Oregon's Strategic Plan

for Health Information Technology and Health Information Exchange (2017–2020)

Health Information Technology Oversight Council (HITOC)

September 2017

Oregon Health Authority
Health Policy and Analytics Division
Office of Health Information Technology

STRATEGIC PLAN
for Health Information Technology and Health Information Exchange

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EXECUTIVE SUMMARY

The Oregon Health Authority (OHA) envisions a transformed health system where health information technology (HIT) efforts ensure that the care Oregonians receive is optimized by HIT.

In an "HIT-optimized" health care system:

- Oregonians have their core health information available where needed so their care team can deliver person-centered, coordinated care.
- Clinical and administrative data are efficiently collected and used to support quality improvement and population health management, and incentivize improved health outcomes. Aggregated data and metrics are also used by policymakers and others to monitor performance and inform policy development.
- Individuals and their families access, use and contribute their clinical information to understand and improve their health and collaborate with their providers.

Oregon's HIT efforts are guided by overarching priorities of OHA and the Oregon Health Policy Board (OHPB) within a constantly shifting health care environment. OHPB's Action Plan for Health, created in 2010 and refreshed in 2017, sets a clear direction for advancing health in Oregon, and HIT plays a critical role in several key initiatives, including expanding the coordinated care model, integrating physical, behavioral and oral health, and moving upstream to address the social determinants of health. HIT is also an important enabler to broader health system transformation efforts, including improving health outcomes, lowering costs, and addressing health inequities across different populations and regions.

Action Plan for Health: foundational strategies	Oregon's HIT priorities	Oregon's HIT focus areas (2017–2020)
• Pay for outcomes and value • Shift focus upstream • Improve health equity • Increase access to health care • Enhance care coordination • Engage stakeholders and community partners • Measure progress	• Support alternative payment models • Support social determinants of health data and partners • Support integration of physical, behavioral and oral health • Support sharing information and care coordination and promote patient access to data • Align across stakeholders and develop partnerships • Monitor and adapt to changing environment	• HIT to support value-based care and alternative payment models • Support high-value data sources, including the social determinants of health • Spread health information exchange and patient access to health data • Implement core HIT infrastructure • Develop shared governance for long-term HIT sustainability and alignment

Path to statewide health information exchange

Oregon has made progress in spreading health information exchange (HIE) through regional HIE efforts, health care organization investments, vendor-led networks, and national approaches and solutions. Significant gaps remain, however, especially in regions and settings that face resource barriers. Future work will focus on the following approaches:

1. Supporting and connecting a robust networks of HIEs
2. Providing baseline HIT services to those facing barriers
3. Offering statewide enabling infrastructure to leverage existing investments and opportunities
4. Providing access to high-value data sources
5. Coordinating stakeholders to establish a shared governance model

New opportunities for public/private partnership: HIT Commons

The HIT Commons is an envisioned public-private partnership to advance HIT in Oregon by convening stakeholders in a neutral setting, coordinating shared HIT efforts and creating sustainable funding mechanisms for shared investments.

The HIT Commons builds on the success of the Emergency Department Information Exchange (EDIE) Utility and will grow through a "crawl, walk, run" model. OHA and the Oregon Health Leadership Council (OHLC) will co-sponsor the HIT Commons and provide initial support, along with payers, CCOs, hospitals and provider participants. OHLC will provide fiscal and management support for an initial period, after which a separate nonprofit organization is expected to form.

Initial work will focus on continuing the successful work of the EDIE Utility and OHLC's Administration Simplification Committee (including single sign-on work), providing funding for statewide access to the Prescription Drug Monitoring Program's PMP Gateway, and beginning work to coordinate the HIE Network of Networks.

Patient access and engagement

Promoting patient access to their health information and patient engagement through HIT is one of HITOC's three goals of HIT-optimized care. Previous work has focused on promoting efforts to open access to clinician notes through OpenNotes, and improving access and exchange of specially protected health information. Going forward, HITOC will explore the topic of patient access and engagement further to identify additional policy and strategic opportunities to leverage HIT to advance efforts. There are many potential opportunities to consider, from expanding access to records to engagement through telehealth and digital health to better understanding health conditions and treatment options. HITOC also remains committed to ensuring patient and consumer

representation on stakeholder committees and initiatives, where appropriate, and will work to identify additional ways to engage patients in the work ahead.

Oregon HIT Program work ahead and key results

Much work is underway to support these efforts. While foundational programs support effective use of electronic health records (EHRs) and initial HIE services, new work is being developed to provide:

- Statewide HIT infrastructure
- Financial support to spread HIE and coordination of a Network of Networks to ensure HIE is available and connected statewide
- New programs to support alternative payment models
- A focus on adoption and spread of HIT and initiatives and
- New access to high-value data.

Health Information Technology Oversight Council's work ahead

OHA remains committed to monitoring the rapidly changing landscape of technology innovation and health care reform. Efforts to understand the changing landscape are ongoing. To ensure strategies are linked with changes in the landscape, the Health Information Technology Oversight Council (HITOC) will review sections of this strategic plan on an annual basis to create a rolling three-year plan. This will help ensure that strategies are linked to opportunities and can account for changes in the rapidly shifting environment.

In addition, HITOC will focus on monitoring the changing landscape and developing data dashboards, milestones and measures of success that provide insights into Oregon's progress in achieving HIT-optimized care.

VISION, GOALS, PRINCIPLES AND PRIORITIES

Vision

OHA envisions a transformed health system where HIT efforts ensure that the care Oregonians receive is optimized by HIT.

Goals

In an "HIT-optimized" health care system:

1. Oregonians have their core health information available where needed so their care team can deliver person-centered, coordinated care.
2. Clinical and administrative data are efficiently collected and used to support quality improvement and population health management, and incentivize improved health outcomes. Aggregated data and metrics are also used by policymakers and others to monitor performance and inform policy development.
3. Individuals and their families access, use and contribute their clinical information to understand and improve their health and collaborate with their providers.

Office of the National Coordinator vision for HIE

"All patients, their families, and providers should expect consistent and timely access to standardized health information that can be securely shared between primary care providers, specialists, hospitals, behavioral health, Long-Term Post-Acute Care, home and community-based services, other support and enabling services providers, care and case managers and coordinators, and other authorized individuals and institutions."

Office of the National Coordinator for HIT (ONC). Strategy and principles to accelerate HIE, August 2013.

Principles for statewide HIT efforts

The following principles guide the work toward HIT-optimized care:

Leverage existing resources and national standards, while anticipating changes:

- Consider investments and resources already in place.
- Leverage Meaningful Use and national standards; anticipate standards as they evolve.
- Monitor and adapt to changing federal, state and local environments.

Demonstrate incremental progress, cultivate support and establish credibility:

- Advance efforts through incrementalism: Define a manageable scope, deliver and then expand.
- Communicate frequently with measureable progress. Demonstrate optimal value for patients and providers toward the triple aim of better health, better care and lower costs.
- Provide public transparency into development and operations of statewide resources.
- Be a good steward of limited public resources.

- Establish long-term financial, leadership and political sustainability.
- Seek broad stakeholder involvement and support. Statewide resources cannot be developed alone.

Create services with value:

- Maximize benefits to Oregonians while considering costs. Do not disenfranchise ("do no harm") and be inclusive of providers that face barriers to participation.
- Support provider participation in HIT-optimized health care; meet providers where they are. Recognize the challenges especially for smaller, independent providers and providers who are not eligible for federally funded EHR incentives.
- Prioritize efforts to achieve a common good that local entities could not do on their own.
- Cultivate and communicate about value at the individual, provider, system and state levels. Champions and personal stories can be very effective.
- Support new models of HIT-optimized health care that result in better quality, whole person care and improved health outcomes and lower costs for all.
- Leverage HIT to support broader goals to promote health equity and address disparities in care.

Protect the health information of Oregonians:

- Ensure information sharing is private and secure and complies with HIPAA and other protections.

Health equity and the role of HIT

Advancing health equity and addressing disparities in health is a key priority of OHPB and OHA, and HIT supports this work in several ways. Efforts to expand HIE and offer baseline services are prioritizing and supporting critical service providers, including safety net clinics, rural providers and equity-focused organizations. The Provider Directory will include information about providers regarding languages spoken, cultural competency and disability access. HIT can also support health equity with efforts such as telehealth and telemedicine that can expand access to underserved areas and populations. Improving data collection on patient-level characteristics and outcomes can also identify health disparities among specific populations, monitor interventions and guide policymakers' action.

Future work will involve alignment with OHPB's recently restarted Health Equity Committee and other, ongoing OHA efforts to address inequities across the state. HIT can also play a critical role in helping collect more robust data on disparate health outcomes and care among different populations to inform policymakers and stakeholders and guide future work.

Overarching aims and objectives

Goal 1: Aims and objectives

Oregonians have their core health information available where needed so their care team can deliver person-centered, coordinated care.

1. Increased adoption of standards-based technology for data capture, use and exchange
2. Improved ability to capture, produce and use interoperable standards-based data in formats structured to be integrated and automated within EHRs and workflows
3. Improved access to and sharing of meaningful patient information across organizational and technological boundaries
4. Improved provider experience and workflows, reduced burden, and increased workforce capacity
5. Improved care coordination and reduction in duplicate services leading to system-level cost savings

Goal 2: Aims and objectives

Clinical and administrative data are efficiently collected and used to support quality improvement and population health management, and incentivize improved health outcomes. Aggregated data and metrics are also used by policymakers and others to monitor performance and inform policy development.

1. Improved use of HIT tools for data collection, analytics and reporting
2. Increased use of aggregated data, including clinical data for population management, quality improvement and alternative payment methods
3. Reduced reporting burden for data needed to support the coordinated care model across programs

Goal 3: Aims and objectives

Individuals and their families access, use and contribute their clinical information to understand and improve their health and collaborate with their providers.

1. Increased patient access to/use of their complete health records
2. Improved ability for individuals to provide relevant information to their health records
3. Increased use of HIT by patients to engage providers (e.g., patient portals, e-visits, messaging, remote monitoring)

Crosscutting aims and objectives

1. Improved culture of HIT-optimized health care where providers and other stakeholders value and expect electronic access to shared information
2. Increased alignment of standards to promote interoperability
3. Improved distribution of financial burden for supporting HIT investments as payment models evolve
4. Ensured protection of privacy and security of electronic health information

Priorities and policy context for HIT efforts (2017–2020)

OHA's work toward HIT-optimized care is connected to and aligned with broader efforts to improve and transform health care delivery in Oregon. The Action Plan for Health, a health system transformation roadmap established by the Oregon Health Policy Board in 2010 and revised in 2017, guides much of the broader work. The Action Plan for Health identifies seven foundational strategies, which Oregon's HIT priorities and focus areas for 2017–2020 support.

Action Plan for Health: foundational strategies	Oregon's HIT priorities	Oregon's HIT focus areas (2017–2020)
• Pay for outcomes and value • Shift focus upstream • Improve health equity • Increase access to health care • Enhance care coordination • Engage stakeholders and community partners • Measure progress	• Support alternative payment models • Support social determinants of health data and partners • Support integration of physical, behavioral and oral health • Support sharing information and care coordination and promote patient access to data • Align across stakeholders and develop partnerships • Monitor and adapt to changing environment	• HIT to support value-based care and alternative payment models • Support high-value data sources, including the social determinants of health • Spread health information exchange and patient access to health data • Implement core HIT infrastructure • Develop shared governance for long-term HIT sustainability and alignment

The opportunities and stakeholder priorities driven by policy, regulatory and financial changes also influence Oregon's HIT priorities. Below are some of the major changes in the health care context and policy environment that will affect HIT work over the next few years.

Policy context topic	Description and impact
Medicare Meaningful Use transitions to Medicare Access and CHIP Reauthoritzation Act (MACRA) Quality Payment Program – Merit-Based Incentive Payment System (MIPS)	MACRA legislation created the Quality Payment Program – MIPS (that adjusts Medicare payment based on quality outcomes and use of HIT) to start in 2017.
Comprehensive Primary Care Plus (CPC+)	Many Oregon CCOs and major payers, OHA and CMS/Medicare are supporting more than 150 Oregon primary care clinics with this alternative payment model, which will require data aggregation and care coordination, and will rely on HIT to support the CPC+ objectives.
Primary Care Payment Reform Collaborative	Will transform payment for primary care and work on data aggregation and reporting necessary for care improvement and value-based payment. This legislatively authorized collaborative will include a broader group of Oregon payers and clinics and will likely align data efforts with the CPC+ group.
Health Plan Quality Metrics Committee	This legislatively mandated committee is working to align performance metrics for CCOs and Oregon health plans, including clinical quality metrics.
Patient-Centered Primary Care Home (PCPCH) Program	Oregon's PCPCH program recognizes primary care clinics that meet statewide criteria, including expectations for the use of HIT. PCPCH tier status is tied to payment models, such that higher-tier PCPCHs have financial incentives. The program is transitioning from three tiers to five tiers to provide advanced recognition of progress.
Certified Community Behavioral Health Clinic (CCBHC) program	CCBHC is a federal pilot initiative through 2019 to transform payment for behavioral health providers to a value-base model, requiring the use of HIT for care improvement and metrics tracking. Oregon has about a dozen behavioral health organizations participating as CCBHCs, and has state-specific standards including expectations for use of HIT.

Policy context topic	Description and impact
Behavioral Health Collaborative	This 2016/2017 OHA-led stakeholder group made recommendations to help transform Oregon's behavioral health system. Implementation of recommendations will occur over the next several years. One of the four overarching recommendations focuses on technology and data, and HITOC will play a role in overseeing HIT-specific components of this work.
The future of CCOs	OHPB provides input to OHA and the legislature on the future of CCOs as OHA prepares for the next phase.

To support these efforts, the following areas of focus for Oregon's HIT efforts for 2017–2020 have been identified:

1. **Spread health information exchange, patient access to data and other HIT efforts**

   The vision of the coordinated care model is seamless care across providers and organizations. Thus, HIE is a key enabler for the coordinated care model, and there are significant opportunities to leverage HIT and HIE to reduce barriers and improve communication. To reap the full benefits of HIT, critical users need to be connected to meaningful HIE opportunities. Past work has focused on EHR adoption and building the foundation for HIE and care coordination. Future work will involve ensuring that key providers and other critical care team members are connected to robust HIE.

   HIT is also critical to promoting the integration of physical, behavioral and oral health. A key part of that work is improving Oregon's behavioral health system, and that improvement effort involves several HIT components. For instance, the Certified Community Behavioral Health Clinic (CCBHC) program includes requirements for the use of HIT and the reporting of performance metrics. Oregon stakeholders recently convened the Behavioral Health Collaborative, which resulted in a series of recommendations on improving behavioral health information sharing and reducing barriers to data access.

   HIT can also help patients access their health information and better engage with their health care providers. This allows patients to participate more fully with their care team and can improve the effectiveness of health care interventions. Key HIT efforts include supporting initiatives such as OpenNotes that support patient access to clinician notes, engaging providers to increase the value of patient access and engagement, and helping spread best practices.

2. **Implement core HIT infrastructure**

   Significant progress has already been made on the planning and development of core infrastructure to support HIT, including the Oregon Common Credentialing Program, Provider Directory and an HIT gateway to the Prescription Drug Monitoring Program. Future work will focus on implementation and launch of these services and the successful spread of their use.

3. **Support value-based care and alternative payment models**

   HIT can support the shift from fee-for-service models of payment to alternative payment models that reward value and outcomes, which is crucial for health system transformation. These new payment models create requirements to track and report outcomes, and incentivize efforts to improve care coordination and health across populations. They also create an opportunity for aligned interests and shared need between health care payers and providers.

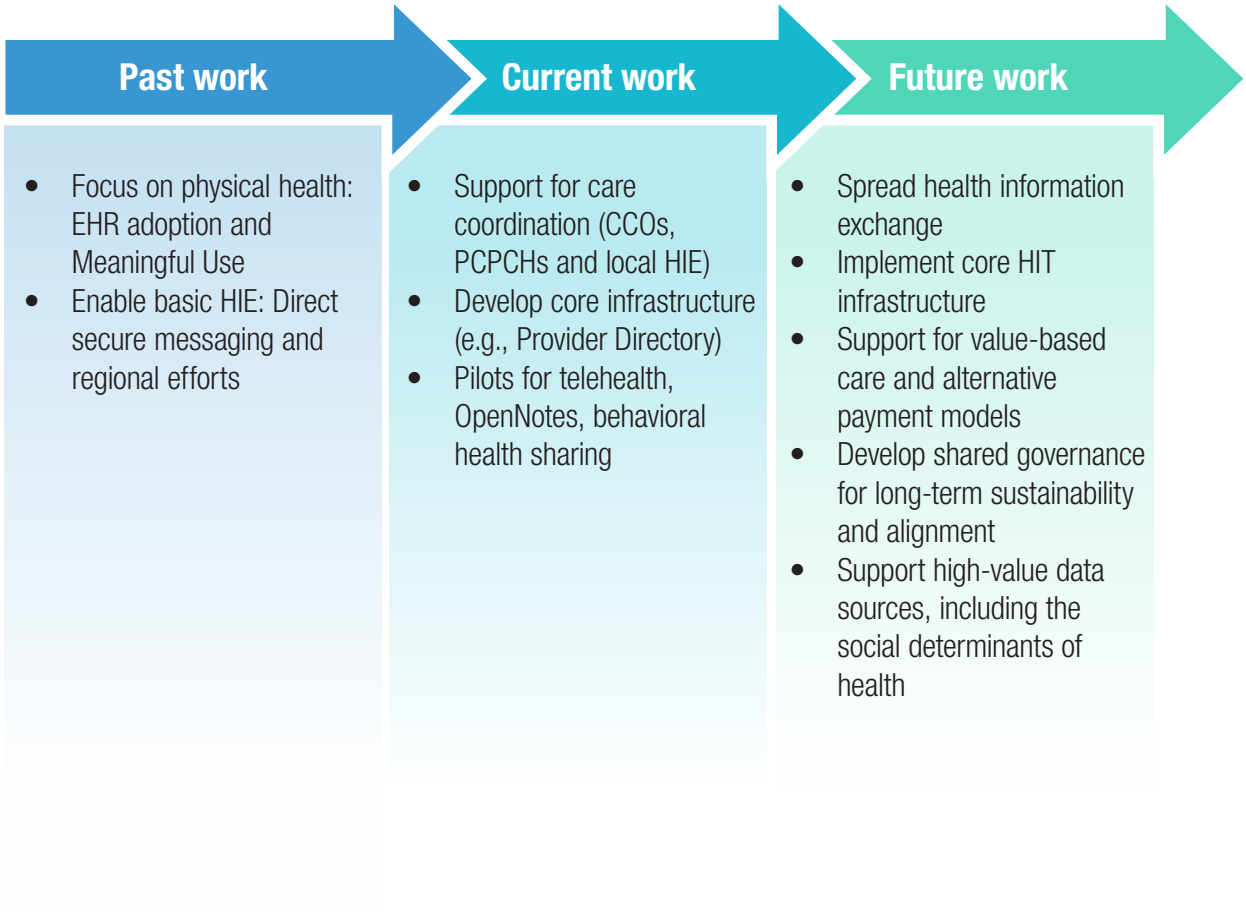
4. **Develop shared governance for long-term sustainability and alignment**

   Bringing together stakeholders and creating sustainable financing for HIT investments is crucial to long-term success. A public-private partnership also has the ability to leverage significant federal support while aligning interests of providers, payers and patients.

5. **Support high-value data sources, including information related to social determinants of health**

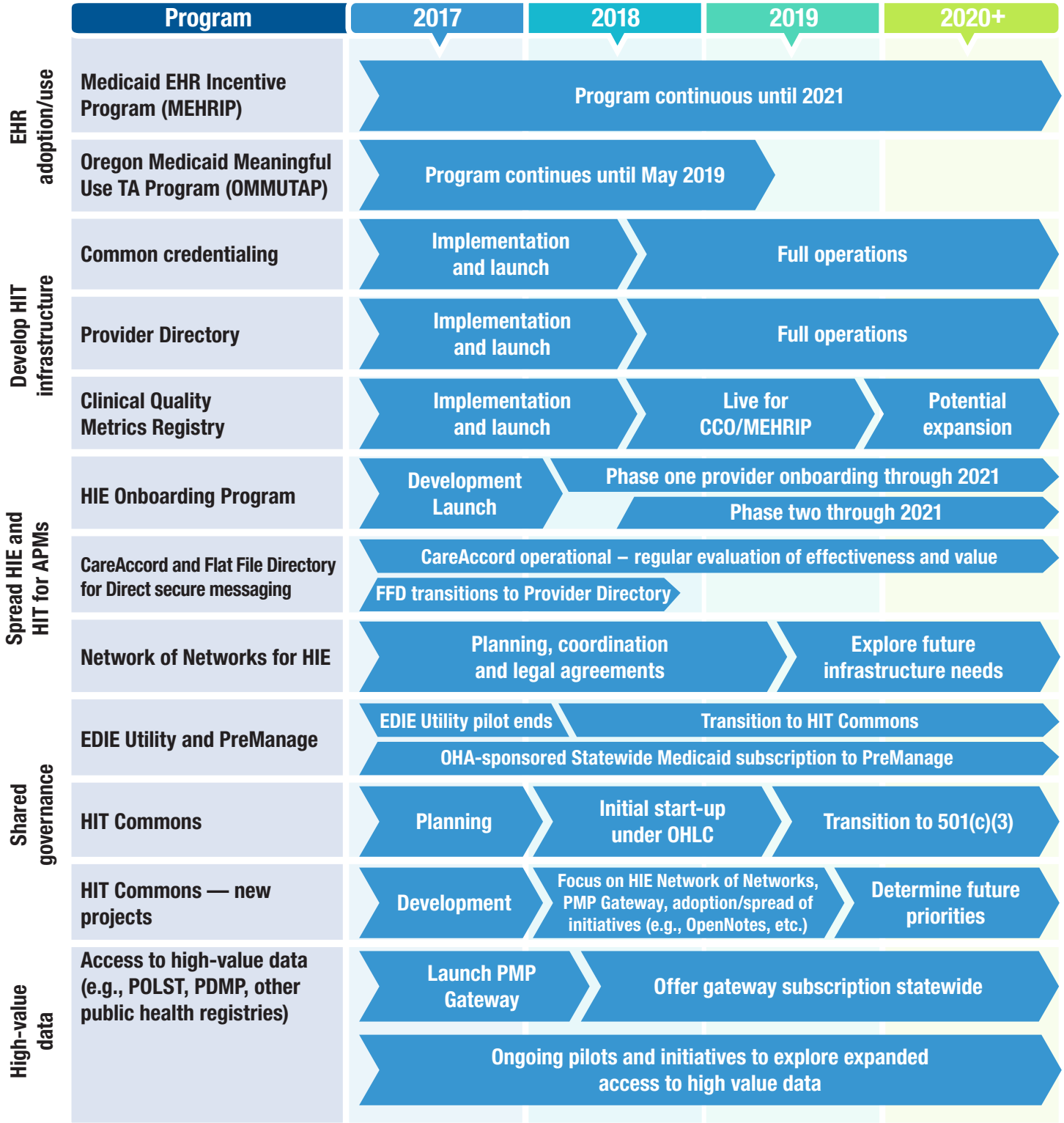
   To support care coordination and population health efforts, new initiatives will also explore opportunities to leverage high-value data sources, such as public health registries and non-clinical sources of data that can be useful in addressing the social determinants of health. At the same time, work is needed to ensure patient confidentiality and address issues around stigma and privacy. Promoting health equity is crucial, and high-value data can be used to ensure Oregonians receive high-quality care regardless of socio-economic, racial and other differences.

Oregon's HIT areas of focus: past, current, future



Oregon HIT Program and HITOC workplan and milestones

Several bodies of work address the state's HIT priorities. The following chart describes key programs and timelines. Strategies described in sections 5–8 provide additional information.



Milestones

Key high-level results and milestones over the next three years are currently in development. Milestone types are expected to vary depending on the stage of an effort, as described below:

Once HITOC develops milestones and key results, OHA expects to collect baseline data and begin developing data dashboards to better monitor statewide HIT progress.

HITOC role and workplan (2017–2020)

Oregon's legislature charged HITOC with overseeing the Oregon HIT Program, monitoring the HIT landscape in Oregon, developing long-term strategies to advance HIT and making recommendations to the Oregon Health Policy Board and the Oregon Congressional delegation. HITOC reports to the OHPB, which sets HITOC priorities and membership, endorses HITOC recommendations and guides HITOC work to ensure Oregon's health system transformation efforts are supported by the right HIT.

Key work for HITOC in 2017–2020 includes coordinating with the HIT Commons (described in Section 6), developing additional data-driven milestones to measure progress, updating HIT strategies and recommendations, and staying abreast of the constantly changing landscape.

High-level HITOC work plan

	2017	2018–2020
Policy topics	• Interoperability • Behavioral health information sharing • Other policy board or HITOC identified topics	• Support for behavioral health information sharing • Patient access, consent and specially protected information • Data sharing needs related to social determinants of health (SDoH) • Coordination with related OHPB committee work, including Health Equity Policy Committee, Behavioral Health Collaborative and Primary Care Payment Reform Collaborative • New priorities as determined by OHPB and HITOC
Strategic planning	• Complete update to strategic plan • Develop behavioral health HIT workplan for the Behavioral Health Collaborative	• Review and update strategic plan annually • Development or endorsement of strategies to support network of networks for HIE and HIT for Alternative Payment Methods (APMs) • Support HIT Commons and determine appropriate oversight and reporting roles
Oversight	• Oregon HIT Program (e.g., Provider Directory, Common Credentialing, Clinical Quality Metrics Registry, HIE Onboarding Program etc.) • Behavioral Health Collaborative - HIT workplan • Advance data-driven measurement and milestones for HIT oversight	
HIT environment	• Behavioral health scan	• Develop additional capacity for ongoing environmental scanning, with focus on new priorities (e.g., Long Term Services and Supports, SDoH, APMs, etc.)
Reporting	• Legislative Report in Summer 2017 • OHPB Report in September 2017	• Annual reports to legislature and OHPB • Explore opportunities to create dashboards to measure statewide progress
Federal Policy	• Federal Law/Policy Considerations (e.g., ACA, MACRA, 21st Century Cures Act, ONC initiatives. Meaningful Use, privacy and security requirements (42 CFR part 2, etc.))	

OREGON HIT LANDSCAPE

Progress (2014–2017)

Since the development of the last strategic plan (2014–2017), significant progress has been made in achieving HIT-optimized care.

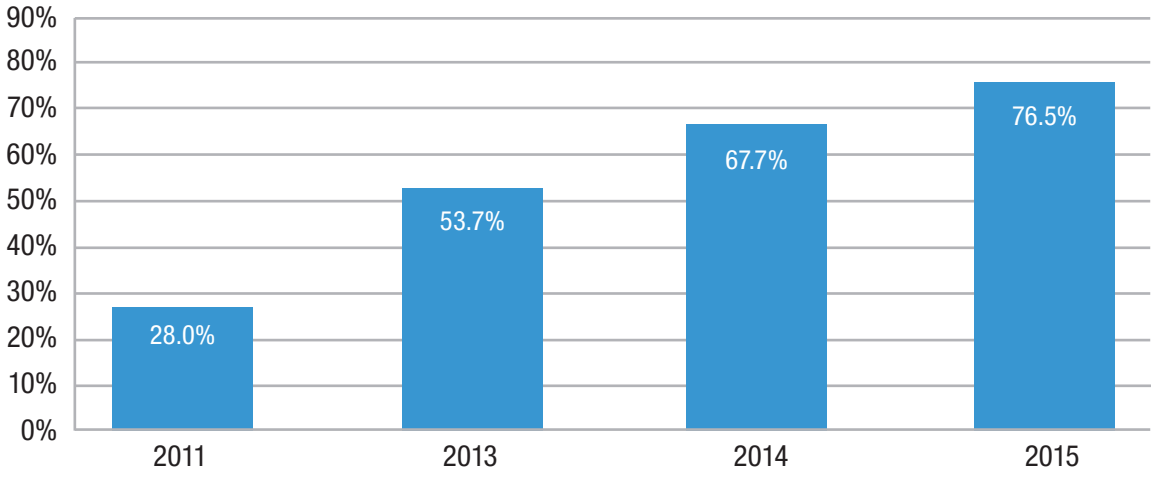
Progress on governance and accountability frameworks

- House Bill (HB) 2294 (2015) reset HITOC under the leadership of the Oregon Health Policy Board, solidifying alignment of HIT efforts within health system transformation efforts. HB 2294 also created the Oregon HIT Program, which allowed OHA to provide HIT services beyond state programs, and explicitly authorized OHA to participate in partnerships and shared governance efforts to accelerate HIT-optimized care in Oregon.
- Initial planning for the HIT Commons, a public-private partnership to advance HIT, is underway. This effort, led by OHA and the Oregon Health Leadership Council, will provide a neutral convening space to coordinate HIT activities, leverage shared funding for sustainable investments, and accelerate the spread and use of HIT.

HIE is spreading:

- Oregon provider practices are using EHRs more, which improves providers' ability to access medical records across systems.
  - » Oregon providers and hospitals are in the top tier of states accessing millions of federal EHR meaningful use incentive dollars each year.
  - » Many providers are using EHR-based HIE capabilities, such as Epic's CareEverywhere and other EHR-based hub solutions, to exchange and access information.
  - » Key Medicaid providers and clinics have received support and technical assistance through the Oregon Medicaid Meaningful Use Technical Assistance Program (OMMUTAP).

EHR adoption of CCO provider networks



- Regional HIEs have grown throughout the state, with coverage in several regions. National efforts such as eHealth Exchange, Commonwell, and Carequality have an established presence in Oregon and continue to grow (see further description on next page).
- OHA supports HIE by offering no-cost access to Direct secure messaging through its CareAccord program. CareAccord allows organizations that do not have EHRs or that are facing barriers to electronic health information sharing the ability to securely exchange health information with different care teams across care settings. CareAccord serves more than 150 organizations and 1,500 users; its transaction volume tripled in 2016. CareAccord also administers the Flat File Directory, which has grown to provide information on more than 10,000 Direct secure messaging addresses from more than 550 unique health care organizations (primary care, hospital, behavioral health, dentistry, Federally Qualified Health Center, etc.).
- OHA — in partnership with the OHLC, Oregon's hospitals, payers and CCOs — launched the EDIE Utility. EDIE alerts provide emergency departments across the state with critical visit history and care coordination information for patients who experience frequent ED visits and/or have complex care needs. PreManage provides this same critical information to health plans, CCOs, primary care clinics, behavioral health providers, oral health and others. This information allows them to proactively coordinate care with the EDs through entering patient care recommendations and care histories. EDIE and PreManage services seek to improve care coordination and reduce emergency department use for patients with frequent ED visits. All Oregon hospitals (except Veterans Affairs facilities) are currently participating in EDIE. Hundreds of clinics, 11 CCOs and several commercial health plans now use PreManage. A recently completed evaluation of the EDIE Utility found a $5.8 million reduction of Medicaid ED spending from May 2016 through December 2016 and a 10% reduction in ED utilization for EDIE patients with an active care guideline in place.

National interoperability efforts and options with significant presence in Oregon

eHealth Exchange

The eHealth Exchange is a group of federal agencies (Department of Veterans Affairs, Department of Defense, Social Security Administration), hospital systems, medical groups, and state and regional HIEs that exchange health information in order to improve patient care, streamline disability benefit claims, and improve public health reporting. Participants operate under a comprehensive, multi-party

trust agreement (the DURSA) among public and private organizations that desire to engage in electronic health information exchange. The initiative is most known for query-based, peer-to-peer document exchange, but also supports document submission and publish-subscribe exchange models.

Carequality

Carequality is a multi-stakeholder collaborative that formed to help providers share clinical data across multiple networks and HIT systems. Using a consensus-based, use case-driven process, Carequality has developed a common interoperability framework, including legal and technical specifications, to enable connectivity across participating networks. Many of the largest EHR vendors are members of Carequality. EHR vendors must become "implementers" of Carequality; their users may then elect to participate. The first use case implemented is a query-based document retrieval and other use cases are in development.

- *EHR vendor "implementers" with major Oregon footprint include Epic, GE Healthcare/Centricity, NextGen, Allscripts, eClinicalWorks, athenahealth, Netsmart.*

CommonWell Health Alliance

CommonWell Health Alliance is a multi-vendor association that provides core services and infrastructure to enable the exchange of patient clinical data. These include a master patient index for patient identity and matching, records locator and retrieval, and access and consent management solutions. CommonWell members include large EHR vendors and other HIT solutions, such as personal health records.

- *EHR vendor members with major Oregon footprint include Cerner, McKesson, Meditech, Allscripts, Greenway, eClinicalWorks, athenahealth.*

Vendor-specific HIE efforts

Many vendors have developed proprietary HIE solutions that connect users of the same EHR product. Epic's Care Everywhere, for instance, is a tool within the Epic electronic medical record that allows Epic users to securely share patient records with other health care providers that use Epic. It allows providers to query for and retrieve health information resulting from episodes of care delivered in other, non-local facilities using Epic's EHR in document format.

Development in core services and programs:

- Significant progress has been made on the Oregon HIT Program, detailed in the previous strategic plan, which includes operational programs, such OMMUTAP and CareAccord, and the following four core services in development. These efforts are expected to launch in 2018:
  - » The Oregon Common Credentialing Program, a legislatively mandated program and database to centralize the process of obtaining and verifying Oregon health care practitioner credentialing information. This program will provide administrative efficiencies and reduce burden for approximately 55,000 Oregon practitioners and more than 300 credentialing organizations.
  - » A statewide Provider Directory, critical to supporting HIE, analytics and population management, accountability efforts and operational efficiencies.
  - » A Clinical Quality Metrics Registry (CQMR) to capture clinical quality metrics from electronic health records, with an initial focus on required CCO EHR-based quality metric reporting and Medicaid EHR Incentive Program reporting.
  - » The HIE Onboarding Program to leverage significant federal matching funds to support onboarding critical Medicaid providers to robust community HIEs.

Advancing HIT for behavioral health:

- OHA and other stakeholders have worked to improve access to the state's Prescription Drug Monitoring Program specialized registry, which contains information on controlled substances/opioid prescription fills. A new HIT gateway service will allow EHRs and other HIT systems, including HIEs and EDIE, to connect directly to the PDMP database and provide actionable data within a prescriber's workflow.
- Through federal ONC cooperative agreement funding, Reliance eHealth Collaborative has worked to address barriers to information sharing and care coordination across settings, particularly for behavioral health data, by developing a common consent model. Additional work to further convene stakeholders and disseminate learnings is underway.

Challenges

Despite progress, significant challenges with HIT remain:

The health care ecosystem continues to evolve rapidly, especially in regards to alternative payment models:

- Payment and quality reform efforts continue to grow: Efforts such as primary care payment reform (including CPC+ and the Primary Care Payment Reform Collaborative), CMS's Quality Payment Program (MIPS and advanced APMs), federal and state health care financing uncertainty, and evolving technology

all contribute to a dynamic and uncertain future that makes planning for and investment in HIT challenging.

- Changing payment models require new technology and measurement: New payment models that promote coordinated care and incentivize health outcomes are growing. However, measuring, tracking and reporting on outcomes remain a challenge. In addition, many providers are still paid, at least in part, with fee-for-service models, complicating and confusing efforts and needs.

- Myriad unaligned metrics and reporting requirements create difficulties: Providers and health systems face a daunting number of reporting requirements across health plans, Medicare, Medicaid, and pay-for-performance programs. Reporting metrics and other data often require reporting many similar, but not identical, pieces of information. Changing and unaligned federal, state and payer efforts mean providers are often trying to address different measures for different programs. This lack of alignment increases administrative burdens and provider frustration and reduces comparability of data.

- Aggregating and analyzing clinical data can be challenging for some CCOs, health plans and health systems: Aggregating clinical data across different EHRs is a specialized technical skill set. With varying levels of capacity for HIT and analytics work, some stakeholders have developed or purchased tools that work well for their specific needs, while others have not.

Users face very real technology burdens, which may impede new HIT efforts

- Practices continue to face many technology challenges: Upgrading to ce rtified EHR technology, adapting to new payment models and meeting requirements on Meaningful Use activities are all occurring simultaneously. Multiple metrics and reporting requirements demanded by different payers and programs also create a significant administrative burden for many providers.

- Providers must adopt and use EHRs, HIT and HIE services to see the benefits: Providers will need support and technical assistance to integrate information technology into their workflow. There will also be increased demand for knowledgeable staff who can adapt to new technology and implement new workflows that maximize the benefits of HIT services. Training and retention of qualified staff is an additional concern.

- Providers face challenges with EHR usability: Small providers are constrained by the “out-of-the-box” capabilities provided in their EHRs. They have limited financial ability to customize their EHRs to produce metrics and reporting. For example, 2015 Edition certification criteria call for EHRs to generate reports in the Quality Document Reporting Architecture (QRDA) format without subsequent developer assistance. However, implementation of EHRs certified to the new standards is not yet widespread enough to evaluate success. In addition, the

ability to produce high-quality, accurate data for each metric relies on the workflow and processes that ensure providers are entering appropriate data into the relevant fields of their EHR.

- Translating data into action: Providers are ready for information that allows them to better understand and manage their patient panels. However, the ability to translate metrics into practice improvements and/or to target patients needing care varies among providers and can depend on the utility of the reported data. Having excellent analysis of performance data, trends and benchmarking are of little use if providers are not able to take action or change practices to realize improvements. Health systems, CCOs and health plans also vary in their ability to work with practices and target their resources effectively.

HIE efforts remain fragmented and uneven:

- Health information exchange is unconnected: Many HIE efforts are still limited by separate networks that are unable to share information effectively, and significant gaps remain, especially with regards to geography and access to resources. Technical barriers and a lack of standards adoption also create difficulty in establishing connections.
- HIT efforts must be inclusive of settings, including those focused on addressing social determinants of health: Behavioral health, oral health, long-term services and supports, corrections, supported housing and social services must all be included in HIT efforts to achieve health systems transformation, but most of these providers face significant financial and technological barriers.
- Sustainability is challenging: Although the benefits of HIT infrastructure are of interest to many stakeholders, many are reluctant to invest without clear demonstration of value and return on investment. At the same time, for many services, participation by a critical mass of providers is needed to realize the return on investment.
- Risk of unintended consequences: The addition of new HIT services, however well-intentioned, could inadvertently contribute to information overload. For example, alerts designed to call attention to important information about a patient are useful only if the provider can act on the information. “Alert fatigue” can occur when a provider is overwhelmed by the volume of messages and begins to ignore them.
- Data ownership and challenges with sharing: The expansion of HIT has created new tension around data ownership, responsibility, investments in data cleaning and maintenance, and organizations’ competitive advantage around information. The intersection of the Health Insurance Portability and Accountability Act (HIPAA) with other privacy protections, such as 42 CFR Part 2, can create uncertainty about what information can be shared and how. Questions may

arise regarding who owns and can access the data. Protecting patient privacy and assuring security are paramount when working with patient information. Successful HIE will require addressing concerns of data blocking and ensuring information is available where needed while ensuring sustainable business models for infrastructure and exchange efforts.

Patient access and control remains challenging:

- Many patients still do not have access to their electronic health information. Those that do often have to access it through multiple unconnected portals. This is a particular challenge for patients with complex or chronic illnesses as well as for family members and others who support patients.
- The spread of HIE has particular implications for sensitive information, such as mental health, substance abuse and health data that may be connected with a particular setting (for instance, a county jail). HIE efforts should include considerations of patient choice and ability to control access to information.
- Incorporation of additional sources of data, such as those connected with the social determinants of health and those from HIPAA non-covered entities, raises additional concerns around privacy, stigma and rules surrounding sharing between organizations.

ROLES IN ACHIEVING HIT-OPTIMIZED HEALTH CARE

The state's role

The state plays a central role in coordinating efforts, leveraging funding opportunities and ensuring that all Oregonians can benefit from HIT-optimized care. Oregon also recognizes that local and private efforts play important roles in the adoption of HIT. In addition, the launch of the HIT Commons as a public-private partnership will create a period of transition as roles are developed and established. The state envisions that some of its work, where appropriate, may transition over time to the HIT Commons. (See Section 6 for additional information.)

The state has three primary levels of involvement: coordinating, standardizing and providing:

The state will coordinate and support community and organizational HIT efforts.

- Recognizing that HIT and HIE efforts must be in place locally to achieve a vision of HIT-optimized health care, the state can support, facilitate, inform, convene and offer guidance to providers, communities and organizations engaged in HIT.
- The state will use stakeholder groups such as HITOC, the HIE/ HIT Community and Organizational Panel (HCOP), other advisory groups, and ongoing environmental scan efforts to monitor the landscape, understand changes in the environment, develop or refine strategies and adjust efforts or make recommendations.
- The state will support the onboarding of critical physical health, behavioral health and oral health providers to community HIEs to improve care coordination and help Medicaid providers meet Meaningful Use requirements.
- The state will publish and share information about the use and adoption of HIT and HIE across Oregon to promote accountability, demonstrate progress and inform future action.
- The state will collaborate with other OHPB committees and with other OHA workgroups, such as the Health Equity Policy Committee, Behavioral Health Collaborative, and the Primary Care Payment Reform Collaborative to ensure the right HIT is available to support those efforts.

The state will align requirements and establish standards to promote statewide HIE.

- To ensure that health information can be seamlessly shared, aggregated and used, the state is in a unique position to establish standards and align requirements around interoperability, privacy and security. The state will rely on already established national standards where they exist.

- The state will use contracting opportunities related to CCOs to promote and support the use of HIT to advance Medicaid objectives.
- The state will promote the use and adoption of HIT through regulatory levers, such as the PCPCH standards.
- The state will work to align metrics and reporting to encourage HIT use and reduce administrative burden.
- The state will support the expansion of CQM reporting through electronic means to enable effective alternative payment models and promote population health efforts.

The state will provide a set of HIT technology and services.

- As described more fully in Section 4: The path to statewide HIE, new and existing state-level services connect and support community and organizational HIT efforts where they exist, fill gaps where these efforts do not exist, and ensure all providers on a care team have a means to participate in basic sharing of information needed to coordinate care.
- The state will leverage governance and funding opportunities, such as co-sponsoring EDIE and the HIT Commons and supporting the deployment of the PMP Gateway.
- The Oregon HIT Program will include enabling infrastructure and services, such as the Provider Directory, CareAccord and the CQMR, provide funding for EHR adoption and HIE onboarding, and offer technical assistance and support to assist providers in adopting and using HIT.

Role of other key stakeholders

All Oregonians have a stake in achieving HIT-optimized health care. Making the vision a reality will require participation, investment and support from all of Oregon's health care partners. Health plans, CCOs, community and organizational HIEs, health systems, providers and individuals have the following roles to play:

Health plans and CCOs:

- Support and encourage participation in programs that call for the use of HIT tools to improve care, such as the Oregon Medicaid EHR Incentive Program, CMS's MACRA Quality Payment Program (MIPS or Advanced APM track), and the multi-payer CPC+ initiative.
- Support and facilitate provider use of EHRs and HIE opportunities.
- Align quality reporting requirements around common sets of clinical quality metrics endorsed by the Oregon Health Plan Quality Metrics Committee. Build toward use of national standards, such as the QRDA EHR certification criteria.

- Invest in technology and processes to use aggregated clinical metrics data for effective population management, performance monitoring and creation of new payment models to reward outcomes rather than old models of paying for visits, and share data back to providers in usable formats.
- Work with health systems, providers and technical assistance resources to ensure the credibility and quality of clinical data generated from EHRs.
- Encourage and empower patient and provider relationships via electronic interaction with health information, leveraging patient portals and exploring new tools.

Health systems, hospitals and providers:

- Adopt and use HIT. This includes:
  - » Pursuing Meaningful Use of certified EHR technology (particularly for providers eligible for EHR program incentive payments and/or supporting Care Information (particularly for providers participating in the Merit-based Incentive Payment System), and incorporating the use of technology into workflows
  - » Participating in HIE across organizational and technological boundaries via Direct secure messaging and community, organizational and statewide HIE efforts
  - » Sharing information and engaging in care coordination efforts, such as participating in regional HIEs, PreManage and EDIE
  - » Engaging with efforts to expand access to public health and other registry data, including immunization registries, the PDMP and Physician Orders for Life-Sustaining Treatment (POLST)
  - » Including all members of the care team in coordination and sharing information, including physical, behavioral health, dental, long-term care and social services partners.
- Ensure EHRs meet current certification requirements that enable EHRs to produce clinical quality metrics, generate and report on clinical metrics data, implement workflow changes that may be needed to ensure quality of data, and make practice changes and target patients for interventions based on metrics and analysis of practice performance
- Participate in programs that leverage investments in HIT, such as CMS's Quality Payment Program and CPC+ initiative, the Oregon PCPCH program, and CCBHC
- Work with health plans, CCOs and technical assistance resources to ensure the credibility and quality of clinical data generated from EHRs

- Educate, engage and empower individuals through access to their health information. The providers have the primary relationship with individuals (and often their families).

Regional HIEs:

- Connect with other HIEs to create a Network of Networks that supports the exchange of information across vendor systems and organizational boundaries
- Promote the use of HIE within provider workflows
- Assist providers in extracting metrics and using data to improve care
- Connect critical providers to address gaps in HIE.

Individuals:

- Expect that providers have electronic access to their patient information, inform their providers where to access patient-generated information (such as personal health records), and seek to engage in their care and outcomes.

THE PATH TO STATEWIDE HIE COVERAGE

Goals for statewide HIE

To achieve the goals of HIT-optimized care, the state will work to ensure statewide coverage of HIE. To that end, three goals specific to HIE have been developed:

1. Oregonians have their core health information available wherever they receive care statewide.
2. HIE is meaningful to providers, takes into account usability and workflow and prioritizes high-value use cases.
3. HIE supports the coordinated care model, patient engagement and other alternative payment models.

Principles of statewide HIE

These goals are further guided by the following principles of HIE that will guide implementation strategies:

Democratize the data:

- Patients have a right to have their key health data available to their care team to support continuity of care, safety and quality.

Establish minimums (not maximums) and work to "raise all boats":

- Set minimum specs for provider participation.
- Avoid caps or disincentives that would hinder more robust and sophisticated uses.

Set rules of the road for data sharing/use and ensure trust:

- Contributors need to clearly know how their data will be used and how decisions will be made. Organizations will want clarity on data uses and clear rules of the road to have trust and participate.
- Set guard rails for uses of data that protect trust and encourage use.
- Rules must ensure mechanisms for accountability and dispute resolution.

Be Inclusive:

- Successful exchange will require everyone to participate — "all in."
- Particular attention is required for gaps in HIE, especially those due to resource limitations, geography and health inequity.

Consider provider workflow and use cases:

- Focus on high-value use cases, and incorporate solutions into workflows.

A governance role is needed:

- Competition makes coordination and collaboration difficult. A neutral entity of trust is required to align efforts and ensure that data is available for appropriate use.

High-value use cases to guide efforts

Health information exchange encompasses myriad efforts and technologies, with each offering different levels of connectivity, robusticity and complexity. To best leverage existing investments and new opportunities, efforts will focus on identifying high-value use cases to guide strategies for statewide coverage of HIE. Several high-value use cases have already been identified, including:

- Exchange of care summaries: providing relevant, timely information about care a patient receives. Basic care summary exchange already occurs in a variety of ways, and future work will focus on integrating across technology systems and better integrating into provider workflow. As national HIE frameworks (such as Carequality, Commonwell, and eHealth Exchange) spread across Oregon providers, care summary exchange should significantly increase.
- Closed loop e-referrals: sending referral information from a coordinating provider to a specialty provider, hospital, behavioral health organization or other entity and then receiving information about the results of the visit or service to incorporate into the plan of care. Future needs may also include interfacing with social services agencies, supported housing and other support services.
- Complex care coordination: providing seamless and up-to-date information about a patient across a care team, which may include physicians, care managers, specialists and other support organizations.
- Alert notifications: capturing information about transitions of care or service and communicating them to the right people at the right time. Alert notifications for hospitalization and ED visits are already available through the EDIE Utility and PreManage service. These efforts could expand to include transitions in and out of post-acute care facilities and correctional institutions, or service information, such as visits to primary care or a social services agency.
- Data for alternative payment models: providers' and payers' need for increased access to the right information at the right time. This includes clinical information for care coordination purposes, clinical metrics for quality and payment purposes, and information needed for population health and practice improvement efforts.

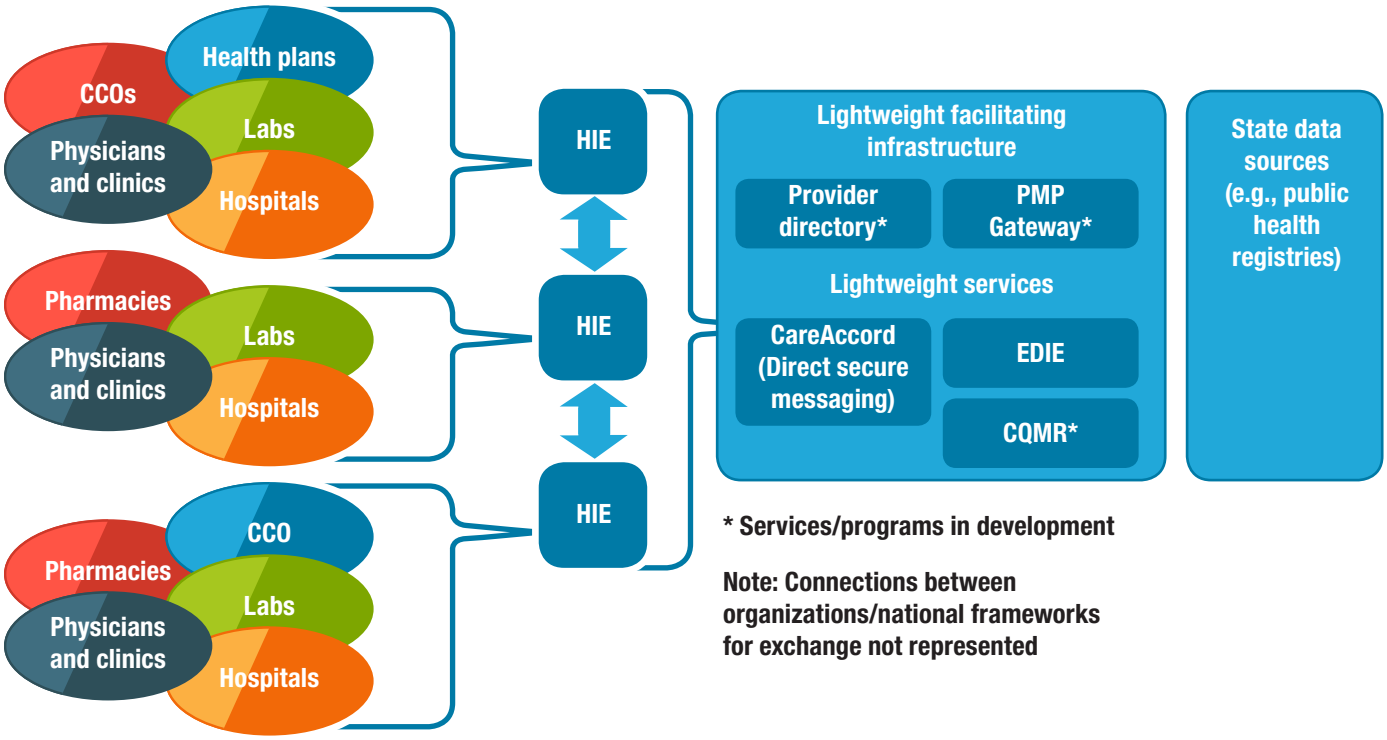
Each of these use cases features specific and differing stakeholders, workflows and underlying technology requirements. By focusing efforts on use cases, the right stakeholders can come together, and the right technological and technical solutions can develop to improve care communication and coordination.

Use cases	Main stakeholders/ participants	Types of exchange/ efforts
• Referrals • Alerts • Records request • Complex care coordination	• Hospitals • Physical health providers • Behavioral health organizations • Oral health providers • CCOs • Health plans • Long-term services and supports • Social services and supported housing agencies	• Direct secure messaging • Regional HIEs • EDIE/PreManage • Expanded notifications • Vendor-led efforts (e.g., Care Everywhere) • National efforts (e.g., Carequality, Commonwell, eHealth Exchange)

A number of models have been considered to provide statewide HIE, including a robust HIE-led model and a robust enabling-infrastructure model. HITOC recognizes previous and ongoing investments in technology and infrastructure by the state and health care stakeholders, a diversity of needs, and a desire to remain flexible amid changing delivery and payment landscapes and, as a result, has determined a robust HIE model with a lightweight enabling infrastructure supported with baseline services is the right path forward at this time.

In this model, providers, hospitals, health systems, health plans and other health care users connect primarily through a robust HIE network that facilitates exchange. Statewide enabling infrastructure will focus on helping these robust HIE networks share information, such as the Provider Directory that helps locate providers and organizations. Some lightweight services are also provided to fill gaps and address barriers such as a lack of resources or incomplete access to data.

Robust HIE model with light services



In developing this model, HITOC considered the feasibility of more robust statewide services, as well the continuation of the status quo. It was determined that robust networks of HIE, connected together, offered the right value, risk and likelihood to provide the necessary level of HIE. HITOC will monitor the spread of robust HIE networks, as well as technology changes and evolving needs, and make recommendations or adjustments going forward.

Approaches to achieve statewide HIE

1. Supporting and connecting robust networks of HIEs
2. Providing baseline services to those facing barriers
3. Offering statewide enabling infrastructure to leverage existing investments and opportunities
4. Providing access to high-value data sources
5. Coordinating stakeholders to establish a shared governance model

The following approaches will guide strategies and efforts:

1. Supporting and connecting robust network of HIEs

Various local efforts have emerged to offer HIE solutions, including community health information exchange organizations (HIEs) and health system-led HIE efforts. Each effort varies in the sophistication, types and degree of information shared, and connectivity with outside sources (including national exchange efforts). Significant gaps still exist in the availability and usefulness of HIE efforts.

HIE Onboarding Program: The HIE Onboarding Program will support the initial costs of onboarding priority Medicaid providers to a community-based HIE that provides meaningful HIE opportunities and plays a vital role for Medicaid in that community. It may also support participating community-based HIEs in connecting to the Network of Networks including HIE-enabling infrastructure, statewide services and other connections, as described in this strategic plan, that create value for priority Medicaid providers.

The initial phase of the program will focus on promoting integrated care. Therefore, priority Medicaid providers for that phase will be Medicaid behavioral health, oral health and critical physical health providers including county corrections health. The program will also incentivize early onboarding of major trading partners to help create value for other priority Medicaid providers. Later phases of the program will likely include long-term services and supports, social services and other organizations that focus on the social determinants of health as priorities.

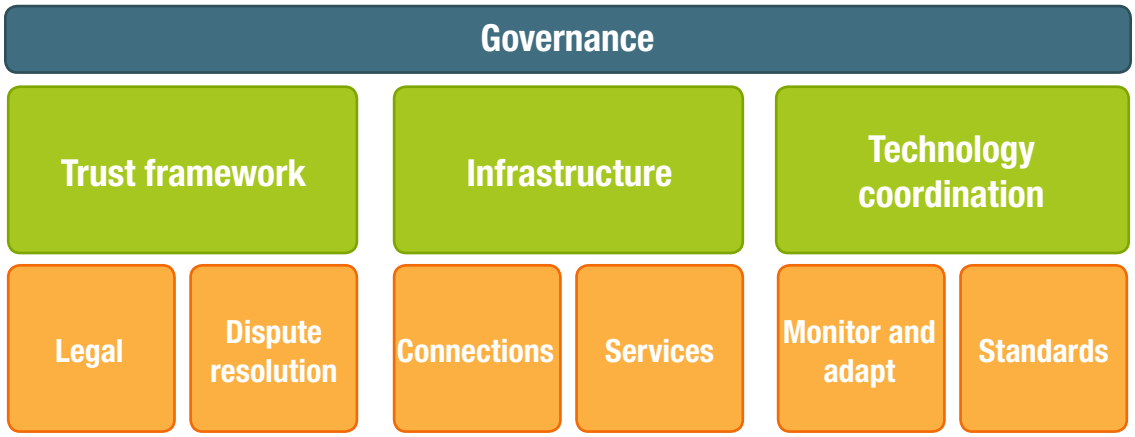
The state will also continue to convene stakeholders, such as HITOC and the **HIE Community and Organizational Panel** workgroup, to monitor and support the development of HIEs, share best practices and collectively resolve challenges. Grant funding and other support will also be sought to build additional connectivity and functionality of HIEs.

While significant progress has been made to develop and build HIE networks across the state, challenges remain, particularly in communicating across

different HIE networks. A Network of Networks model envisions collaborative work around establishing common rules of the road, developing requisite technical and legal frameworks, and developing and/or adopting enabling infrastructure to support cross-network exchange.

Key functions of the Network of Networks

- Coordinating and convening key stakeholders to develop the necessary trust framework, including legal and data use agreements, policies and dispute resolution approaches.
- Identifying and implementing needed infrastructure to facilitate exchange.
- Ensuring interoperability to improve the use and value of information exchanged, while enabling seamless use of state services that rely on data and technology residing in multiple organizations.
- Ensuring privacy and security practices are in place.
- Providing neutral issue resolution.
- Monitoring environmental, technical and regulatory changes and adapting as needed.



2. Baseline services and supports to those facing barriers

The state will provide baseline services to address gaps and support providers facing barriers. These barriers could include resource limitations, a lack of adequate and effective alternate HIE methods, or geographic challenges.

Baseline services already in place include:

- CareAccord®: CareAccord is available throughout Oregon, including in areas where no community HIEs exist. By offering CareAccord, the state provides an option for any provider, with or without an EHR, to access electronic health information through Direct secure messaging.

- Emergency Department Information Exchange (EDIE) and PreManage: The EDIE Utility is a public-private partnership that provides Oregon emergency departments key care summaries for patients with high utilization of emergency department services and/or who have been identified to have complex care needs with care guidelines. The goal is to reduce unnecessary hospital services and improve outcomes. Statewide hospital notifications (ED and inpatient admit, discharge and transfer data), through the PreManage program, augment the work under EDIE by notifying providers, health plans and care coordinators when their members or patients are seen in any Oregon or Washington hospital. EDIE and PreManage services provide critical care coordination links between hospitals; critical physical, behavioral and oral health providers; tribal clinics; long-term care providers; CCOs; and other payers. Organizations are also using data from the service to improve population health and analytics efforts.

3. Statewide enabling infrastructure services

Statewide enabling infrastructure services provide core services that facilitate efficient use of HIT and information exchange across organizational boundaries, providing the underlying "glue" to connect robust networks of HIE with baseline services and other efforts. The following services are currently being developed:

- Provider Directory services: Provider Directory services are critical for several uses: HIE, analytics, state program operations, health plan and health system operations, statewide common credentialing efforts underway at OHA, public health program operations, and others. Oregon's Provider Directory will be developed in phases, starting with key use cases (HIE, common credentialing, etc.) and expanding over time to serve other use cases. The Provider Directory will include all types of providers and organizations that participate in these use cases, not just physical health providers and hospitals.

  The Provider Directory services will:

  » Enable lookup of parties (e.g., organizations and individuals) and their associated information (e.g., name, postal address, phone number, electronic service address for HIE purposes) using identifying characteristics. The Provider Directory will identify key affiliations, such as individual provider affiliation to their practices, health systems, health plans, etc.

- » Act as a "router," and a single lookup point, distributing lookup requests to provider directories at community and organizational HIEs and health systems and returning aggregated responses.
- » May include core provider data in a central database (e.g., static data such as name, demographics, etc.).

- Common credentialing: OHA is mandated to establish a common credentialing solution that will provide credentialing organizations (hospitals, health systems, health plans, ambulatory surgical centers, etc.) access to commonly held information necessary to credential all health care practitioners in the state. The goal of this effort is to reduce the administrative burden on practitioners and reduce redundancies of the credentialing process. Common credentialing and Provider Directory efforts have many opportunities for synergies: e.g., common credentialing will provide a trusted, robust data source for the Provider Directory.

The last strategic plan (2014–2017) envisioned additional enabling infrastructure. These efforts included expanded notifications, a master patient index, record locator service and support for query-based exchange. Due to changes in the environment and new national exchange efforts, these efforts are not being pursued at this time. However, they may still be considered for future needs. See "Appendix A: Opportunities for future Investments" for more information.

4. Provide access to high-value data

As one of the largest collectors of data, the state is uniquely positioned to support and augment HIE efforts. High-value data managed by the state includes public health reporting data, including immunizations, opioid prescription fills, emergency medical services (EMS) events and outcomes, and specialized registries such as Physician Orders for Life-Sustaining Treatment (POLST). Current efforts to promote data access and sharing include bi-directional interfaces between HIT systems and public health gateways and pilots to support integration between the POLST registry and POLST electronic reporting interfaces. The state is also exploring ways to share social determinants of health data to improve care coordination and upstream interventions.

PMP Gateway: The Prescription Drug Monitoring Program is a specialized registry that contains crucial opioid prescription fill information. Previously, access to PDMP data was limited to a web portal that was burdensome to many prescribers' workflow. OHA has worked to connect the PDMP database to a cloud-based gateway (called PMP Gateway) will improve access and usability of the data. Approved prescribers will be able to access PDMP data on their patients from within their EHR system without logging into a separate portal. In

addition, PDMP data will be available through EDIE alerts when certain criteria are met. Future envisioned efforts include establishing a shared funding model to improve access and lower costs to connecting to the PMP Gateway.

5. Coordinate stakeholders and establish shared governance model

The key enabler to statewide coverage of HIE will be coordinating various efforts and using enabling infrastructure in a cohesive way. A shared public-private governance model, described next, will leverage this opportunity.

THE HIT COMMONS: A PUBLIC-PRIVATE PARTNERSHIP GOVERNANCE MODEL

Background on HIT governance efforts

Developing a public-private partnership to govern statewide HIT efforts has been on HITOC's strategic roadmap from the beginning. In 2010, a strategy work group convened by HITOC determined that Oregon's governance model should take a phased approach to developing a public utility with government oversight. In the first phase, the state would support existing community and organizational HIT efforts by providing HIE policies, requirements, standards and agreements. The work group anticipated that a financial sustainability plan and necessary legislation would allow for a second phase in which a state-designated HIT entity would be created. The entity could serve as the central contracting point for community and organizational HIT efforts and act as the accrediting body by implementing the policies developed in the first phase.

The 2014 HIT Taskforce confirmed the phased approach to developing a public-private governance model. In 2015, legislation passed that allowed OHA to participate formally in such a governance entity. It allowed the state to transition any or all of the Oregon HIT Program to the governance entity if doing so was in the best interests of the state.

In 2015, the EDIE Utility formed to provide statewide hospital event notifications. A key success of the EDIE Utility was OHLC's and OHA's sponsorship and all Oregon hospitals', major payers', CCOs' and OHA's participation under a shared governance model. The model provided for representation, shared financing, and agreements for participation and use of the data and infrastructure.

Developing an HIT Commons

Building upon the success of the EDIE Utility, OHA and OHLC, in collaboration with other key stakeholders, have begun developing a public-private governance model and business plan. Through extensive listening sessions, several key themes and opportunities for a shared governance model emerged around coordinating HIE efforts, spreading HIT progress and creating sustainable funding mechanisms for shared investments.

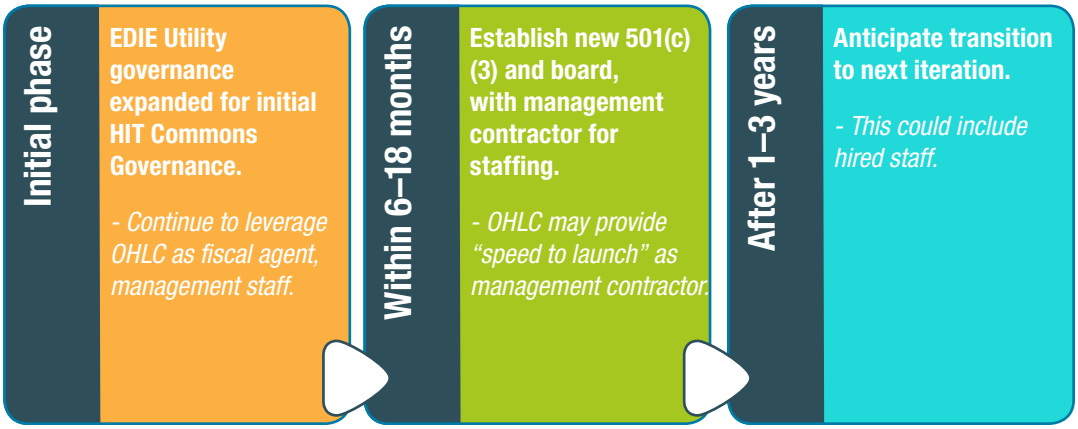
The HIT Commons will be established as an umbrella governance structure initially under OHLC, with a transition to a separate legal entity over time. The HIT Commons will include: decision making based on common principles and expectations; a base funding model to support umbrella governance and a select scope of initial projects; and clear criteria for selecting future projects to be funded and staffed as they are initiated.

Initial work of the new HIT Commons will focus on continuing the successful work of EDIE and OHLC's Administration Simplification committee (including single sign-on work), providing funding for statewide access to the PMP Gateway, and beginning work to coordinate the Network of Networks for HIE.

Organizational model and key considerations

The HIT Commons will take a "crawl, walk, run" approach to launch. The initial HIT Commons entity will be based on the EDIE governance model, with the OHLC acting as a fiscal agent and management contractor. Over 12–18 months, the entity is expected to transition to a stand-alone nonprofit organization.

Glide path to more formal structure



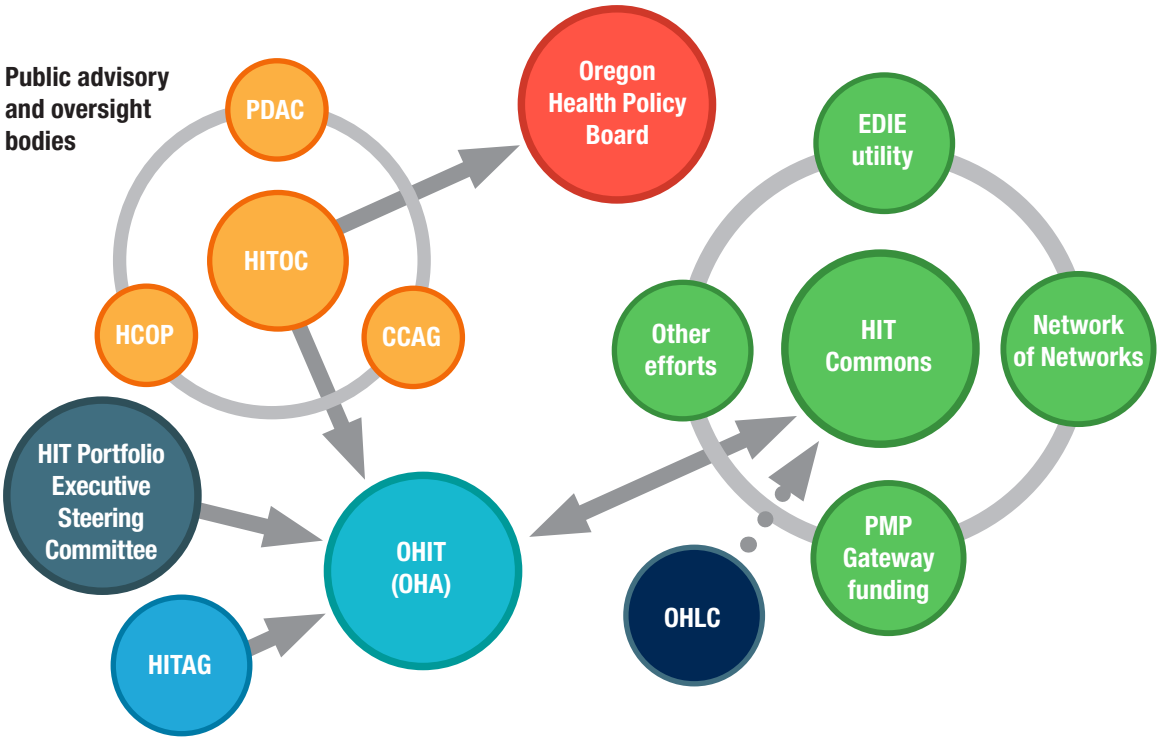
Key guiding principles include:

- Democratize the data — common data set shared.
- "Raise all Boats" — establish minimums (vs. maximums).
- Inclusive — work to ensure "all in" or critical mass.
- Work for common or public good.
- Spread HIT successes.
- Set rules of the road for data sharing — guard rails to promote trust.
- Create transparency — how and why decisions are made.
- Identify and communicate value.

Stakeholder representation on the HIT Commons will be balanced and include OHA; health plans and CCOs; hospitals and health systems; physicians; Oregon Association of Hospitals and Health Systems; behavioral and oral health providers; and social services agencies.

The relationship between HITOC and the HIT Commons is still being refined and may shift over time. Currently, it is envisioned that HITOC will be responsible for setting overall HIT strategy and monitor broad efforts and programs, including the progress and effectiveness of the HIT Commons. The HIT Commons, in turn, will take a primary role in implementing key strategies. The HIT Commons will also provide monitoring and accountability for its projects and initiatives. Description of the potential HIT governance "galaxy" follows.

Potential health IT governance "galaxy"



Coordination and clarity of roles between the HIT Commons, OHA and HITOC is key. In summary:

- **HIT Commons** will serve as a neutral convener and be responsible for governing the execution of strategies and work to advance HIT in Oregon. The HIT Commons may receive recommendations from HITOC (or other entities) based on HITOC's strategic or policy work and may refer issues to HITOC or other entities. However, each entity will maintain independence in choosing what action to take based on the referral or recommendation.
  - » OHLC will serve as the managing partner and fiscal agent of the HIT Commons initially. Responsibilities include contracting, convening, staffing, coordinating, communicating and project managing the HIT Commons.
- **HITOC** serves as the public oversight body under the authority of the Oregon Health Policy Board and is aligned with Oregon's health system transformation efforts.
  - » HITOC has three advisory groups that report to it: the Provider Directory Advisory Committee (PDAC), the Common Credentialing Advisory Group (CCAG) and the HIT/HIE Community and Organizational Panel (HCOP).
- **OHA** is responsible for the state's Medicaid objectives and health system transformation efforts and is accountable to the Governor's Office and the Oregon Legislature. The Office of HIT (OHIT) is responsible for statewide HIT policy, programs and partnerships that support health system transformation.

    - » OHIT's HIT projects are governed by a decision-making group, called the HIT Portfolio Executive Steering Committee.
    - » OHIT is advised by the CCO HIT Advisory Group (HITAG) on its implementation of HIT initiatives.
- **Private stakeholders** are responsible for executing HIT initiatives, achieving the value proposition of HIT initiatives and informing the development of statewide policy and HIT Commons operations.

A formal business plan for the HIT Commons has been developed by OHA and OHLC through an interim advisory group in summer 2017 (see http://www.orhealthleadershipcouncil.org/wp-content/uploads/2017/09/HIT-Commons-Business-Plan-FINAL-9-2-17.pdf).

TECHNOLOGY NEEDED FOR ALTERNATIVE PAYMENT MODELS

Central to health systems transformation is the move from fee-for-service payment models to ones based on outcomes and effectiveness. This has created an opportunity for improved HIT for several purposes:

- Quality measurement
- Care coordination and care gaps identification
- Population health management and risk stratification
- Expanded data collection, especially around social determinants of health and other critical, non-medical information

To reward value, alternative payment models (APMs) require gathering timely performance information and communicating it between providers, payers and regulatory bodies. With an increasing focus on quality measurement, measures have proliferated. For measurement to become more meaningful and less burdensome, alignment is necessary on measure sets, specifications and measure collection.

HIT plays a key role in quality measurement. Electronic Clinical Quality Measures (eCQMs), which include process and outcomes measures used to measure the current quality of patient care and identify opportunities for improvement, are generated from providers' EHRs. Ideally, the necessary data should be captured as part of the provider's regular workflow (e.g., when lab results are received or when a patient's vitals are taken), but a frustration with current measures is that extra steps are often required to capture the data.

Needs for quality data:

Health plans, CCOs, health systems and providers all need CQMs to achieve the triple aim of better health, better care and lower costs.

Provider-level uses: Point–of-care providers and the care team need actionable CQMs, alerts and other patient-level information to look across their patient panels and identify care needs. These tools allow providers to identify patients who have gaps in care (e.g., missing recommended screenings), are at risk for poor outcomes (e.g., missing follow-up visits after hospitalization or being outliers within their chronic care cohorts) or have other signs of needing additional, proactive care. Clinical quality measures can provide insight into areas of success and areas for improvement. To be most useful for providers, these data and metrics should include the ability to drill down to the patient level so patient follow-up and practice changes can occur.

Management-level uses: Health plans, CCOs, health systems and providers need CQMs and data to:

- **Ensure quality:** Identify, monitor and improve quality of care.
- **Manage populations:** Identify and manage their patients/populations effectively.
- **Pay differently:** Transform care delivery via new payment models based on paying for value and health outcomes rather than visits.

To be most useful for management-level users, these data and metrics should be collected frequently enough to demonstrate the impact of new delivery care models and help identify where resources and course corrections could yield better outcomes.

Policy-level uses: The state monitors population health and seeks to ensure value in the health care delivery system. Data that are particularly relevant at the policy level may include provider or management-level metrics. Data may also include less frequently collected indicators, such as patient satisfaction surveys.

Efforts to advance HIT for alternative payment models

In addition to supporting HIE that can support access to critical clinical information available to payers and providers engaged in new payment models, the following five efforts support the HIT needed for these models as well. HITOC will explore these strategies and others as APMs spread across Oregon's payers and providers in the coming years.

Leveraging national standards and Medicaid EHR incentives

The state will use available levers to promote participation in the Oregon Medicaid EHR incentive programs. As programs evolve, the state will monitor and share information, e.g., the EHR certification standards embedded in federal requirements for the MIPS and CPC+. Where relevant to Oregon's interests, the state will advocate nationally for standards and policy that further the ability of providers to seamlessly report clinical quality metrics from their EHRs. Where appropriate, the state will provide information for EHR vendors regarding state reporting requirements and convene stakeholders to help collectively voice concerns.

Assessing changing environments and convening stakeholders

The state will monitor and report on how EHR vendors adapt to new 2015 Edition certification standards (required for use in 2018 CMS programs) and how new EHRs meet clinical quality metrics and reporting needs.

Align metrics and reporting

The state will use available levers to align metrics and reporting requirements across Oregon. The new Health Plan Quality Metrics Committee, created under SB 440 (2015), is charged with measure alignment.

Clinical Quality Metrics Registry

The state will procure a Clinical Quality Metrics Registry with the ability to collect and aggregate key clinical quality data for the Medicaid program, develop benchmarks and other quality improvement reporting and calculate clinical quality metrics. Initially, the CQMR will support reporting for two needs: electronic health record (EHR)-based CQMs from CCOs and electronic CQMs from eligible professionals in Oregon's Medicaid EHR Incentive Program.

The CQMR will collect data that enable deeper analysis than possible with current submissions. As providers build capacity to submit patient-level clinical quality measure data in a national standard (QRDA I), the CQMR will provide a glide path to increasingly collect data in that format. This will enable OHA to identify, understand and target efforts to address disparities in care for Medicaid patients.

Over time, the CQMR can support a "report once" approach in which providers submit single reports to the CQMR to meet multiple reporting needs. The CQMR is a step in an incremental process toward this reduction in administrative burdens of reporting. The process begins with building agreement on the data collection point. Building alignment on measure sets and reporting requirements will take time. Although OHA does not have authority to change reporting requirements for every program, it will work toward alignment where possible and consistent with program purposes.

Technical assistance to Medicaid providers

The state has contracted for technical assistance to Medicaid providers in order to support EHR adoption and Meaningful Use under the Oregon Medicaid Meaningful Use Technical Assistance Program (OMMUTAP). Technical assistance can improve credibility of EHR data underlying clinical quality measures, bolstering provider confidence in metrics. Other technical assistance programs are also available, and the state has a role in helping coordinate efforts and facilitate communication with interested parties.

PATIENT ACCESS TO HEALTH INFORMATION

Individuals and their families or caregivers can partner with their providers when they are educated and engaged. Increasingly, patients have access to some of their health care information through patient portals and other means. Individuals can also be empowered to provide some of their own clinical data using remote monitoring devices and new applications that allow them to remotely engage with their health care teams.

With support from OHA and several health care organizations, Oregon has become a leader in the OpenNotes initiative, which encourages and supports providers in offering electronic access to full clinical notes to their patients. OHA has also supported efforts to improve electronic access and exchange of POLST forms between providers and the statewide POLST registry.

To reduce gaps in patient access to their health information:

- Individuals should have access to their complete health record, including provider notes, treatments and goals in order to improve their understanding and engagement in their health care and outcomes.
- Individuals should have ways to provide important information into their health records, including clinical data and their preferences related to their care, such as end-of-life care and POLST forms.
- Individuals should have the capacity to facilitate care management by sharing data with their providers.
- Sufficient safeguards should be in place and be clearly communicated to patients so individuals have confidence in the privacy and security of their electronic health information.

Efforts to support improved patient engagement through HIT

The state will support community and organizational efforts by:

Promoting EHR adoption and Meaningful Use

The state will use levers, such as promoting the Medicaid EHR Incentive Program, to encourage providers to make protected health information available to patients. Meaningful Use Stage 3 and MIPS require eligible clinicians to give patients secure, electronic access to their health information.

Leveraging national standards and federal EHR incentives

To inform and support stakeholders, the state will monitor national efforts and standards, the evolving personal health record market and direct-to-consumer health care.

Providing guidance, information and technical assistance

The state will support efforts to make patient information available electronically by informing stakeholders, supporting initiatives and seeking to advance Meaningful Use requirements for making information available to patients.

Assessing changing environments and convening stakeholders

The state will identify and disseminate best practices and seek opportunities to explore promising approaches. As part of that effort, the state will engage individuals to identify opportunities, preferences and barriers around engaging in their health care via electronic interaction with their health information.

CONCLUSION

The work of creating HIT-optimized health care is not easy. Challenges are plentiful – from the burdens on providers struggling to meet multiple HIT changes in a short time, to the misaligned incentives still embedded in fee-for-service models, to the danger of unintended consequences such as "alert fatigue" resulting from an overwhelming volume of incoming information.

The benefits of achieving HIT-optimized health care, however, will be great. In many areas, these benefits are already being seen, as improved information sharing supports better care coordination and improved health outcomes. As the right HIT services become ubiquitous and coordinated across Oregon, more Oregonians will experience the advantages of health care supported by timely access to patient information. Providers will find it easier to deliver coordinated care. Systems will have the clinical outcomes data to enable quality improvement, population management and incentives for health promotion. Policymakers will be able to use clinical data for transparency and policy development. Oregonians and their families will access and use their own health information to be informed and engaged in their own health care.

Providers, systems and individuals all have a stake in making this vision a reality. This report outlines steps for the state, health plans, CCOs, community and organizational HIEs, health systems, providers and individuals. With all stakeholders working together, Oregon can achieve a transformed health care system that is optimized by HIT.

APPENDIX A.
OPPORTUNITIES FOR FUTURE INVESTMENTS

The 2014–2017 Strategic Plan envisioned several efforts as Phase 2.0 services developed after the initial rollout of baseline services and infrastructure. Over the past three years, changes in technology, health care policy and stakeholder environments created a need to hold on development and reconsider the value and risk of state-led investments in these efforts.

Some efforts have been eclipsed by new technologies or efforts. Others, such as those listed below, still hold significant value. However, they present high risks to implementation or require resources beyond what is currently available. As technology and the environment evolve, they will continue to be evaluated for potential adoption.

Enterprise Master Patient Index (eMPI): Patient identity management is a challenge for many HIT users. The problem increases when trying to share information across organizations. Problems with patient identity can prevent the exchange of information or cause information about a different patient to be incorrectly exchanged. The purpose of a master patient index is to store demographic and other information about a person in order to correctly identify that individual in a care setting. A statewide eMPI could provide a single look-up location to determine patient identity and facilitate the exchange of patient records across organizations.

Patient attribution, record locator service and query: A patient attribution service that includes provider affiliation services is valuable for several uses: HIE, analytics, state program operations, health plan and health system operations, and others. A patient-provider attribution service would build on a master patient index and Provider Directory to create care team relationships and linkages.

Notifications hub: A notifications hub could build on the success of the EDIE alert system and include notifications for care visits, specialty interactions, behavioral health referrals, development screens, long-term or post-acute care admissions or entry/release from correctional facilities. These notifications could enhance care coordination, improve care management and help identify care gaps for key providers, care managers, coordinated care organizations and payers.

APPENDIX B.
PAST WORK AND CONTRIBUTORS

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Greg Van Pelt	President, Oregon Health Leadership Council

2014 HIT Task Force members and staff

HIT Task Force: In the fall of 2013, OHA convened the Health Information Technology Task Force (Task Force). Comprised of a wide group of Oregon's HIT/HIE stakeholders, the 19-member task force met in five public meetings and a series of smaller workgroups between September and November 2013. The task force produced the 2014–2017 Strategic Plan, upon which the current plan is based (Members' titles and organizations represent the time they served on the task force.)

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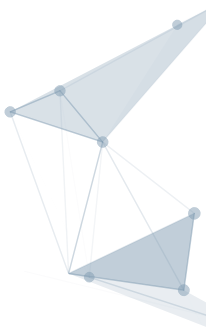

Oregon Health Authority

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