Health Information Exchange – Respondent Feedback on Strategic Direction in Oregon

Health Information Technology Oversight Council

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Oregon Health Authority

Contents

Acknowledgments

Executive Summary

In the fall of 2021, HIT Commons conducted a series of informational interviews with a diverse group of 25 partners across Oregon and representing health information exchange (HIE) leadership in other states (see Appendix A for a list of participants). The goal of these interviews was to further inform the Health Information Technology Oversight Council (HITOC) and Oregon Health Authority (OHA) staff on the current state of HIE in Oregon, including major opportunities and challenges. This document is intended to help guide HITOC and OHA on how to approach HIE strategy development as part of the 2022 strategic plan update. Open-ended questions were asked consistently across all respondents. The following is a synopsis of the ideas and themes that arose from those interviews, categorized by areas that will best serve future discussion around HIE strategy development in Oregon.

Before delving into each category, it might be useful to note that some themes came up consistently across multiple lines of questioning, suggesting that they may address foundational elements to successful HIE efforts. We are noting these now, and they are discussed further within each relevant section:

- **Governance and Broad Buy-In**: respondents consistently came back to strategies and opportunities around engaging leaders, entities, sectors, and ensuring that there are clear efforts to build greater trust and collaboration. Respondents spoke to the need of protecting against anti-competitive activities and abuse of data. By its nature, HIE is connecting systems and sectors that have not historically worked together. Oregon has made promising strides in this direction, including a regional/community HIE (Reliance eHealth Collaborative) and the creation of a public-private collaboration (HIT Commons), but respondents commented that these efforts need to be expanded upon.

- **Increasing Data Access and Eliminating Fragmentation**: across many lines of questioning, respondents noted the need for using HIE to collect more diverse and disparate data sources than what is currently available. For example, beyond clinical data from electronic medical records (EMRs), respondents mentioned claims, social determinants of health, as well as enrollment and other administrative data. Many respondents viewed HIE as a key aspirational strategy to eliminate fragmentation in the health care system, particularly for areas like behavioral health and oral health. Access to this data by a broader network of users was also emphasized throughout our discussions and for many respondents, patients were a key user group of these data tools.

- **Education, Awareness, and Community Engagement**: respondents spoke to the ongoing need to promote the HIE tools and strategies that are available. They suggested some groups might require increased attention, including providers and community-based organizations. For the latter, respondents encouraged taking new approaches to engagement and trust-building.

- **Establishing Value**: respondents acknowledged that these tools and strategies often require financial and other resource investment by private organizations such as health systems and health plans. Establishing value across the broad network of entities that may be called upon to fund these efforts was consistently mentioned as core to success. Some suggested more detailed business cases upfront, as well as increased efforts to evaluate the impact of initiatives after go-live.

- **Workforce**: among the many interdependencies that influence whether HIE will be successful, many respondents noted the need for a bolstered clinical and technology workforce and the need for that workforce to be more diverse and reflective of the communities served. Some respondents suggested prioritizing HIE tools or solutions that can address workforce issues through increased operational efficiency (e.g., using technology to automate tasks that have traditionally been done manually like chart review).

Detailed Responses

Each section below identifies a set of themes that arose from discussion around a particular open-ended question (e.g., goals of HIE, barriers or challenges to HIE, etc.). Themes are provided in order by most-to least-mentioned and include the proportion of respondents that spoke to each theme over the total number interviewed (n=25).

An important note: we acknowledge that our sample size was too small to draw any conclusions about the complex HIE landscape in Oregon. The following information is intended to note the variation in opinions and needs in the HIE space and not to confirm what strategies, if any, the public or private sectors should take moving forward.

Goals of HIE

Respondents were asked about the goals for HIE in Oregon. The responses tended to be aspirational in nature. Respondents were typically asked "If you were personally drafting the strategic plan, what would you identify as the goal or goals of HIE?" We coded 63 distinct concepts from respondent interviews. These concepts were rolled up into 10 themes as noted below:

1. **A Seamless Solution (11/25):** the most prevalent theme was respondents' aspiration toward a solution that felt singular to the end user and could be accessed by all, including patients, and which would drive contribution from all sources (including state bodies) and fill data gaps. Respondents stressed that this solution should include broad sets of data (not just clinical data, see also Eliminate Fragmentation below), be patient-centered, and facilitate interaction among care professionals.

2. **Client Needs are Communicated (8/25):** this theme is closely related to the Seamless Solution theme but was called out for the number of times respondents specifically discussed the role of HIE in communicating clearly and quickly the primary need(s) of the client/patient across all medical and social domains.

3. **Governance (7/25):** respondents spoke to an open, public governance structure for HIE. Concepts specifically

"Health is fundamental to our existence. Being able to address factors that most impact our health is the only way to keep people healthy. In order to understand those factors and their impacts on health, we need to connect the dots between the outcomes we are concerned about and the causes. A system that allows us to connect the most upstream causative factors with the most downstream outcomes in as direct a line as possible is going to be a tremendous tool for improving health and identifying the societal causes of poor health and allow us to directly affect them.

Because the data belongs to the people being evaluated, they need to be directly involved in how the data is shared and used to ensure it's addressing what they care about most."

Dr. Brian Frank, OHSU Richmond Clinic

mentioned topics like stewardship of data, trust building among organizations, and education/promotion of the value of HIE.

4. **Eliminate Fragmentation (6/25):** this theme centered around expanding the kind of data that flows through HIE. Many of the concepts centered around social determinants of health (SDoH) data and state-held data (e.g., public health, Medicaid data, etc.).

5. **Evaluation/Impact (6/25):** respondents spoke to the need for establishing how HIE impacts the health care ecosystem (including goals for each actor like hospitals, payers, clinics, etc.) as well as leveraging HIE data to evaluate impact of interventions in the field (see also Population Health below).

6. **Efficiency of Transport (4/25):** several respondents highlighted that a goal for HIE is to ensure the ease and efficiency of transporting data between systems (e.g., HIE as a verb). This includes both the one-to-many advantage of an HIE as well as standards to ease data transfer and use.

7. **Population Health (4/25):** several respondents spoke to the goal of leveraging HIE as a source of truth for population health, including how data can connect upstream causes to downstream outcomes.

8. **Provider Directory (4/25):** several respondents called out the need for a single source of information on providers' contact information, organizational affiliations, and relationship to patients.

9. **Focus on Behavioral Health (2/25):** a couple of respondents directly advocated for focusing efforts on supporting behavioral health, as well as the importance of effective behavioral health systems within the broader health care system to be able to achieve health outcomes.

10. **Take Action (2/25):** two concepts spoke to the gap between policy and execution and advocated for a stronger focus on execution.

Benefits of HIE

Respondents were asked an open-ended question about the benefits of HIE in Oregon, with the intent of understanding what is working well. Of the 32 concepts captured in response to this question, several fell into themes based on a named solution, while others fell into themes around value propositions or infrastructural requirements without any specific named solution. Both are provided below. In addition, nine responses could not be categorized into a theme, but mentioned the benefits of HIE to specific populations of patients,

specific provider types, or specific benefit to having HIE as an infrastructural source of information.

Benefits of named solutions:

1. **Epic CareEverywhere and Carequality (5/25)**: respondents felt that this HIE strategy works well, with some acknowledging that the prevalent use of Epic in Oregon was key to this success. Epic CareEverywhere allows Epic EMR users to benefit from data collected from other Epic EMR users across the nation, whereas Carequality is a national framework for clinical data exchange with data being contributed from several different EMR vendors including Epic. Taken together, these solutions provide Epic users with a significant source of clinical information outside the four walls of their own institution.

2. **Collective Medical (EDIE, Collective Platform (fka PreManage)) (4/25)**: respondents noted the value in having a statewide hospital event notification system in Collective Medical. These respondents praised both the ED-facing solution in terms of preventing costly work ups, as well as the payer- and clinic-facing Collective Platform, which helped them with risk stratification, care coordination efforts such as hospital follow-up, and keeping members in-network.

3. **Reliance eHealth Collaborative (3/25)**: across multiple lines of questioning, three respondents highlighted Reliance as a successful HIE, both in terms of reliably pulling data out of multiple disparate EMR systems as well as assisting smaller practices with important quality reporting processes.

4. **Connect Oregon/Unite Us (2/25)**: two respondents flagged Unite Us as a valuable platform for social need referrals. One respondent flagged the need for transport/exchange of information contained within Unite Us to other systems (e.g., other HIE tools, electronic medical records, etc.).

5. **Registries (2/25)**: two respondents flagged OHA public health registries, with one specifically calling out the success of Prescription Drug Monitoring Program (PDMP) data pushed to electronic medical records via Collective Medical notifications. One respondent pondered how these registries could be further leveraged to provide a bigger picture about patient health (e.g., via a community health record or other data aggregation tool).

Other benefits of HIE without a named solution:

1. **Breadth of important data sources (4/25)**: respondents indicated that a primary benefit of HIE is the breadth of data contained within it, which

serves multiple use cases. Also included in this theme were specific types of data, including labs, social determinants of health data, claims, and OpenNotes (e.g., full provider notes accessible by patients) as important data available via HIE.

2. **Models that support infrastructure (2/25)**: respondents flagged specific payment and delivery models as contributing to the infrastructure needed to make HIE successful. Models referenced included coordinated care organizations (CCO) and the certified community behavioral health clinic (CCBHC) model.

3. **Multi-partner governance (2/25)**: a couple of respondents raised multi-partner governance as a key benefit of HIE efforts, with one indicating that the current HIT Commons governance model in Oregon is working—particularly if that Board is engaged early enough in a process.

Equity

Given OHA's commitment to eliminating health inequities by 2030, all respondents were specifically asked how health information exchange (and technology in general) can help address health disparities and promote greater equity in health care and health outcomes. Some respondents received follow-up questions on more specific topics as they came up, including collection of race, ethnicity, language and disability (REALD) and sexual orientation and gender identity (SOGI) data. We captured 55 concepts in response to this question which were then categorized into 10 themes:

1. **Identify Disparities and Inform Interventions (11/25)**: almost half of the respondents touched on the ability to use HIE and the data collected therein to identify disparities and use this information to target interventions accordingly. The use of tools like "hot-spotting" (leveraging geospatial data along with other data to identify geographical differences in disease prevalence or outcome) was mentioned. Some respondents discussed the need to combine data sets (e.g., clinical and social data) to inform these activities.

2. **Collection of Demographic Data (8/25)**: many respondents discussed the need and the complexity of collecting accurate, consistent demographic information on their populations. Oregon's REALD & SOGI data collection work was mentioned several times. This theme was raised as both an opportunity and a challenge. Provider burden in collecting this information was also mentioned.

3. **Targeted Interventions (6/25)**: some respondents gave specific examples of interventions that they have either implemented or would like

to implement. Some of these included vaccine efforts tied to COVID-19, but others flagged language translation needs, disparities faced by rural communities, and interventions for seniors.

4. **Eliminating Fragmentation (5/25)**: consistent with the theme in the Goals section of the interviews, respondents also felt that the elimination of fragmentation among data systems would better serve populations that face health disparities. Examples of responses in this theme included: navigating needs between health care and schools; and creating links between dental care and behavioral health outcomes.

5. **Support a Diverse Workforce (4/25)**: several respondents noted the need for a more diverse workforce that is congruent with community demographics. Some mentioned this as a targeted intervention, while others simply noted the importance of a workforce that includes roles like a Chief Diversity Officer and community health workers.

6. **Education/Awareness (3/25)**: some respondents noted workforce (e.g., physicians, other care workers) education and training around health inequity as well as broader community awareness around health inequities.

7. **Improve Data Science (3/25)**: this theme included concepts around data quality and the ability of data to inform disparities, such as the lack of national standards for social needs data, weaknesses in claims data to identify disparities, etc.

8. **Invest in Communities (3/25)**: some respondents noted that increased attention was needed to build trust with communities that face health disparities, and that this could be reflected by increased investment in community-based organizations, or other community investments.

9. **HIE as an Equal Playing Field (2/25)**: a couple of respondents touched on the system-agnostic approach that a community HIE takes by pulling disparate information together from various data sources and how this promotes equity by touching all patients, ignoring things like insurance status or EMR vendor which are built into our health care system.

10. **Patient Access to Data (1/25)**: one respondent noted that patients' access to their data via HIE or other third-party applications would help to address equity in health care. These comments also noted a concern over patient awareness of the complex privacy and security rules around data access.

Opportunities and Challenges for HIE

Respondents were asked a couple of open-ended questions about the challenges and opportunities for HIE. The intent was to identify common areas for strategic investment or other efforts that the public and private sectors can make to address issues. Upon deeper analysis of the 205 discrete responses to these questions, they were first categorized into broader themes and use cases.

Broader Themes

The broader themes around opportunities and challenges for HIE consistently touched on the tension between two opposing factors, for example, the tension between cost and value, or the tension between interorganizational trust and competition. As such, we felt it was most useful to present these themes as illustration to the interwoven opportunities and challenges that exist in HIE efforts. The broader themes were only coded if at least three or more of the original 205 concepts touched on the theme, leading to a total of 11 themes. Below is the set of broader themes:

1. **Cost vs. Value (14/25)**: the most prevalent theme among respondents was the comparison of both up front and ongoing costs of HIE efforts with the measured or perceived value these efforts produce for participants and funders (said another way, the return on investment or ROI). Concerns included financial sustainability of HIEs (including additional services they are starting to offer, consolidation among HIEs), the costs of including more user types (e.g., community-based organizations, others), defining value among a wide network of user types, and the "chicken-or-egg" conundrum of establishing value without critical mass in order to obtain greater participation to reach critical mass. This theme reminds us that no effort in the HIE space will likely be successful without a clear ROI.

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2. **Addressing Data Gaps (9/25)**: while many of the comments on data gaps could be translated into use cases (see below), many respondents spoke broadly about the opportunity and challenge of addressing large structural gaps in health care data. The inclusion of behavioral health and dental care providers, small and rural providers, and non-clinical data were all referenced.

3. **Alignment and Reconciling Efforts at Different Levels: Local, State, Regional, and Federal (9/25)**: another prevalent theme touched on by respondents was the complexity of reconciling differing federal, state, and other jurisdictional efforts and requirements. This included topics like Oregon not adopting national standards for state efforts, interstate data sharing via HIEs, the Trusted Exchange Framework and Common Agreement (TEFCA), consent issues for behavioral health, and lack of a clear big picture for how different level strategies tie together.

4. **Community Trust vs. Competition (8/25)**: several respondents touched on the lack of trust among parties, including between competing organizations, but also the tension between patients and entities, the concerns over "big data," and activities that are designed to improve trust and establish accountability like standard data sharing agreements.

5. **EMR vs. other HIE Investments (e.g., EMR Integration) (7/25)**: one of the more complex themes, this category includes the tension organizations face in leveraging their EMR as a primary source of HIE activity, and investing in other efforts to collect, aggregate, and move external data sources into the EMR. Provider partners have long held the view that the EMR is their gateway to health information and therefore exchange efforts should prioritize integration with EMRs. This theme is closely tied to the cost theme identified above, in that integration into EMRs is a costly activity and there are diminishing returns on this work if the EMR in question is not broadly adopted. Epic was discussed by many respondents in this theme, given its significant footprint in Oregon.

6. **Technology and Delivery System Design/Interventions (7/25)**: this theme includes the reality that a technology solution, on its own, cannot improve health care or drive significant outcomes. Concepts in this theme acknowledged the other aspects of care delivery that must be in place in order for technology efforts to succeed, including availability of providers and services, adopting the right care delivery models and payment methodologies, and having clear workflows by which to leverage the data shared via HIE.

7. **Targeted Solutions vs. One-Size-Fits-All (6/25)**: there were conflicting opinions among respondents as to the value of having a single solution to serve all users (e.g., reduces confusion and fragmentation, creates a consistent pathway for new efforts, etc.) and the value of building incremental, targeted solutions to address use cases. HIE strategies in Oregon will need to look at both options, as targeted solutions are already in place. But currently, having multiple solutions is leading to some confusion for organizations, such as understanding the scope of each

solution, when to use/rely on one tool vs. another, etc. Some of this confusion could be addressed through other strategies (see Education and Awareness).

8. **Workforce and Technical Support (6/25)**: each concept in this theme touched on workforce, with the driving tension being between investing in IT workforce (in-house, stable experts) versus temporary, technical support. Again, the tension largely comes down to cost, with technical assistance being more affordable than workforce, but at the cost of not being stable over time. Several concepts also touched on the ROI that can be achieved by HIE in allowing the clinical workforce to practice at the "top of their license."

9. **Compliance vs. Innovation (5/25)**: concepts in this theme touched on the tension created between following federal and/or state rules and contractual obligations versus decision-making based on innovations that push care delivery forward. The more accountability that is built into the system (e.g., HIE participation mandates, etc.), the more that private sector actors are likely to manage to these minimum requirements as opposed to participating in efforts that might be best for patient care but lack a requirement. See also Federal Policy – CMS Interoperability Rules, TEFCA.

10. **Focus and Prioritization (5/25)**: a few respondents emphasized the need to have a consistent focus over time in order to achieve success (e.g., "stay the course"). This conflicts in part with the vision of having HIE be incremental and flexible in order to meet the demands of the day, which was also expressed by respondents. Prioritization of HIE efforts was greatly impacted by COVID-19, for example, and respondents suggested the state play a greater role in maintaining focus when these unforeseen events occur.

11. **Education and Awareness (5/25)**: respondents felt that more could be done to educate and train providers and administrators, but also the public, about what HIE tools are available, what integration opportunities might exist, and how data sharing impacts our health care system. Some respondents also pointed out that many partners lack awareness as to the value of certain functions, e.g., care coordination and navigation, that rely heavily on HIE to do their work.

Use Case Opportunities

A use case is a defined problem and solution set that relies in part on one or more unique technology tools and/or sources of data. Use cases can be organized by the type of data used, the type of end user served (e.g., a

patient, a primary care provider, a health plan case manager, etc.), or a specific workflow. Use cases are helpful in identifying the areas of greatest common value among diverse technology partners. Among the 205 opportunity and challenge concepts, 31 unique opportunities were identified that could be developed further into use cases (or sets of use cases). The opportunities are listed below with the number of times mentioned by respondents:

- Public-private data sharing (OHA, bi-directionality) (7)
- Provider-Payer data sharing (7)
- SDoH (including Community Information Exchange) (6)
- Public Health data (5)
- Provider reporting & metrics (5)
- Population health/analytics (4)
- Risk stratification (4)
- Behavioral health treatment plan and utilization (4)
- Disaster & emergency preparedness (3)
- Emergency Medical Services engagement (3)
- Claims data (including Blue Button pilots) (3)
- Dental care role in care coordination (3)
- Patient access (3)
- Value Based Payment (including cost data) (2)
- Event notification (beyond hospital encounter) (2)
- Incarcerated populations (2)
- EpicCare Link (Epic access for outside providers) (2)
- In- and out-of-network utilization (2)
- Rural care gaps (1)
- Home health (1)
- Long-term care (1)
- Medications/reconciliation (1)
- Imaging (1)
- Medicaid administrative data (1)
- Clinical Decision-Making Support (1)
- State Hospital data (1)
- Provider Directory (1)
- Community health record (1)
- Diabetes (1)

Oregon Approach

Many of the concepts provided by respondents took the shape of more concrete advice or guidance to state leaders about how to approach HIE efforts and what will most likely lead to success. The following concepts and themes were captured not in response to any one specific question, but instead were pulled across a multitude of topics. This category of themes would be particularly useful to OHA and to governance boards and groups that manage how HIE is being implemented and adopted across the state. We identified 62 concepts that fit into this category, which fell into 8 unifying themes. We note below when themes included concepts that were in direct conflict with one another:

1. **Leadership (7/25)**: This theme included concepts around obtaining buy-in from the right sectors and leaders, investing in change management, and ensuring that the right tables are set for both public and private sector needs to be addressed. Specific interests identified included: executive leadership, policy leaders, implementation specialists, patients, and regional governance models.

2. **Incremental Improvements to What Works (7/25)**: several respondents emphasized the strategy of building upon existing infrastructure (e.g., hospital event notifications, regional HIE, existing governance bodies) and several mentioned specific use cases to illustrate this: focusing on referrals, disaster relief, and supplementing EMR data.

3. **Accountability (6/25)**: This theme included concepts around holding both state actors (e.g., OHA, the Oregon Department of Human Services (ODHS), etc.) and private actors accountable for contributing data to HIE, ensuring interoperability is built into all state strategies, and using tools like standard data use agreements to address issues around abuse of data (such as using data shared for HIPAA purposes of treatment, payment and health care operations to gain an advantage over a competitor).

4. **Build Confidence in Solutions (6/25)**: this theme included comments about data quality, including acknowledging the nuances of data; clear communication about what role solutions play in the environment (e.g., "name the HIE"); and building confidence among businesses and patient populations about how their data is being used.

5. **Community Engagement/"Widen the Net" (6/25)**: this theme talked about the importance of engaging local communities around adoption and use of tools. Concepts that touched on widening the net to include other actors (e.g., community-based organizations, ODHS, etc.) were also included in this theme.

6. **Define Value (6/25)**: this theme included concepts around the lack of value in certain activities (e.g., how is data requested by OHA going to be used, etc.) and in ensuring that new strategies have a clear value or business driver. Respondents want to avoid "solutions looking for a problem."

7. **Reduce Burden (5/25)**: respondents were candid about the burden of activities like collecting data based on non-national standards (e.g., REALD & SOGI), the burden of managing to metrics and reporting requirements that deviate in any way from industry standard, and lessons

from other states with opt-in models for patient consent to HIE as a significant burden and barrier to adoption of HIE.

8. **Funding (3/25)**: For some, participation in HIE is cost prohibitive. Respondents suggested strategies like supporting behavioral health and dental providers. One respondent suggested that hospitals/health systems could contribute to funding issues through their community benefit spending strategies (e.g., hospitals in Oregon have a spending floor for community benefit dollars to maintain their tax-exempt status).

Federal Policy

Given recent activity at the federal level around information sharing, a subset of the respondents were asked directed questions about policies that may impact them. We captured 24 distinct concepts that were categorized by the federal policy or activity they were associated with. These distinct areas included: new Centers for Medicare & Medicaid Services (CMS) Interoperability Rules for payers; the information blocking rules for providers and health technology systems as part of the 21st Century CURES Act; 42 CFR Part 2, a federal regulation that restricts sharing of substance use disorder (SUD) treatment information; and the emerging Trusted Exchange Framework and Common Agreement (TEFCA), which is intended to facilitate national sharing of clinical data defined by a standard called the United States Core Data for Interoperability (USCDI):

CMS Interoperability Rules

The Interoperability Rules require health plans to make data available to their members and to other health plans at the direction of members. In general, health plans discussed the disruption of these rules to current operations. They mentioned concerns around timelines for these rules and suggested that a more incremental approach might be more appropriate. One respondent mentioned that the state should play a bigger role in reconciling potentially conflicting guidance between its own regulations and the federal government. Other respondents shared concerns around the validity of patient-facing applications who would query for data from health plans via these rules (this was also noted in discussion of TEFCA, see below).

Information Blocking Rules

Respondents had less feedback on the information blocking rules that are an important policy lever to drive HIE and TEFCA adoption over the next few years. One comment was that adoption of HIE was viewed as strictly a compliance issue for the information blocking rules (as opposed to part of a more holistic strategy toward better care design). Another suggested that it

might be helpful to do more diagraming of information flows to better identify where information truly gets "blocked," or where gaps in HIE reside.

SUD Treatment Information (42 CFR Part 2)

Substance Use Disorder treatment information is protected under 42 CFR Part 2 to a higher degree than that which is required of protected health information (PHI) under the Health Insurance Portability and Accountability Act (HIPAA). HIPAA serves as the underlying privacy and security framework governing most health information sharing in the US. That means that for the behavioral health respondents we interviewed, they still mentioned concerns around a "shadow record" that gets created by parsing out and holding SUD treatment information to a different standard. Respondents mentioned that the modified rules (the regulation was updated in 2017) have helped, but that additional support was still needed with the opt out component of the rule. Furthermore, until vendors change their architecture around how this information is stored and managed, there will continue to be barriers in information sharing for patients with SUD treatment history.

TEFCA

Given the early stage of TEFCA (the common agreement has just been launched, implementation of initial Qualified Health Information Networks (QHINs) is expected later in 2022), there was limited information for respondents to react to. Nevertheless, respondents were concerned about how this new national data exchange framework (including the creation of QHINs) and set of activities would impact existing efforts like the patient-centered data home model that has been adopted by many HIEs across the county (and supported by the HIE trade association, Civitas Networks for Health). Respondents mentioned that the sheer volume of queries resulting from this new network will be time consuming and costly. Respondents were unclear how testing, validation, and other activities will be accomplished. Respondents shared concerns that queries from patient-facing applications might not truly be driven by the patient. One respondent mentioned that the effort has been de-prioritized within their organization given COVID-19 and other pressing operational concerns. In contrast, one respondent highlighted that HIEs could serve as a useful connection point to this emerging network.

Conclusion

As identified in the executive summary, several themes identified throughout this document can be linked to one another. For example, governance was identified as a goal of HIE, but this topic was also important to ensuring that HIE promotes equity and was central to the advice respondents gave on the Oregon Approach. While the temptation is to jump to use cases and

solutioning, the results of this interview process emphasize the ongoing need to think about how governance is structured, how education and training are used to support the adoption and maintenance of HIE tools, and how the widening of the HIE net will require new strategies around community engagement and investment.

With that in mind, the respondents did generate a significant list of actionable opportunities for both state and regional HIE leaders to further develop into use cases that could promote and enhance the value of HIE in Oregon. The interviewers recommend establishing a way to index and potentially prioritize these opportunities as a key strategy to fostering adoption and spread of the right HIE tools.

The themes captured in this project were in many ways a good review of the types of feedback and guidance that organizations in Oregon have been providing over the past 5-10 years on HIE. The emphasis on leadership buy-in and defining value up front are important insights that Oregon has gained from years of successes and failures in the technology space. While several HIE leaders from outside of Oregon were interviewed for this project, the interviewers recommend a deeper focus on how other states have addressed these issues as a next step.

Appendix A: Interview Respondents

Name	Organization	Title
Bill Bard*		Consumer Advocate
Cherryl Ramirez	Association of Oregon Community Mental Health Programs	Executive Director
Andy Van Pelt**/Elyssa Tran	Apprise Health Insights (OAHHS)	CEO/Senior VP
Aaron Turchil	Camden Coalition (NJ)	Director of Strategy & Analytics
Manu Chaudhry*	Capital Dental	President
Nicole Merrithew/Nate Corley	CareOregon	VP, Network Relations & QI/VP IS & Analytics
Lisa Bari	Civitas Networks for Health	Interim CEO
Richard Gibson/Sara Hallvik	CoMagine Health	Medical Director/VP, Analytics
Morgan Honea	CORHIO (A Contexture organization) (CO)	CEO
Kristina Martin/Dorothy Rengal	Curry General Hospital	CIO/Medical Records Manager
Laura Proud/Seth Harriff	Legacy Health	Manager, Rev Cycle/Manager, IS Applications
Mary Monnat**/Katy Beveridge	Lifeworks Northwest	Executive Director/VP, Operations
Paul Matthews/Jennifer Stoll	OCHIN	CTO/EVP, External Affairs
Bridget Barnes/Cort Garrison	OHSU	CIO/CMIO
Dr. Brian Frank	OHSU Richmond Clinic	Provider
Brian Wetter**	PacificSource	VP, IT Infrastructure & Analytics
Daniela Onofrei	Providence Medical Group	Manager, Case Management
Erick Maddox/Paula Weldon	Reliance eHealth Collaborative	Executive Director/Director of Operations
Sonney Sapra	Samaritan Health Services	CIO
Stephanie Renick/Nic Hess	San Diego Health Connect (CA)	Director of Operations/Technology
John Gaede**	Sky Lakes Hospital	CIO
Michael Thomas	Tetra	Consultant
Matt Sinnott**	Willamette Dental	Senior Director of Government Affairs
Diane Tschauner*/David Perkins	Yakima Valley Farm Workers Clinic	CIO/VP IT
Rod Meyer**/Daniel Dean	Yamhill Community Care	Director, IS/Consultant

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