PDMP integration patient improvement outcome is the decrease in the number of patients receiving long-term opioid prescriptions.

Overall, the number of **patients receiving opioid prescriptions fell 14%** (from 146,164 in 2017 to 126,161 in 2021). Furthermore, the number of patients receiving opioid prescriptions in each category of days supply declined between 2017 and 2021.

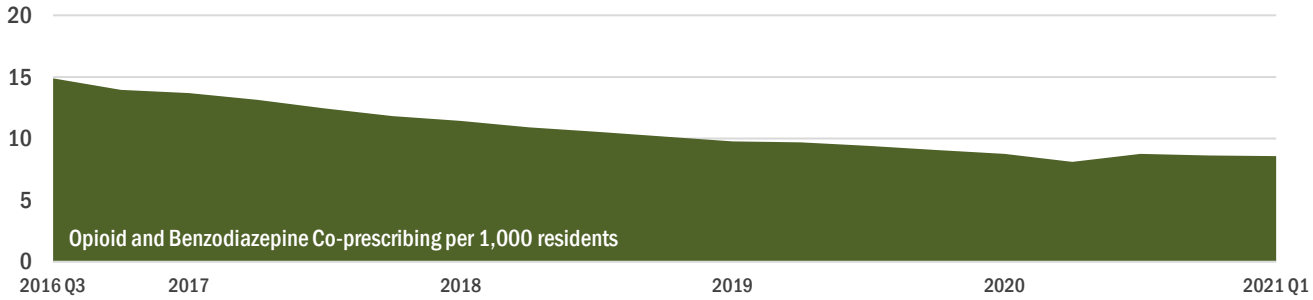
The biggest decreases, proportionally, occurred in the longer days supply categories. The number of patients receiving opioid prescriptions for 8 to 13 days fell 61%. The number of **patients receiving opioid prescriptions for 14 or more days, the longest category, fell 43%.**



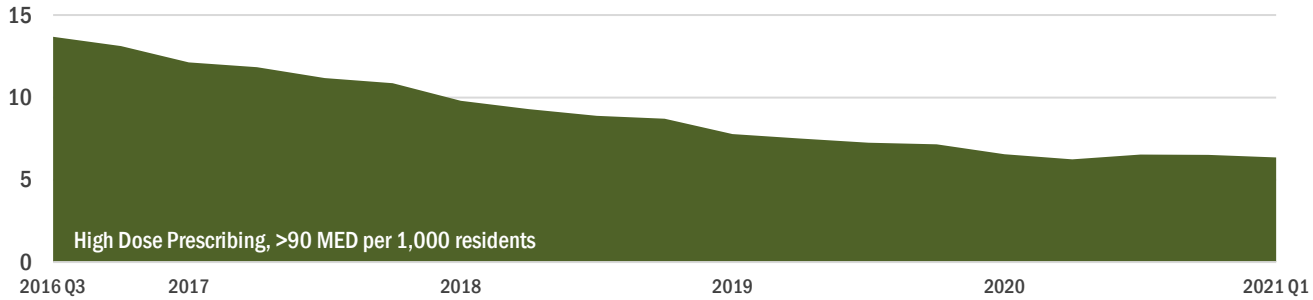
Source: Oregon Health Authority, Prescription Drug Monitoring Program, 2/10/2022

In addition to other community and agency efforts, **PDMP integration has contributed to the decrease in risky prescribing.**

The rate of opioid and benzodiazepine co-prescribing has decreased by 42% since 2016.



The rate of high dose opioid prescribing (>90 MED) has decreased by 53% since 2016.



Note: MED refers to Morphine equivalent dosing.
Source: Oregon Health Authority, Prescription Drug Monitoring Program 2/10/2022

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.

CCOs and health plans collect and make data available through population management tools, health information exchange tools, and analytics reports. For example, CCOs are expected to rely on HIT to support their value-based payment (VBP) arrangements[35], including

- administering payments to providers (for example, to calculate metrics and make payments consistent with its VBP models),
- supporting providers with data needed to manage their VBP arrangements (such as actionable data, lists of patients assigned/attributed by the CCO to the clinic, and information on performance), and
- managing population health effectively through insight into member characteristics, utilization and risk.

CCOs reported ongoing challenges using race, ethnicity, language and disability data and social needs data to monitor health inequities arising within VBP arrangements. They were also challenged integrating data from across platforms and care providers to support bundled payment models. Some CCOs encountered a challenge that VBP-relevant data were stored across multiple nonintegrated platforms, making it difficult for CCOs to see comprehensive information about members, especially for CCOs aiming to link clinical and social needs data.[36]

Providers use analytic tools to show the impact they can have on patient populations and to better advocate for favorable value-based payment arrangements. Most VBP arrangements have focused on primary care, but CCOs are required to have VBP arrangements with hospitals, maternity care and behavioral health providers in 2022, and must add children's health and oral health VBP by 2024. Providers anticipating VBP arrangements, such as behavioral health providers, invest in data analytics, population management, and care coordination tools.[37]

CONSIDERATIONS FOR OREGON'S HEALTH IT OVERSIGHT COUNCIL (HITOC)

HITOC will consider the questions below during its 2022 strategic plan revision. HITOC's strategic plan includes strategies for the state and for other partners: hospitals, health systems, health plans/CCOs, clinicians and clinic staff, technology partners, consumers/patients, and more. Thus, HITOC's considerations below may impact actions for the state as well as many other organizations.

- Health equity is a critical policy priority for OHA, and health IT can provide opportunities to better identify health inequities. There is more to learn about the **relationship between health IT and health equity**. How will HITOC's HIE strategies promote health equity?
- **Health IT is a critical tool in addressing social determinants of health**, which are especially important for populations that face health inequities. How will HITOC's strategies help Oregon leverage health IT to address social determinants of health?
- There is an ongoing need for **EHR adoption support in Oregon, including CEHRT adoption**, but federal EHR incentives ended in 2021 and not all providers were supported. Access to robust, certified EHRs is a major driver of HIE opportunities. How will HITOC's strategies address these needs?
- **Behavioral health agencies need help navigating the EHR vendor market, including education, better understanding of vendors in use in Oregon, and other assistance**. How will HITOC's strategies address these needs?
- **Information on oral health EHR adoption and EHR challenges is a significant gap**, although CCO contract requirements for EHR adoption data will help over time. How will HITOC account for this information gap in its strategies?
- **Different organizations in Oregon face different HIE challenges** (see *HIE in Oregon: A Tale of Two Worlds*). How will HITOC address the wide variety of HIE needs and opportunities?
- **Oregon organizations must leverage a variety of HIE tools to meet their HIE needs**. In HITOC's 2017 Strategic Plan, one strategy focused on connecting across HIE networks. Since that time, many networks have connected organically and Oregon's HIE landscape has changed. How will HITOC's strategies evolve given lessons learned and current conditions?
- Health IT such as patient portals and consumer applications (apps) can **help individuals access their own health information and better engage in their care**. Recent changes in federal regulations promote broad use of consumer apps. How will HITOC's strategies promote such sharing while considering patient privacy and informed consent?
- HITOC's strategic plan identifies priority use cases: care summary exchange, alerting, data for alternative payment models, closed loop e-referrals, and complex care coordination. Oregon continues to have **significant gaps in HIE options for complex care coordination and closed loop e-referrals and faxing is still largely used.** Have use case priorities changed? How will HITOC's strategies narrow gaps in priority use case support?
- The **broad adoption and use of Collective (formerly EDIE/PreManage) and the improved outcomes seen with the Prescription Drug Monitoring Program (PDMP) Integration initiative** may contain lessons for the future. How will HITOC draw on those lessons when deciding what to pursue and what to avoid?

ENDNOTES

EHR Data Brief

[1] With no comprehensive statewide listing of primary care clinics available, participants in the Patient-Centered Primary Care Home (PCPCH) program are used to represent physical health clinics throughout this report. For more information about Oregon's PCPCH program, visit www.PrimaryCareHome.oregon.gov

[2] Behavioral health agencies are those that offer at least one OHA-certified behavioral health program. Some behavioral health agencies are part of larger physical health organizations, which can impact their access to resources and incentives for adopting health IT. Some sections of the report distinguish between all certified behavioral health agencies (n=226) and those that are not part of larger physical health organizations ("Certified behavioral health (primary) agencies (n=191)") to highlight the differences between those types of agencies. These agencies represent a subset of Oregon's behavioral health provider landscape.

[3] Oral health (primary) clinics are contracted with Oregon's Medicaid coordinated care organizations (CCOs) and are not part of a larger physical health organization.

[4] Hospital data includes Medicare and Medicaid; all others are Medicaid only due to data availability.

[5] Certified EHR Technology (CEHRT): The Office of the National Coordinator for Health Information Technology (ONC) oversees an EHR Certification Program, which sets national EHR standards. The benefits of standard data capture and interoperable exchange of information include enhanced patient safety, usability, privacy, and security. For more information, visit https://www.healthit.gov/playbook/certified-health-it/

[6] The Office of Health IT collects data on participants in various state and federal programs and health information exchanges. Many of these sources contain information about EHR use. All of these data are combined to produce estimates of HIT and HIE use by various healthcare entity types.

[7] Oregon payments total $533.5 million to all 60 Oregon hospitals (excluding Shriner's Children's Hospital) and 8,486 Eligible Professionals between the Medicaid and Medicare EHR Incentive Programs as of 10/9/2019. For publicly available payment reports, visit https://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/DataAndReports

[8] Medicare Access and CHIP Reauthorization Act of 2015 (MACRA): https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Value-Based-Programs/MACRA-MIPS-and-APMs/MACRA-MIPS-and-APMs

[9] Although many EHRs meet federal certification standards, those standards set minimum requirements. Like other commercial products, EHRs vary in terms of add-on features and usability as well as associated cost. The ONC has provided a Health IT Playbook to assist providers in selecting an EHR. This Playbook touches on the differences between different types of EHRs and provides links on different tools for providers. https://www.healthit.gov/playbook/electronic-health-records/

[10] Barriers for Adopting EHRs by Physicians: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3766548/. Benefits and drawbacks of electronic health record systems: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3270933/. All Oregon behavioral health agencies that reported having no plans to implement an EHR were smaller agencies who indicated their size did not justify the considerable investment (OHA Behavioral Health HIT Scan): https://www.oregon.gov/oha/HPA/OHIT-HITOC/BH%20HIT%20WG%20Docs/BH_HIT_ReportDraft.pdf

[11] 70% of PCPs believe EHRs have improved over the last five years: https://med.stanford.edu/content/dam/sm/ehr/documents/EHR-Poll-Presentation.pdf. From 2014 to 2018, EHR vendor satisfaction among registered nurses increased from 24% to 79%: https://healthitanalytics.com/news/ehr-satisfaction-rises-usability-complaints-drop-for-nurses. Still, 74% of PCPs agree that EHRs increase the number of hours they work and 69% agree that EHRs take time away from patients: https://med.stanford.edu/content/dam/sm/ehr/documents/EHR-Poll-Presentation.pdf

[12] Estimates from the National Electronic Health Records Survey, a national survey of office-based physicians by the National Center for Health Statistics. For more information, visit https://www.cdc.gov/nchs/ahcd/ahcd_products.htm

[13] Rates reflect total CCO members assigned to primary care clinics with an EHR that participate in Incentive Measures Reporting out of the total Medicaid CCO enrollment.

[14] CCO Incentive Measures Reporting Clinics are Medicaid clinics that report their CCO incentive measure data electronically through their EHR.

[15] Comprehensive Primary Care Plus (CPC+) is a national advanced primary care medical home model that aims to strengthen primary care through regionally-based multi-payer payment reform and care delivery transformation. For more information, visit https://innovation.cms.gov/initiatives/comprehensive-primary-care-plus

[16] Rural Health Clinics (RHCs) are federally recognized primary clinics in underserved, non-urbanized areas. For more information, visit https://www.cms.gov/Center/Provider-Type/Rural-Health-Clinics-Center

[17] Federally Qualified Health Centers (FQHCs) are community-based health care providers that receive funds from the HRSA Health Center Program to provide primary care services in underserved areas. They must meet a stringent set of requirements, including providing care on a sliding fee scale based on ability to pay and operating under a governing board that includes patients. For more information, visit https://www.hrsa.gov/opa/eligibility-and-registration/health-centers/fqhc

[18] "Tribal Health Centers" represents the nine federally recognized Tribes of Oregon, plus the Chemawa Indian Health Center.

[19] Eligible Professionals are physicians, nurse practitioners, certified nurse-midwives, dentists, pediatric optometrists, and naturopaths. Physician assistants are Eligible Professionals if they practice in a Federally Qualified Health Center (FQHC) or Rural Health Center (RHC) that is led by a physician assistant.

[20] Percentages shown here are weighted by number of beds. In 2019, 70% of Oregon's 60 hospitals used Epic (not weighted by number of beds), while 7% used CPSI, 5% used Cerner, 5% used eClinicalWorks, and fewer than 5% used each of the remaining vendors.

[21] When assessing the current landscape of EHRs using EHR Incentive Program data, only attestations since program year 2013 were considered due to the greater reliability of more recent information and changes to Stage 1 Meaningful Use requirements that were implemented in 2013.

ENDNOTES

[22] This chart considers the most recent attestation in each program year of all Eligible Professionals who have participated in the Medicaid EHR Incentive Program since 2013. It estimates the current CEHRT year landscape in each year based on the most recent available information for all providers. If a provider did not participate in a particular year, their most recent attestation information is carried over from a previous year. Some providers may have adopted 2015 CEHRT after ending their participation in MEHRIP which would not be reflected in these rates.

[23] Behavioral health EHR information is largely based on OHA's Health IT surveys, conducted from 2017-2019 and Oct 2021–Jan 2022. Responses were self-reported and combined with other existing Office of Health IT data sources to obtain a fuller assessment of behavioral health EHR use, though information gaps still remain. For more information about previous work in this area, refer to the Behavioral Health IT Workgroup and BH HIT Scan materials at https://www.oregon.gov/oha/HPA/OHIT-HITOC/Pages/Behavioral-Health-HIT.aspx

HIE Data Brief

[24] OHA and the Oregon Health Leadership Council partnered to launch Oregon's Emergency Department Information Exchange (EDIE) with all Oregon hospitals agreeing to implement EDIE by the end of 2014.

[25] Regional HIEs in Oregon in 2014 included Bay Area Community Informatics Agency in Southern Coast, Central Oregon HIE, Gorge Health Connect, Jefferson HIE (now called Reliance), and the Regional Health Information Collaborative (RHIC) was in development. See Oregon's "HIT Business Plan Framework" (appendix B): https://www.oregon.gov/oha/HPA/OHIT/Resources/Business%20Plan%20Framework.pdf and OHA's "2015 Oregon Coordinated Care Organizations' HIT Efforts" report: https://www.oregon.gov/oha/HPA/OHIT/Resources/CCO%20HIT%20Summary%20Report%20July%202015.pdf

[26] Collective Medical Technologies recently changed the name of EDIE/PreManage to The Collective Platform.

[27] Oregon HIT Environment Assessment, 2009; Health Information Exchange (HIE) Activities Inventory (an evolving list – October 30, 2009): https://www.oregon.gov/oha/HPA/OHIT-HITOC/Documents/OregonHIE_Activities_103009P.pdf

[28] Efforts around Community Information Exchanges (CIEs) and the social determinants of health are developing and emerging in Oregon and around the country. CIEs typically include a social services resource directory and closed-loop referral functionality For more information, see: https://www.oregon.gov/oha/HPA/OHIT/Pages/CIE-Overview.aspx.

[29] Both ONC and CMS released federal final rules related to interoperability and patient access. For more information, see: https://www.healthit.gov/curesrule/ and https://www.cms.gov/Regulations-and-Guidance/Guidance/Interoperability/index . For further information on the Trusted Exchange Framework and Common Agreement, please see: https://www.healthit.gov/topic/interoperability/trusted-exchange-framework-and-common-agreement-tefca

[30] Medicaid Dental Care Organizations (DCOs) mainly use Collective to redirect non-urgent ED use for oral issues to a patient's primary dental provider. The dental clinics themselves are not active users, but DCOs take the lead to coordinate follow-up care for members recently admitting to the ED. This workflow has been identified by DCOs as the best use of time and resources in the dental field, rather than to onboard the clinics themselves.

[31] The Oregon Department of Human Services (ODHS) is responsible for programs that support Oregonians in need of services related to aging and disabilities, including intellectual and developmental disabilities. These programs are managed by local field offices or contracted to local entities such as Area Agencies on Aging.

[32] For more data on the impact of Collective, see: https://orhealthleadershipcouncil.org/edie-utility-data-and-reports/

[33] Care Guidelines are a part of Collective intended to deliver brief, critical information to emergency department providers at the point of care. They include care recommendations, explanations of past coordinated care efforts, pain management guidelines, and other information.

[34] Chart displays the top 2,000, top 4,000, and total number of prescribers who wrote prescriptions for controlled substances in Oregon in July-September of 2021, along with the percent who were enrolled in the Prescription Drug Monitoring Program and the percent who viewed a report from the PDMP. https://www.oregon.gov/oha/PH/PREVENTIONWELLNESS/SAFELIVING/PDMP/Documents/3rd_Quarter_2021_Report.pdf.

[35] See OHA's CCO 2.0 Request For Applications, section on HIT: https://www.oregon.gov/oha/OHPB/CCODocuments/08-CCO-RFA-4690-0-Attachment-9-HIT-Questionnaire-Final.pdf

[36] From the report: Oregon's Value-Based Payment Roadmap for Coordinated Care Organizations – Interim Progress Report, March 2022, OHA and Center for Health Systems Effectiveness. https://www.oregon.gov/oha/HPA/dsi-tc/Documents/Oregon-Value-Based-Payment-Roadmap-for-CCOs-Progress-Report-March-2022.pdf

[37] From the Behavioral Health HIT Scan – finding #4: "In addition to EHRs, a subset of behavioral health agencies have invested in data analytics (22%), population management (10%), and care coordination (13%) tools (see chart "Other IT in Use (Non-EHR)" on page 10). As in the physical health system of care, behavioral health providers are increasingly being required to report on various metrics and participate in value-based payment, and so are increasingly prioritizing their data needs." https://www.oregon.gov/oha/HPA/OHIT-HITOC/BH%20HIT%20WG%20Docs/BH_HIT_ReportDraft.pdf

Appendix:
2021 Oregon HIT Survey Summary

Oregon Health Authority
Office of Health Information Technology

March 2022

BACKGROUND AND RESPONDENT OVERVIEW

The Oregon Health Authority (OHA), in partnership with Oregon's Medicaid coordinated care organizations (CCOs) and dental care organizations (DCOs), developed and fielded the 2021 Oregon Health Information Technology (IT) Survey to better understand Oregon's health IT landscape, including electronic health record (EHR), health information exchange (HIE), and community information exchange (CIE) adoption. The survey collected information about health IT use, challenges, and needs related to electronically collecting, storing, and exchanging information between providers, as well as engaging patients in their care.

Survey responses were collected between October 2021 and January 2022. OHA identified 3,281 CCO- or DCO-contracted health care organizations that provide physical, behavioral, or oral health care. OHA collaborated with CCOs and DCOs to distribute the survey to 2,183 organizations for whom contact information was available. From these 2,183 invitees, we received 578 complete responses (27%) and 88 partial responses (4%). Of the complete responses, 221 organizations also responded to an optional section, presented at the end of the main survey. The survey's open-ended questions yielded thoughtful comments from health care organizations. Qualitative analysis is ongoing.

Previous efforts[1] to document the adoption and use of health IT across Oregon focused on hospitals and key clinics, such as Patient-Centered Primary Care Homes (PCPCH), Rural Health Clinics (RHC), Federally Qualified Health Centers (FQHC), Tribal clinics, and agencies with a certified behavioral health programs. The 2021 Oregon Health IT Survey, by contrast, examined any CCO-contracted health care organizations. This expanded scope was intended to yield a more complete picture of health IT use across the state. However, generalizations based on survey responses are unlikely to be perfectly representative for the following reasons:

1. An overall 31% survey response rate
2. Survey responders may be more likely to have adopted health IT than non-responders, therefore estimates in this summary may somewhat overstate rates of health IT adoption and use in Oregon
3. CCO-supported organizations are more likely to adopt health IT than those without CCO support
4. Health care organizations that are not contracted with a CCO were not invited to respond to the survey.

Survey invitations were limited to organizations that provide physical, behavioral, or oral health care. Many organizations provide more than one of these types of care. To present meaningful results for each type of care, OHA assigned a *primary type*—physical, behavioral, or oral—to each organization. Organizations that specialize in behavioral health, for instance, are classified as *behavioral* even if they also offer physical care. Large organizations that provide all three types of care are generally categorized as *physical*. Where plots and tables in this document present results broken out by provider type, we are using providers' *primary type*. Other plots break out results by provider size, using number of sites or number of licensed providers to determine size.[2]

This preliminary report is the work of the Oregon Health Authority's Office of Health IT, which staffs HITOC, conducts other health IT policy work, and operates the Oregon Health IT Program, bringing millions of federal dollars to Oregon for health IT programs and partnerships that support health system transformation. This report was developed by the following key Office of Health IT staff: Marta Makarushka, Lead Policy Analyst and Joe Mitchell-Nelson, Research Analyst. For further information or questions, please contact Marta.M.Makarushka@dhsoha.state.or.us.

[1] 2019 Report to Oregon's Health IT Oversight Council and 2019 Report on Health IT Among Oregon's Behavioral Health Agencies

[2] The survey also solicited estimates of a third measure of size: number of unique patients served annually. Many respondents provided unclear answers to this question, so we do not use it as a measure of organization size within this document. One response to this question captures both the difficulty in estimating this number and the general mood of health care workers in Oregon: "A lot. I'm tired."

RESPONDENT CHARACTERISTICS

The table below describes the characteristics of responding organizations. Response rates were similar for physical and behavioral organizations, with fewer oral health responding. The majority (74%) of responding organizations were single-site, with behavioral health organizations having the most solo practitioner respondents.

Survey completeness	Physical	Behavioral	Oral	Total
Complete	236	220	122	578
Partial	32	30	26	88
Total	268	250	148	666

Number of sites*	Physical	Behavioral	Oral	Total
1	159	163	102	424
2-5	53	48	17	118
6-10	9	4	0	13
11-20	4	1	0	5
21-40	7	1	0	8
Over 40	3	1	3	7
Don't know	0	1	0	1
Total	235	219	122	576

Solo Practitioner*	Physical	Behavioral	Oral	Total
Yes	56	123	51	230
No	178	96	70	344
Total	234	219	121	574

Answered additional Questions*	Physical	Behavioral	Oral	Total
Yes	102	96	23	221
No	134	124	99	357
Total	236	220	122	578

*Table only includes data from organizations who completed the survey. Some survey respondents skipped some questions, so totals may not add up to 578.

The following sections summarize the main findings of the survey:

Section I explores **EHR** adoption, benefits and challenges associated with EHR use, and barriers to EHR adoption.

Section II examines participation in **HIE and CIE tools** across health care organizations.

Section III investigates the **methods used to exchange information** with outside providers and the barriers and challenges associated with those methods.

Section IV considers **patient portal** use and functionality.

EHR USE AND ADOPTION

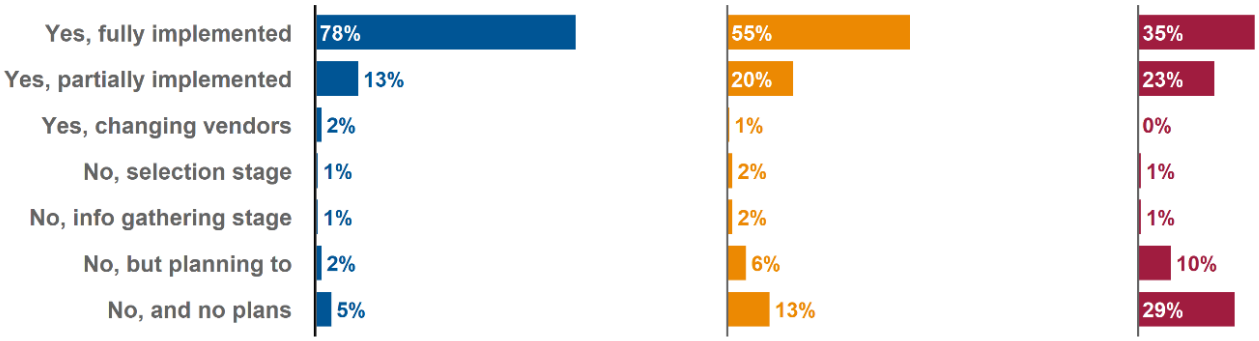
The 2021 Oregon Health IT Survey filled some EHR information gaps, providing a more complete picture of EHR information in Oregon; namely, increased visibility into organizations that are not currently using and have no plans to use an EHR.

Most surveyed organizations have adopted an EHR, regardless of provider type.

Physical health organizations are the most likely to have adopted an EHR, with **93% of physical health** organizations indicating that they have fully or partially implemented an EHR. While these rates are lower for organizations that primarily provide behavioral or oral health care, **most organizations within all three provider types have adopted an EHR**. Additionally, about 10% of behavioral and oral organizations are considering or actively pursuing EHR adoption.

However, of the 643 organizations that responded to this question, **5% of physical providers**, **13% of behavioral providers**, and **29% of oral health providers** have not adopted and **don't plan to adopt an EHR**.

Does your organization currently use an EHR? (**physical**, **behavioral**, **oral**)

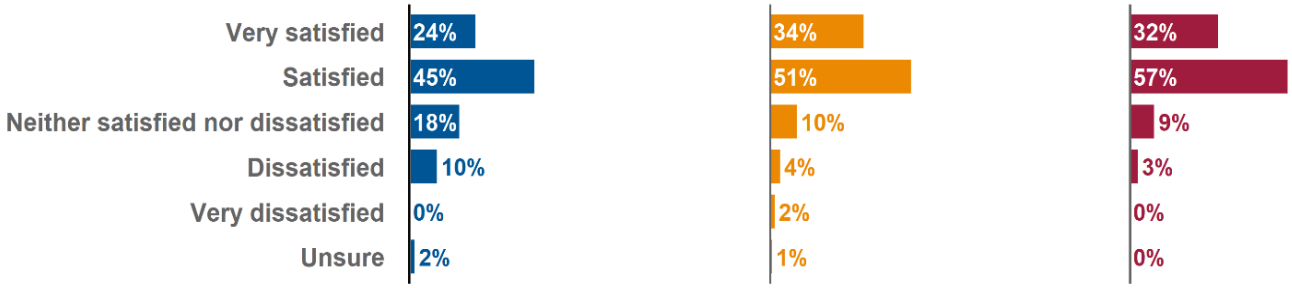


Totals: Physical = 259, Behavioral = 240, Oral = 144

Organizations largely report being satisfied with their EHR.

Despite the large number of organizations reporting challenges relating to EHR use, **most organizations reported being satisfied or very satisfied with their EHR**. Oral health organizations, perhaps unexpectedly, were the most likely to reporting being satisfied or very satisfied.

How satisfied is your organization with its EHR? (**physical**, **behavioral**, **oral**)

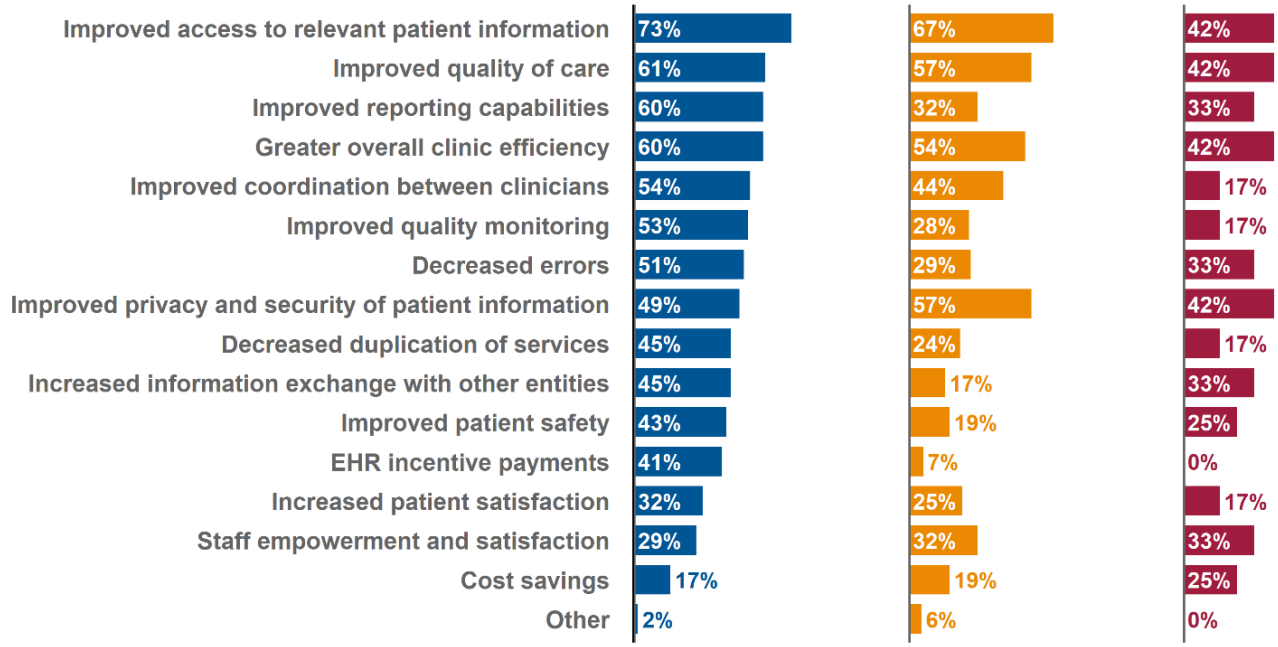


Totals: Physical = 231, Behavioral = 178, Oral = 79

Physical health providers were most likely to report specific benefits of EHR use.

Among organizations that reported using an EHR, **improved access to relevant patient information** was the most cited benefit of using an EHR. **Oral health** organizations were overall **less likely than physical** or **behavioral** organizations **to say they experienced specific benefits of EHR use**. We note that this question was presented in the survey's optional section, which had fewer responses.

Which benefits related to EHR use has your organization experienced? (**physical**, **behavioral**, **oral**)

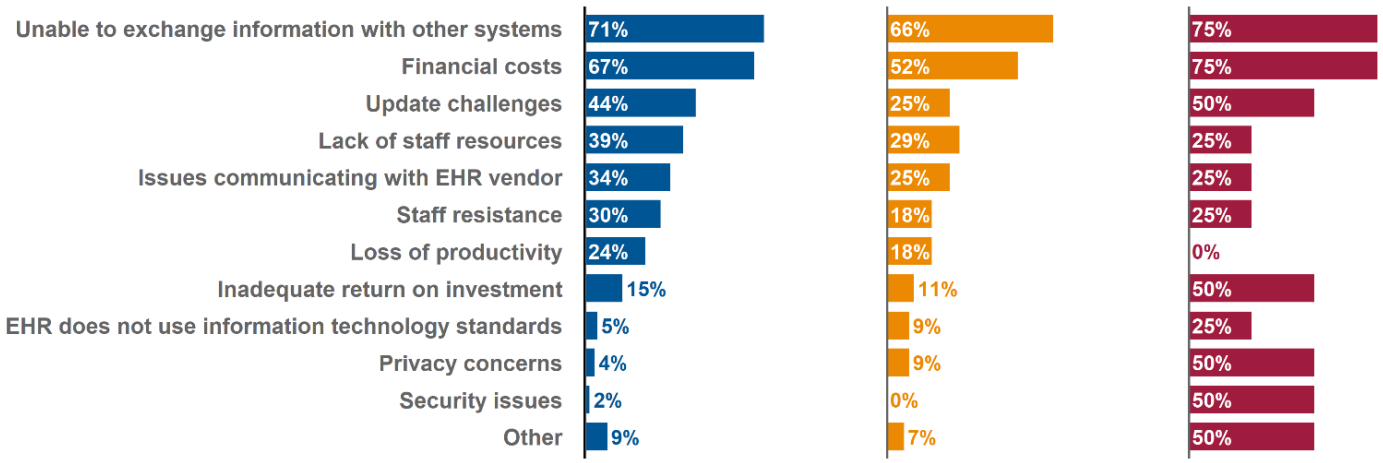


Totals: Physical = 93, Behavioral = 72, Oral = 12

Oral health providers were most likely to report challenges with EHR, but the sample size is small

Oral health organizations were also the **most likely to report challenges** associated with EHR use. However, only 4 oral health organizations responded to this question, which was also in the survey's optional section, so we do not draw any firm conclusions. Across all provider types, the most reported challenges were difficulty exchanging information with other systems and financial cost.

What challenges related to EHR use has your organization experienced? (**physical**, **behavioral**, **oral**)



Totals: Physical = 82, Behavioral = 56, Oral = 4

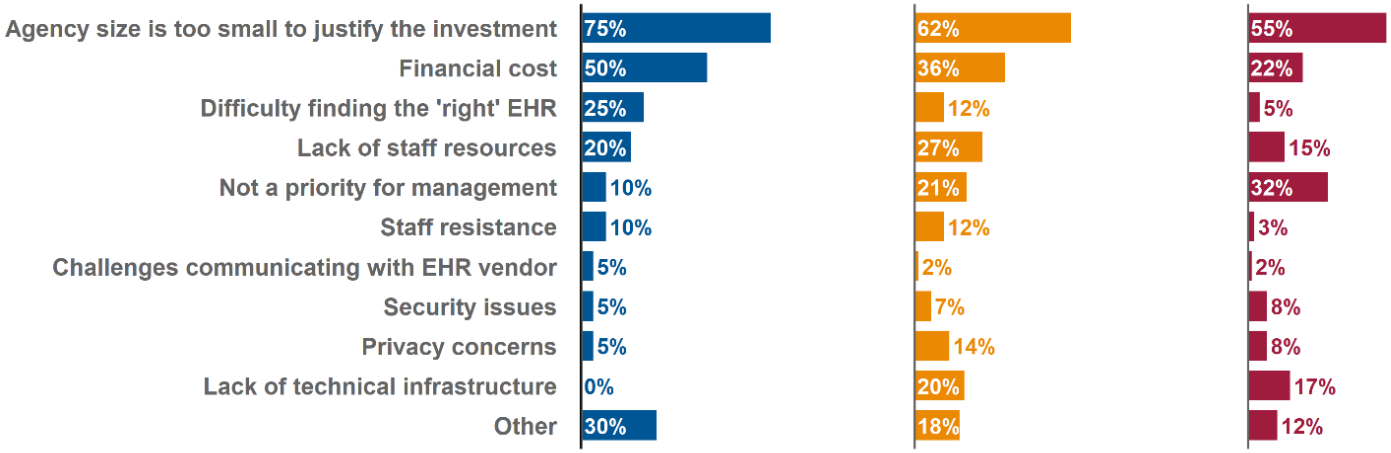
BARRIERS TO EHR ADOPTION

Small agency size and financial cost are major barriers to EHR adoption.

Organizations that indicated they have not implemented an EHR were asked about the main barriers to EHR adoption. Across provider types, **the most common barrier was agency size**. Relatedly, many organizations said that the **financial cost was also a barrier to adoption**. Echoing these results, solo practitioners stated in free-response sections that an EHR (or health IT more broadly) was too daunting, both in terms of financial cost and technical support. Several **rural providers** also mentioned slow internet connection as an issue.

> The electronic billing service I use is extremely helpful. An EHR system, by contrast, proved to be so unwieldy, time-consuming, financially costly, and such a poor fit for a private practice mental health therapist that I gave up and used paper charting instead, which has been much more user-friendly for my setting.
>
> - Small behavioral health provider

What have been your agency's main barriers to implementing an EHR? (**physical**, **behavioral**, **oral**)



Totals: Physical = 20, Behavioral = 56, Oral = 60

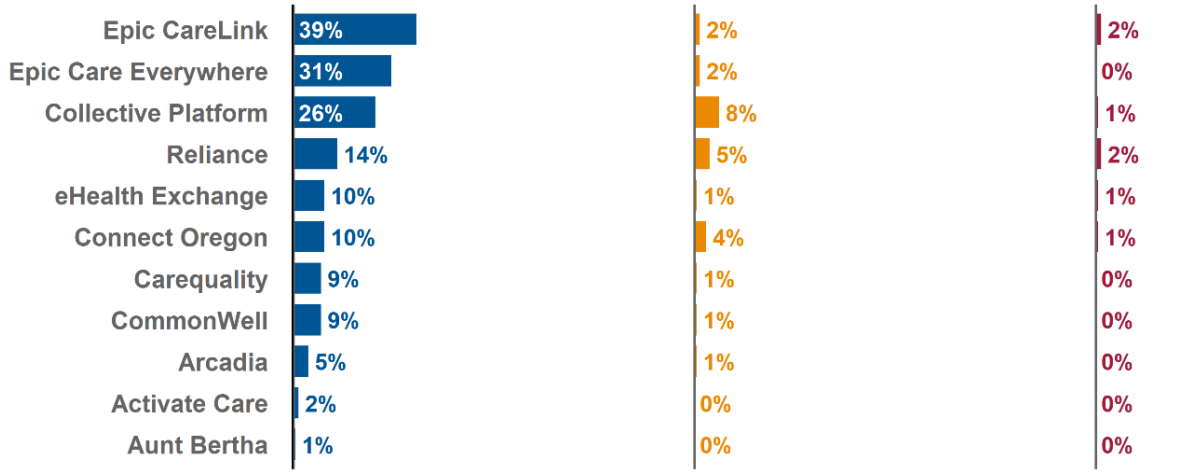
> I am such a small part-time business that I have to watch every cost. Would love an IT team! But it's just me and I am busy doctoring.
>
> - Small physical health provider

> Small private practices cannot afford $12k servers needed to run proper file-sharing systems/security. Also, many non-metro areas do not have sufficient internet bandwidth for efficient exchange of radiograph images and other non-plain text documents.
>
> - Small oral health provider

Physical health providers are the most likely to use HIE tools to exchange information electronically.

Many **physical health** organizations have access to an HIE tool—given the predominance of Epic as an EHR, many physical health organizations use Epic Care Everywhere or Epic CareLink. However, **HIE access is low among behavioral health** organizations, and **almost non-existent among oral health** organizations.

Does your organization have access to the following HIE tools? (**physical**, **behavioral**, **oral**)



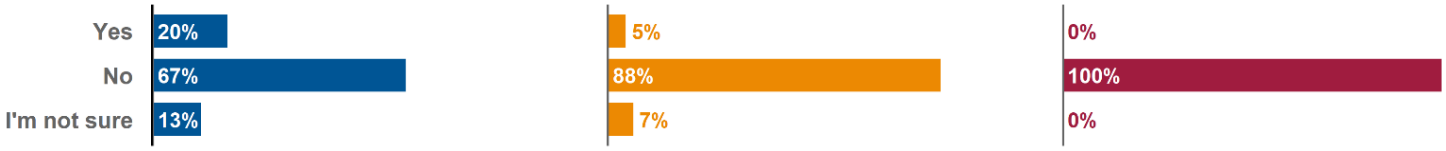
Totals: Physical = 236, Behavioral = 220, Oral = 122

> [We would like] free access to the software so we can all be on the same system, if desired.
>
> - Mid-sized behavioral health provider

Few providers of any type have begun using CIE.

Community information exchange (CIE) is a network of healthcare and human/social service partners using a technology platform with functions such as a shared resource directory, "closed loop" referrals, reporting, social needs screening, and other features to electronically connect people to social services and supports. Questions about CIE access appeared in the survey's optional section, so response rates for these questions are relatively low. Among **physical providers** who have adopted CIE, **Connect Oregon** was the most common platform. For **behavioral providers**, **211info** was most common, though we note that only five behavioral providers listed a CIE—not enough to draw conclusions. **None of the 14 oral providers** who responded to this question said they use CIE.

Does your organization use CIEs or referral-based social needs platforms for your patients? (**physical**, **behavioral**, **oral**)



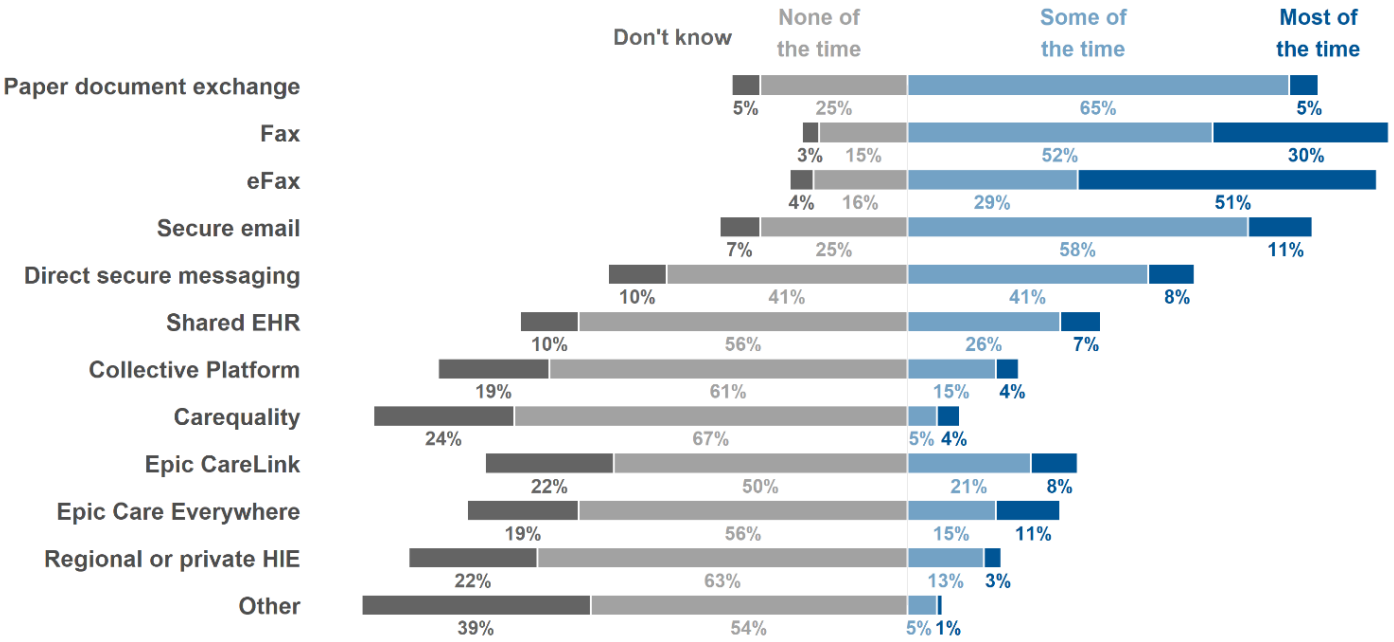
Totals: Physical = 85, Behavioral = 81, Oral = 14

INFORMATION EXCHANGE WITH OUTSIDE PROVIDERS

Though physical health organizations leverage HIE tools to exchange information electronically, they continue to rely on fax, eFax, secure email, paper document exchange, and Direct secure messaging to exchange information with outside entities.

Sharing information with outside providers continues to be a **significant challenge**, particularly for **behavioral** and **oral health providers**. Across provider types, most information exchange occurs using fax, eFax, secure email, and paper documents. **Physical providers** are about **40% more likely** than behavioral or oral organizations to use a method other than fax, eFax, secure email, and paper documents at least some of the time.[3] Relatively few organizations can coordinate information exchange using only shared EHR or HIE tools. In free-response sections, some **respondents expressed a desire to see a universal system** implemented statewide, citing a confusing and complicated landscape of EHRs and methods of exchange.

When exchanging information with unaffiliated entities, how often do you use... (**physical**)



Total: Physical = 246

> Most frustrating is that it [our EHR] cannot connect with local area hospitals and specialists as readily as an Epic or OCHIN based system would.
>
> - Mid-sized physical health provider

> Since there are so many EHRs, no common consent to release records, and so many portals for sharing healthcare information, this has led our group to pause on any investment in time or money into any system. We look forward to the state and CCOs coordinating their efforts to one platform that can be accessed and used by all manage care providers.
>
> - Large oral health provider

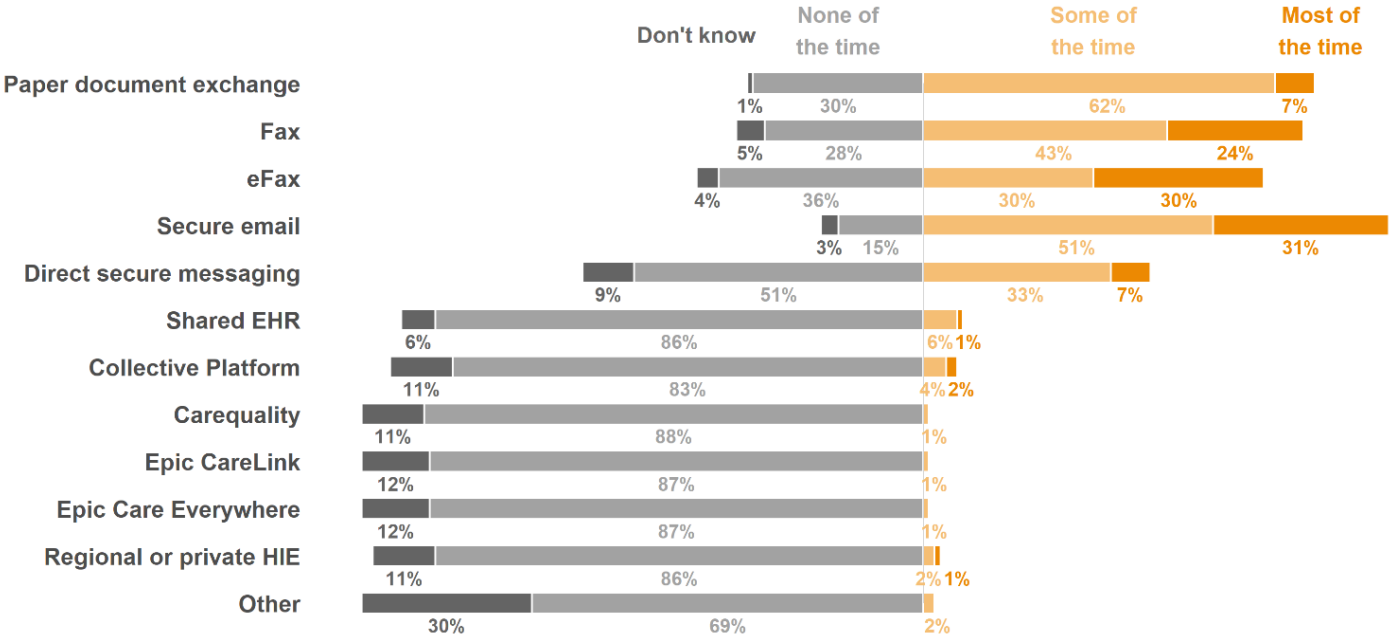
[3] Organization size only partly accounts for this discrepancy. Physical organizations in our sample were larger (in terms of number of providers) than behavioral or oral organizations, on average. Larger organizations are also more likely than smaller organizations to use a method other than fax, eFax, secure email, and paper documents at least some of the time. However, comparing organizations of the same size, physical organizations are still more likely than behavioral or oral organizations to use more sophisticated methods of data exchange.

INFORMATION EXCHANGE WITH OUTSIDE PROVIDERS

Few behavioral and oral health organizations exchange health information electronically.

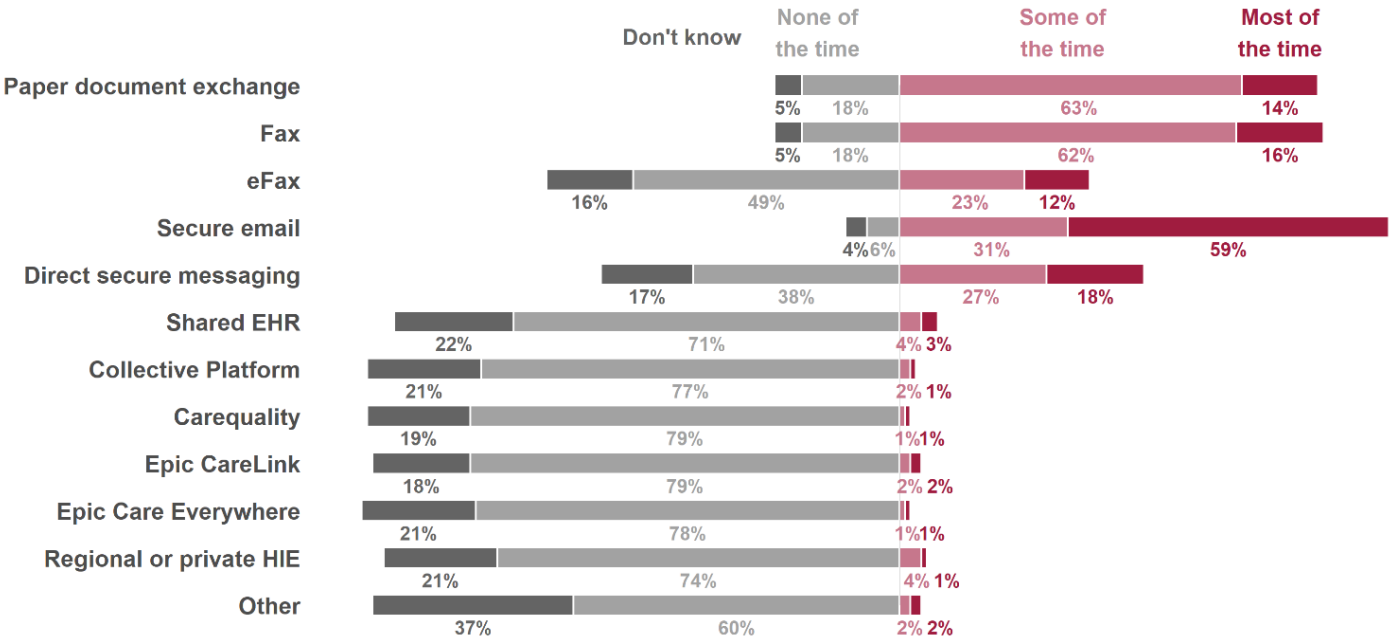
Behavioral health and **oral health** organizations rely on secure email, paper document exchange, fax, eFax and/or Direct secure messaging to exchange information with unaffiliated entities.

When exchanging information with unaffiliated entities, how often do you use... (**behavioral**)



Total: Behavioral = 233

When exchanging information with unaffiliated entities, how often do you use... (**oral**)



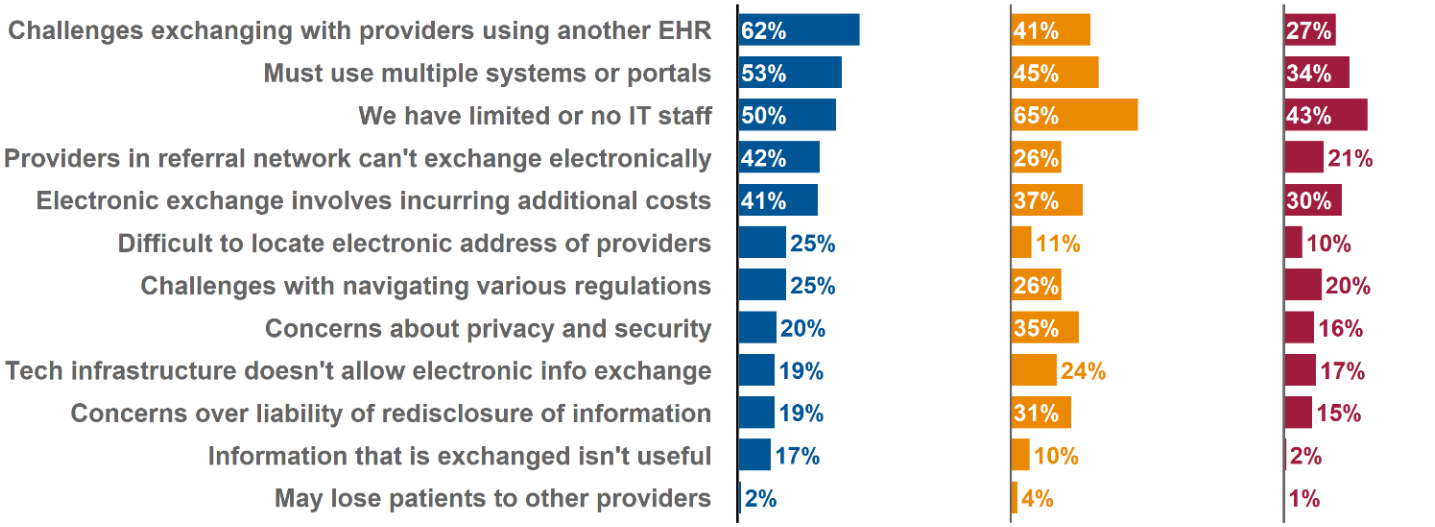
Totals: Oral = 129

INFORMATION EXCHANGE WITH OUTSIDE PROVIDERS

Provider types face different barriers to information exchange with outside providers.

Most **physical health** organizations cited **incompatible EHRs** as a barrier to electronic information exchange with outside entities. For **behavioral health** and **oral health** organizations, which tend to be smaller than physical health organizations, the most-cited barrier was a **lack of IT staff**. **Oral health** organizations, however, were the least likely of the three types to report specific barriers to electronic information exchange in every category. Smaller organizations—both physical and behavioral—were the most likely, in free-response sections, to request additional training and technical support.

Which are barriers to electronic information exchange with outside providers? (**physical**, **behavioral**, **oral**)



Totals: Physical = 236, Behavioral = 220, Oral = 122

> Smaller independent clinics struggle with the resources and staff bandwidth to assimilate larger it projects.
>
> - Small physical health organization

> Any knowledge of our EHR system, Elation Health, would be helpful. With this EHR system, there is not much support or training, so if there is anyone with an understanding of how to navigate through the system, we would love the additional support.
>
> - Small physical health organization

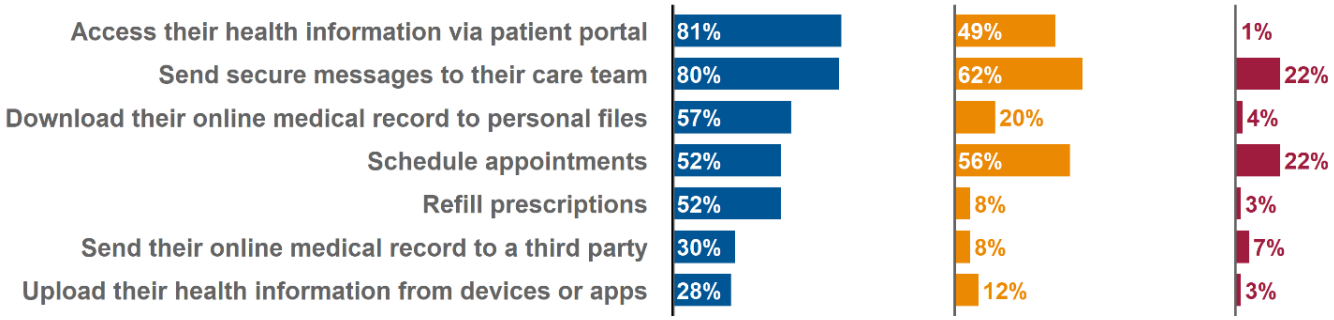
PATIENT INTERACTION WITH HEALTH IT

Physical health EHRs offer the most patient engagement, followed by behavioral health EHRs

As expected, **physical health** organizations report the most EHR patient functionality and use, with over two-thirds of patients using the patient portal. Over half of **behavioral health** organizations report their EHR patient functionality offers messaging, appointment scheduling, and health information access, and that about half of their patients use the patient portal. **Oral health** organizations report that their EHRs offer little functionality for patients, and when offered a patient portal, few oral health patients typically use it.

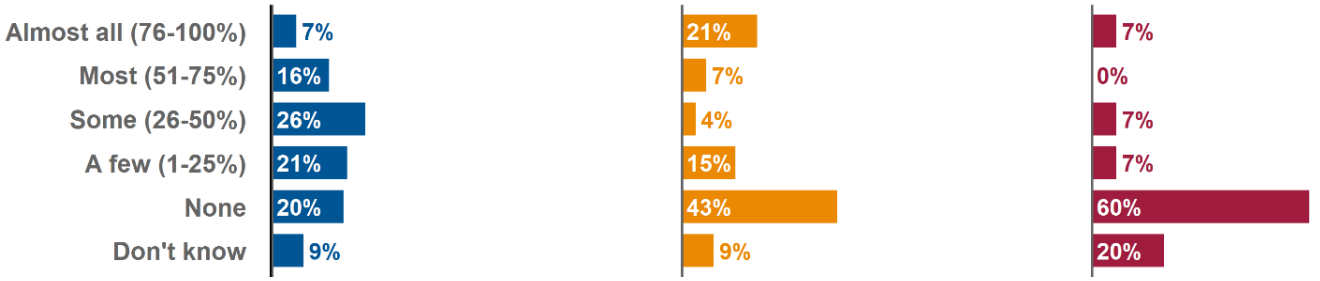
> We would hope that implementing an EHR with patient portal access would empower our patients to be more active participants in the therapeutic process. They would be able to see their drug screen results, pay for services, receive customized outcome measures and be able to access remotely if needed should they be in unstable housing situations.
>
> - Mid-sized behavioral health organization

Does your EHR system allow patients to... (**physical**, **behavioral**, **oral**)



Totals: Physical = 220, Behavioral = 171, Oral = 72

If applicable, about what percent of your patients use your patient portal? (**physical**, **behavioral**, **oral**)



Totals: Physical = 85, Behavioral = 67, Oral = 15