

PROVIDER DIRECTORY ADVISORY GROUP SUMMARY

Provider Directory Background

The [Provider Directory](#) will serve as Oregon’s directory of accurate, trusted provider data. As a stakeholder driven effort, it will support care coordination, health information exchange, administrative efficiencies, and serve as a resource for health analytics for healthcare entities. Authoritative data sources that feed the provider directory will be matched and aggregated, and data stewards will oversee management of the data to ensure the Provider Directory maintains initial and long-term quality information. In early January, MiHIN was selected as the vendor for the Provider Directory which is expected to go live in early 2018.

Purpose of Provider Directory Advisory Group (PDAG)

The [PDAG](#) met from April 2015 – January 2017 to provide stakeholder input and oversight to OHA’s development of the Provider Directory. PDAG members were from Coordinated Care Organizations, Commercial Health Plans, Hospitals and Health Systems, the Oregon Medical Association, Independent Physician Associations, and Clinics (including Dental, Behavioral Health, Pediatric, and Primary Care). Members participated and provided feedback and input on a range of technology, policy and programmatic topics including:

- Value proposition and uses of the Provider Directory
- High level use cases and prioritization of use cases
- Fee structure principles and options
- Communications strategy
- Review of Request for Proposals (subject to signed non-disclosure agreements)
- Vendor demonstrations (subject to signed non-disclosure agreements)

Membership (includes current and past members)

| Name | Title | Organization |
|-----------------------|---|--|
| Jennifer Bradford Awa | Revenue Cycle Supervisor | Metropolitan Pediatrics |
| Gina Bianco | Acting Director | Jefferson HIE |
| Christopher Boyd** | Data Analyst Supervisor | Women’s Healthcare Associates |
| MaryKaye Brady | Consultant | Oregon Medical Association |
| Monica Clark** | Business Systems Analyst | Kaiser Permanente |
| Stick Crosby | Contracts Manager | Allcare |
| Mary Dallas, MD | Chief Medical Information Officer | St. Charles Health System |
| Peter Graven** | Health Economist | OHSU Center for Health Systems Effectiveness |
| Liz Hubert* | Asst. Director Provider Systems & Strategy | Regence Blue Cross Blue Shield |
| Kelly Keith | IT Admin | Greater Oregon Behavioral Health |
| Martin Martinez | Vice President IT | PacificSource |
| Laura McKeane** | Oral Health Integration Coordinator | AllCare |
| Maggie Mellon** | Senior Digital Product Manager | Providence Health & Services |
| Missy Mitchell | Director of Production | Advantage Dental Services |
| Jessica Perak | Manager, Provider Analytics, Underwriting & Actuarial | Moda |

| | | |
|------------------------------------|-------------------------------------|--|
| Ruthie Macha Petty | Data Analyst | Health Share |
| Robert Power* | VP-Chief Information Officer | Samaritan Health Services |
| Stephanie Renfro** | Research Associate | OHSU Center for Health Systems Effectiveness |
| Nikki Vlandis** | Provider Data Mgmt. & Credentialing | FamilyCare |
| Hongcheng Zhao | Chief Information Officer | Portland IPA |
| *Co-chair | | |
| **Not a PDAG member as of Jan 2017 | | |

Meeting dates and topics

| Meeting Date | Meeting topics/activities |
|---------------------------|---|
| Apr 15, 2015 | <ul style="list-style-type: none"> • Provider Directory, Common Credentialing, and Procurement orientation • Charter review |
| May 13, 2015 | <ul style="list-style-type: none"> • Direct Secure Messaging and CareAccord overview • Provider Directory value and Health Information Exchange (HIE) discussion • Health Information Technology (HIT) Procurement and Governance overview |
| Jun 17, 2015 | <ul style="list-style-type: none"> • Provider Directory uses discussion and ranking exercises (breakout sessions) |
| Jul 15, 2015 | <ul style="list-style-type: none"> • Provider Directory uses discussion and ranking exercises (breakout sessions) |
| Aug 19, 2015 (webinar) | <ul style="list-style-type: none"> • Procurement timeline updates • Ranking of uses across groups discussion • Homework (use, data classification, data sources, standards) instructions |
| Sep 23, 2015 | <ul style="list-style-type: none"> • Procurement timeline updates • Homework results discussion • California Association of HIE Exchanges “CTEN” Directory Services presentation |
| Oct 21, 2015 | <ul style="list-style-type: none"> • Use case refinement exercises • Procurement and common credentialing updates |
| Nov 18, 2015 | <ul style="list-style-type: none"> • Use case report-outs • Clinical Quality Metrics Registry presentation • Fees orientation • Common Credentialing and procurement updates |
| Dec 16, 2015 | <ul style="list-style-type: none"> • Fees discussion • Standards matrix review • Common Credentialing and procurement updates • Premanage presentation |
| Jan 13, 2016 | <ul style="list-style-type: none"> • Fees discussion • Common Credentialing and procurement updates |
| Feb 17, 2016 | <ul style="list-style-type: none"> • Iowa HIE lessons learned • Fees discussion • Common Credentialing and procurement updates |
| Mar 16, 2016 | <ul style="list-style-type: none"> • Provider Directory scan presentation • Fees discussion • Common Credentialing and procurement updates |
| May 18, 2016 | <ul style="list-style-type: none"> • Fee structure development discussion • Communications plan discussion • Common Credentialing and procurement updates • Harris presentation |

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|---------------------------|---|
| Jun 15, 2016 | <ul style="list-style-type: none"> • HIE Onboarding presentation • Communications plan discussion • Common Credentialing and procurement updates |
| Aug 10, 2016 (webinar) | <ul style="list-style-type: none"> • Provider Directory activity updates and communications strategy wrap-up • Common Credentialing and procurement updates |
| Sep - Oct 2016 | <ul style="list-style-type: none"> • Vendor demonstrations |
| Nov 16, 2016 | <ul style="list-style-type: none"> • Provider Stakeholder Groups for 2017 • Common Credentialing, HIE Onboarding Program, and procurement updates |
| Jan 18, 2017 | <ul style="list-style-type: none"> • Vendor selection and procurement presentation • Provider Directory stakeholder group review and planning discussion • Common Credentialing update |

Provider Directory Advisory Group Work Products

| Meeting Month | Document Name | Pages |
|----------------|-------------------------------------|---------------|
| October 2015 | PDAG Uses Recap (July – Sept 2015) | Pages 4 - 21 |
| December 2015 | Use Case Refining Sessions Summary | Pages 22 - 42 |
| February 2016 | Fee Structure Principles | Pages 43 |
| March 2016 | Fee Structure Options Analysis | Pages 44 - 47 |
| September 2016 | PD Communications Strategy Overview | Pages 48 - 50 |

PDAG USES RECAP: JULY – SEPT 2015

CONTENTS

| | |
|---|----|
| Group breakout sessions summary..... | 5 |
| List of 25 Provider Directory Uses..... | 5 |
| Ranked uses by group..... | 8 |
| Analytics..... | 8 |
| Delivery..... | 8 |
| HIE..... | 8 |
| Plans..... | 8 |
| Prioritized uses analysis by group..... | 9 |
| Analytics..... | 9 |
| Ranked use 1: integrate sources of data (changed to Analytics Extract)..... | 9 |
| Ranked use 1/2: ability to extract current and historical data (combined into the analytics extract)..... | 10 |
| Ranked use 3: Performance analytics, Outcomes and intervention, Practice location analytics..... | 10 |
| Ranked use 4: Source for payer info..... | 10 |
| Ranked use 5: Source for privileging info..... | 11 |
| Delivery..... | 11 |
| Ranked use 1: Multiple..... | 11 |
| Ranked use 2: HIE address search..... | 12 |
| Ranked use 3: Source for payer info..... | 12 |
| HIE..... | 13 |
| Ranked use 1: HIE address search..... | 13 |
| Plans..... | 13 |
| Ranked use 1: Keeping provider information current/validation source..... | 13 |
| Ranked use 2: Contact information – local query with extract option (use 15)..... | 14 |
| Ranked use 3: System of record for TBD defined elements (user interface): (use 21)..... | 14 |
| Ranked use 4: Use as a data source to report on network adequacy (use 20)..... | 14 |
| Ranked use 5: Contact info/care coordination (use 14)..... | 15 |
| Data elements evaluation..... | 15 |
| State Data Sources..... | 19 |

GROUP BREAKOUT SESSIONS SUMMARY

To analyze the list of provider directory uses, smaller breakout sessions were conducted with the PDAG in the PDAG meetings from July 2015 – October 2015. In addition, individual PDAG members were asked to analyze the existing use cases, data elements, state sources, and provider directory regulations as homework assignments.

The desired outcome of the sessions was to produce a list of refined uses, developed ranking and justification for uses and sources, and a regulations and standards matrix that can be used to:

- Develop a phasing roadmap
- Understand the justification and purpose behind the uses
- Use documentation to build detailed use cases on ranked uses

Artifacts from the exercises are included in this document.

Groups were broken out based on the following categories:

| | Health plans (Plans) | Health delivery (Delivery) | HIE | Analytics |
|---------------------------|--|--|--|------------------------------|
| Participants | Liz Hubert Martin Martinez Jessica Perak Laura McKeane Nikki Vlandis | Chris Boyd Mary Kaye Brady Monica Clark Kelly Keith Maggie Mellon Bob Power | Gina Bianco Mary Dallas Hongcheng Zhao | Stephanie Renfro |
| Facilitator/Scribe | Melissa Isavoran/ Rachel Ostroy | Laureen O’Brien/ Jason Miranda | Karen Hale/ Brittney Matero | Wendy Demers/ Nick Kramer |

Each group was assigned an Oregon Health Authority facilitator and scribe to guide and document the discussions from participants during the meetings.

LIST OF 25 PROVIDER DIRECTORY USES

The following is the list of compiled provider directory uses utilized by PDAG to analyze and prioritize.

| Use # | Use Description |
|-------|---|
| 1 | Integrate Common Credentialing data: A Statewide Provider Directory will serve as a provider data aggregator and will integrate Common Credentialing data into the provider directory. Data characteristics such as date of the data and source of the data will be displayed to the end-user. Data maintenance, data reconciliation, data validation and data integrity checks are performed by the operations staff of the Statewide Provider Directory. |
| 2 | HPD real-time searches: A Statewide Provider Directory provides a service that can be used by end-users to look up providers without requiring direct access to other existing directories within the state, border states, or nationally. The Statewide Provider Directory will create a series of electronic service endpoints for the participants of the |

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| | directory so they can be discovered by others for health information exchange. The Provider Directory will route requests to other electronically connected directories and produce an aggregated response. |
| 3 | <p><u>Integrate state sources of data:</u> The Statewide Provider Directory will serve as a provider data aggregator and will integrate disparate state sources of data into a single provider directory. Data characteristics such as dates of the data and sources of the data will be displayed to the user. Data maintenance, data reconciliation, data validation and data integrity checks are performed by the operations staff of the Statewide Provider Directory. Data sources include:</p> <ul style="list-style-type: none"> • PCPCH • Medicaid EHR Incentive Program • Public health • Addictions and Mental Health residential alcohol and drug treatment • Medicaid provider enrollment (Oregon Health Plan providers) • CCO provider network tables • DHS Office of Licensing and Regulatory Oversight <ul style="list-style-type: none"> o People with developmental disabilities o Nursing facilities o Assisted Living and Residential Care Facilities o Children's Care o Adult Foster Care |
| 4 | <p><u>Integrate other HIE flat file directories:</u> The Statewide Provider Directory will serve as a provider data aggregator and will integrate certain HIE flat file directories (e.g., CareAccord, NPPEs, DirectTrust) into the provider directory for those participants who are not able to communicate via HPD standards. Data characteristics such as dates of the data and sources of the data will be displayed to the user. Data maintenance, data reconciliation, data validation and data integrity checks are performed by the operations staff of the Statewide Provider Directory.</p> |
| 5 | <p><u>GIS:</u> The Provider Directory will make Geographic Information Systems (GIS) or geo-coding functions data available in provider query.</p> |
| 6 | <p><u>Provider search or lookup for HIE addresses:</u> Use the provider directory to locate a specific provider and their associated direct address as well as the indication of trust community status of their Health Information Service Provider (HISP) (white pages).</p> |
| 7 | <p><u>Meet HIE requirements for meaningful use:</u> A provider needs to find providers that are part of the EHR Incentive Program are are/or likely to have adopted 2014 or 2015 Certified EHR technology needed to exchange patient summaries of care or receive patient summaries of care. The end-user or clinic used the provider directory to look up providers using a federated web search or request an extract of the local provider directory's data. Data must include users that are part of the HPD data service (see use case for HPD) and flat file (local) sources.</p> |
| 8 | <p><u>Keeping provider information current/validation source:</u> A health care entity needs to validate its local healthcare provider information and ensure it is current. The health care entity uses the provider directory to access the most current aggregated provider information on an individual basis (1 off validation) or an extract is downloaded to perform a database dif (entire directory validation).</p> |
| 9 | <p><u>Add/delete/edit provider information for accepting new patients:</u> A healthcare entity needs to update information on a provider's status of accepting new patients. Information must be updated and kept current at least every 30 days to meet Medicare standards but changes as frequently as within the work day. A user interface as well as upload capability is needed to ingest these data.</p> |
| 10 | <p><u>Medicaid EHR Incentive program audit and oversight:</u> The provider directory provides an extract of the flat file sources of data (current and historical) to the Medicaid EHR Incentive program on a weekly basis. The extract will need to contain provider identifying data as well as affiliations to a provider's group, clinic, location, system.</p> |
| 11 | <p><u>Source for payer information for a provider:</u> The provider directory is used to identify and validate the relationship of payers to specific providers.</p> |
| 12 | <p><u>Source for privileging information for providers:</u> The provider directory is used to identify and validate the relationship of hospitals to specific providers (hospital admitting privileges).</p> |
| 13 | <p><u>Outcomes and intervention:</u> Use the affiliations data to identify clinics or groups within a CCO that require intervention because they are not meeting benchmarks or thresholds for a program or to highlight clinics or groups that are performing well</p> |

| | |
|--------------------------------------|--|
| 14 | <u>Find providers to initiate referrals and provide care coordination:</u> The provider directory is used by end-users to query provider information using configurable criteria such as specialty, telemedicine, geographic indicators like zip code, city or state, language or gender. The provider directory returns results for every provider satisfying the search criteria including the physical and electronic address, and contact information. An appropriate provider is selected from the results based on the attributes returned in the response and the electronic address is used to send patient records and documentation to selected provider. |
| 15 | <u>Contact information – local query with extract option</u> - A health care entity can initiate a single search for a list of providers based on configurable criteria such as name, specialty, telemedicine, geographic indicators like zip code, city or state, etc.to the provider directory’s local database. The provider directory returns contact information for every provider satisfying the search criteria, including e-mail addresses, and provides an option for the results or specific providers information to be extracted. |
| 16 | <u>Contact information – federated web search</u> - A health care entity can initiate a single search for a list of providers based on configurable criteria such as name, specialty, geographic indicators like zip code, city or state, and other criteria. The provider directory searches the federation as well as the local directory and returns contact information about every provider satisfying the search criteria, including HIE addresses. Extracts may not provide or are limited due to data-use agreements. |
| 17 | <u>In network search:</u> A health care entity can Identify if provider in the directory is “in network” as part of a CCO/health plan |
| 18 | <u>Practice location analytics:</u> The provider directory can be used as a data source to report on how care varies by practice location or by specific programs such as PCPCH, CCOs, etc. |
| 19 | <u>Performance measure analytics:</u> The provider directory can be used as a data source to report on EHR’s in use by a provider, performance measures, and claims by groups. |
| 20 | <u>Use as a data source to report on network adequacy:</u> The provider directory can be used by a health care entity to report on network adequacy and to meet regulatory provisions. |
| 21 | <u>System of record for TBD defined elements (user interface):</u> (Placeholder for functionality to add/delete/edit provider information). Provide a single entry point for certain defined data elements not present in common credentialing or HPD data models (or other sources). It could be used when a health care entity needs to author/enter their own information in the provider directory for data elements of which there is no external (other) source and have the ability to add, update, or delete the data. A user interface and updates to the data model and database are needed to allow the addition and management of these data. |
| 22 | <u>Reporting data inaccuracies to the statewide provider directory:</u> A health care entity finds information in the provider directory to be inaccurate. End-users are able to flag the information as such within the provider directory. A notification is sent from the provider directory services to the data’s source to correct the information and further query of the information is flagged appropriately until resolved. |
| 23 | <u>Reporting data inaccuracies to a health care entity:</u> The provider directory operations become aware of a discrepancy in the provider directories data. The effected data elements are flagged by the operations staff in provider directory for further queries until the issue is resolved. |
| 24 (new - was part of 3) | <u>Analytics extracts:</u> The provider directory makes an extract of the flat file sources of data (current and historical) available to analytics extract subscribers. The extract will contain provider identifying data as well as affiliations to a provider’s group, clinic, location, system, hospital, payers. Knowing the date and the source of the data is important. |
| 25 (new) | <u>Integrate other authoritative flat file directories:</u> The Statewide Provider Directory will serve as a provider data aggregator and will integrate certain authoritative flat file directories into the provider directory for those participants who are not able to communicate via HPD standards. Data characteristics such as dates of the data and sources of the data will be displayed to the user. Data maintenance, data reconciliation, data validation and data integrity checks are performed by the operations staff of the Statewide Provider Directory. |

Denotes core use: one that PDAG was not asked to prioritize

RANKED USES BY GROUP

Groups evaluated the list of the provider directory uses and were asked to rank their top 5 uses. The tables below represent the uses that each group ranked as a priority.

ANALYTICS

| Rank | Use | Use # |
|------|-----------------------------|-------|
| 1 | Analytics extract | 24 |
| 3 | Performance analytics | 19 |
| | Outcomes and intervention | 13 |
| | Practice location analytics | 18 |
| 4 | Source for payer info | 11 |
| 5 | Source for privileging info | 12 |

After initial discussions, the analytics group combined two uses, state/authoritative sources of information and historic information, to create a use called “analytics extract”.

DELIVERY

| Rank | Use | Use # |
|------|------------------------------------|-------|
| 1 | Validate Source | 8 |
| | Contact info/care coordination | 14 |
| | Local query contact info | 15 |
| | Federated contact info | 16 |
| | In network search | 17 |
| | System of record (add/edit/delete) | 21 |
| 2 | HIE Address search | 6 |
| 3 | Source for payer info | 11 |
| 4 | Network adequacy | 20 |

HIE

| Rank | Use | Use # |
|------|---|-------|
| 1 | HIE address search | 6 |
| 2 | Contact Info/Care Coordination (find providers) | 14 |
| 3 | Outcomes and intervention, Performance measure analytics | X |
| 4 | Local query contact info | 15 |
| | Federated contact info | 16 |
| 5 | Meet HIE requirements for meaningful use | 7 |

The HIE group removed their 3rd ranked item after further review.

PLANS

| Rank | Use | Use # |
|------|------------------------------------|-------|
| 1 | Validate Source | 8 |
| 2 | Local query contact info | 15 |
| 3 | System of record (add/edit/delete) | 21 |
| 4 | Network adequacy | 20 |
| 5 | Contact info/care coordination | 14 |

PRIORITIZED USES ANALYSIS BY GROUP

Each group was asked to analyze the as is, to be, challenges, and benefits for their prioritized uses. Some groups were unable to finish the analysis for all uses but many incorporated ideas that applied across multiple uses.

Common challenges include:

- Keeping data current and updated; Data changes all of the time – especially provider relationships
- Keeping data accurate
- Data reconciliation
- Establishing confidence that the provider directory will work
- Accepting change

Common benefits include:

- Comprehensive sets of data
- Accurate, trustworthy data
- Streamline processes and reduce redundancies
- Improve privacy and security – confidence that the information they are relying on for patient care is correct

The recorded responses from each group are listed in the tables below:

ANALYTICS

RANKED USE 1: INTEGRATE SOURCES OF DATA (CHANGED TO ANALYTICS EXTRACT)

| | |
|---|--|
| <p>No one source to integrate all of these things and the separate sources aren't designed to work with one another.</p> | <p>Information from multiple sources is available from a single point and is reconciled and consistent.</p> |
| <div style="border: 1px solid black; background-color: black; color: white; padding: 5px; border-radius: 10px; display: inline-block;">As is</div> | <div style="border: 1px solid black; background-color: black; color: white; padding: 5px; border-radius: 10px; display: inline-block;">To be</div> |
| <p>Reconciliation and relationships (provider hierarchy) will be a challenge. Balancing securing and availability. How to reconcile the data. Need the ability to rank the sources. Keeping the data current.</p> | <p>Limitless. Reduce redundancy. A lot of different agencies are maintaining their own systems. One single source will eventually lead to data quality, will improve integrity. Useful resource for many different users. Accurate and trustworthy information, a frame to lay claims on, improvement upon APAC. Ability to isolate the effects of new policies and programs, increase the accuracy and validity of that work. Controlling for various providers, entity characteristics. (E.g. Estimate the effects of CCOs while controlling for the effects of PCPCH)</p> |
| <div style="border: 1px solid black; background-color: black; color: white; padding: 5px; border-radius: 10px; display: inline-block;">Challenges</div> | <div style="border: 1px solid black; background-color: black; color: white; padding: 5px; border-radius: 10px; display: inline-block;">Benefits</div> |

RANKED USE 1/2: ABILITY TO EXTRACT CURRENT AND HISTORICAL DATA (COMBINED INTO THE ANALYTICS EXTRACT)

| | | | |
|---|-----------------------------------|---------------------------------|--|
| Unavailable. | | | Available, in multiple and usable formate and in a reasonably efficient process (E.g. CSV, Txt). Ability to extract data without many barriers while preserving security. Guarantee formats - where incremental changes don't break/override previous releases - backwards compatable. |
| Providing extract in a timely way, availability of data for extracts. Complicated to capture the detail of PD in a flat file. User support/documentation will be a challenge. DUA/data governance is difficult to ensure compliance. Size will be a challenge. Secure transfer process (push vs pull) | As is Challenges | To be Benefits | Thousands, allows for in house analysis by agencies and organizations outside (and including) of OHA. Stakeholders will be able to use the data and leverage/realize the benefits of the PD. Having the data available will increase the use and acceptance/buy in/compliance by reporting entities. |

RANKED USE 3: PERFORMANCE ANALYTICS, OUTCOMES AND INTERVENTION, PRACTICE LOCATION ANALYTICS

| | | | |
|--|-----------------------------------|---------------------------------|---|
| Ability to do this analysis by provider is limited by fragmented (not publically available) sources that capture the relationship between provider entities. | | | One comprehensive source available to multiple users. |
| Getting the information, updating it, having the data structure/model to capture it. Keep it current Provider relationships change all of the time. Reconciliation of the varrious data sources. | As is Challenges | To be Benefits | Allows for reporting at a variety of levels of care. Ability to identify clinics or groups within a CCO that require intervention because they are not meeting benchmarks or thresholds for a program or to highlight clinics or programs that are performing well. Ability to see groups that performing well. Ability to isolate what works for improving quality and/or reducing cost. (E.g. FQHCs doing a better job caring for Medicaid patients see that there is a best practice for other clinics). |

RANKED USE 4: SOURCE FOR PAYER INFO

| | | | |
|---|-----------------------------------|---------------------------------|--|
| Incomplete information exists and is fragmented and proprietary. | | | Information is complete and publically available from one source. |
| Relationships and contracting arrangements change often. Relationship are complicated so it could be difficult to capture the data in a usable formats. Integrating the data will be a challenge due to the different types of provider directory consumers. This information may come from several different sources and will need to be combined. | As is Challenges | To be Benefits | Monumental, it will allow for a variety of analyses for example: provider shortage areas, work force projections (Medicaid expansion), provider and network demographics, provider networks that produce positive health outcomes. Identifying factors that lead patients to seek out of network care (e.g. network adequacy). Supports the in-network use case. |

RANKED USE 5: SOURCE FOR PRIVILEGING INFO

| | | | |
|--|-------------------|-----------------|--|
| Information is not available to researchers | As is | To be | Information is available and in a format that is usable for analysis. |
| Sourcing the information will be a challenge, may not be available in a health plan/state sourced provider directory. These relationships change and will need to be updated while preserving historical affiliations. | Challenges | Benefits | Extreme, how admitting privileges influence patters of care delivery and outcomes. Understand inefficiencies in care coordination. |

DELIVERY

RANKED USE 1: MULTIPLE (Validate Source, Contact info/care coordination, Local query contact info, Federated contact info, in-network search, System of record (add/edit/delete))

| | | | |
|---|-------------------|-----------------|---|
| No common credentialing source today; organizations are managing their data with spreadsheets, disparate sources, multiple etc. and non-standardized sources. Sharing of DSM today is essentially only with providers whom are internal or already have an established relationship. Independent technology solutions (we are all on different systems today) and standards. Each group is independently validating using different processes and having different levels of success depending on your organizations uses. | As is | To be | Leveraging CC will supplement the validation process. Reducing overlap with what referrals checking is doing. Providers will have a single source for finding DSM sources. Very little may change initially for each organization but within a year or 2 the users may figure out how to create efficiencies with the PD. |
| Requirements can be different for network adequacy for different governing bodies and can't use 1 standard across. Processes within each of the health systems that are trust based and concerns getting folks to accept change. Also audits happen and abandoning that for another source is concerning. Challenge with future state is if we don't eliminate data sources already submitting to and removing duplicate work noone will want to buy it or sustain it - just another source. Must eliminate duplication of providers and or credentialing organizations to need to go to multiple sources to get data or the information needed to perform their task (PSV). Risk associated with using the data is on the end-user and not the source (PD) - if the state data is wrong and the end-users use it the error falls on the end-user. Identifying a golden source of truth is a challenge. | Challenges | Benefits | Providers can have a source for identifying providers to refer patients to. Provider would be the main beneficiary of not having to enter duplicate data. Focus resources to other needy areas where staffing is needed. Streamline the manual research phone calls and reduce staff hours spent on this activity. Patients reap benefits from more connected providers who have the opportunities to enable whole person care. The eventual realities of a single source of truth being the PD would save end-users and their team time and resources. |

RANKED USE 2: HIE ADDRESS SEARCH

| | |
|--|--|
| <p>Today you share with partners your address. You share the amassed addresses of a group with their partners using some format. Folks aren't feeling confident about the information so there is some hesitance to share today. Today when providers change groups sometimes their email address is lost or changes and partners can no longer communicate and ensure the PD no longer lists it as active. For HIE component some providers have no DSM address at all.</p> | <p>Users can go to one source to get validated and accurate DSM for providers. In-network data being present as search criteria enables referral and transitions of care.</p> |
| <p>How do you update systems that use some of this information so they are in sync when they have unique consuming format requirements and different processes?</p> | <p>The benefit for the provider is the PD is enabling sharing outside of their normal network and range of referral. Examples are snowbirds who are in out of state part of the year and are in OR part of the year. The provider will be able to update their DSM in a single location.</p> |

RANKED USE 3: SOURCE FOR PAYER INFO

| | |
|---|---|
| <p>Today, it's unclear if a provider is covered when preparing a referral for a patient. This is less of an issue for Kaiser specifically. Contracts change often and what you may know at one point in time may no longer be accurate because the source of information is largely manual or relationship based.</p> | <p>Providers will be confident when referring patients to a provider that they will be covered.</p> |
| <p>How would we get the information from reliable and current sources? May not be detailed enough. Challenge is getting Common Credentialing to really sync up.</p> | <p>Benefit for referrals to know that the patient is covered for the referred to provider.</p> |

HIE

RANKED USE 1: HIE ADDRESS SEARCH

| | |
|--|--|
| <p>HIE PD used within HIE= drop down box, outside of HIE = flat-file directory available password protected for users (link) totally outside of JHIE. Data is not dynamic/can be outdated. JHIE requirements regarding clinician turnover- have guides, when someone leaves, terminated their access and JHIE has to be notified for removal/close access. JHIE monitors/reminders/educates/on-line form. CareAccord directory participants can be out of date if we are not notified to remove clinicians. Providence maintains their data base with download to Portland IPA. Every organization is facing the same challenge. Opportunity with state to have required data elements, determine hierarchy/priority. Need right out of the gate value-crawl, walk, run. Automation is a process. Issues around inactive clinicians and accessing data associated with them.</p> | <p>Any native system- wherever they are doing DSM, they should be able to outside search sources.</p> |
| <p>Updating- unless it is mandatory (a carrot/stick). Being accurate, being complete in terms of any providers. Data provenance, and when last updated. User needs successful search or they will not use it. If the info is not available that they need- again, will not use. Whatever selling feature there is for the HPD- there is a huge level of confidence for the user that it will work. Purpose of the directory and most important data elements.</p> | <p>Security and privacy- you know this is the right place that I am sending to. Complete one-stop shop for knowing who, where, how to contact them. Improved care coordination/efficiency for discharge planning, etc. Resource time/cost in managing directories decreased.</p> |

PLANS

RANKED USE 1: KEEPING PROVIDER INFORMATION CURRENT/VALIDATION SOURCE

| | |
|--|---|
| <p>Very manual process; requires people to go to various sources to gather the data; Not regulatorily required; Sometimes not done at all; when done it's manual, resource intensive; For most of population, data available is very sparse; Dependent on 3rd party to gain certain parts of data (i.e. provider, office staff); No authoritative source</p> | <p>Single authoritative, complete data source; Access to many more data elements than are available today; Expect multiple methods of access (i.e. tiered, extractable); Applied business rules (subscription and security levels) / ranking trustworthiness of data Providers become familiar with this entity and are willing to provide the information necessary to validate data (when there are discrepancies - i.e. data stewards)</p> |
| <p>Being able to trust data or assign confidence factors; Unwilling to pay for data that can not be trusted; Will be</p> | <p>Supplements the data they already have; Potentially replaces what they have currently; Eliminate redundant</p> |

| | |
|--|--|
| important to understand data lineage (where it came from);Timing of updates. | staffing across organizations (centralized staffing) - Willing to pay for someone to do the manual cleanup necessary to make this an authoritative data source |
|--|--|

RANKED USE 2: CONTACT INFORMATION – LOCAL QUERY WITH EXTRACT OPTION (USE 15)

| | |
|---|---|
| Very manual process - requires people to go to various sources to gather the data; Not regulatorily required Sometimes not done at all; when done it's manual, resource intensive; For most of population, data available is very sparse; Dependent on 3rd party to gain certain parts of data (i.e. provider, office staff) No authoritative source | Automated connection of provider to entity (ideally based on NPI - pick lists, etc) |
| As is | To be |
| Challenges | Benefits |
| Data organization in the extract will be very challenging; Data model, identifying appropriate hierarchy; assigning attributes appropriately Authentication of who can provide information No free text association of provider to entity | Payer staff retention may increase Huge time savings for payers Member experience improved due to increased accuracy of data; Regulatory compliance improvements; Outreach for provider data decreased Reduction in claims reprocessing (repaying claims that were incorrectly paid based on bad data); Data can be leveraged for use cases beyond provider directories - leverage for other facets of the business / business processes |

RANKED USE 3: SYSTEM OF RECORD FOR TBD DEFINED ELEMENTS (USER INTERFACE): (USE 21)

| | |
|--|--|
| Providers have to give this information to EVERYBODY Everybody has to go and get this from the provider (redundant, costly); No single point of entry; No single source; No standardization of data elements No applicable state or federal policies - no requirement or incentive for providers to tell plans anything | Single point of entry with std data elements Big need for plan specific data - potentially collect this information but not display it? - network participation - open and closed status by network - languages - handicap access - gender |
| As is | To be |
| Challenges | Benefits |
| Participation is not mandatory - No incentive for providers to enter data; Big need for plan specific data - potentially collects this information but not display it? Compliance with CMS mandates - doesn't address plans that serve multiple states | Single point of entry for providers Single source for everyone else to pull from; Compliance with CMS mandates (in Oregon....doesn't address plans that serve multiple states) |

RANKED USE 4: USE AS A DATA SOURCE TO REPORT ON NETWORK ADEQUACY (USE 20)

| | |
|--|--|
| We don't know the universe of providers in the state | We have a single authoritative source of the universe of provider; Tool to |
| As is | To be |

| | | | |
|------------------------------------|-------------------|-----------------|---|
| Participation by all the providers | Challenges | Benefits | allow for retention data Database of all possible providers in the state |
|------------------------------------|-------------------|-----------------|---|

RANKED USE 5: CONTACT INFO/CARE COORDINATION (USE 14)

| | | | |
|---|-------------------|-----------------|---|
| We don't know the universe of providers and we don't have their direct secure email address | As is | To be | We know the universe, have their email addresses, know whether they're accepting new patients |
| | Challenges | Benefits | Care coordination |

DATA ELEMENTS EVALUATION

As a homework exercise, PDAG members were asked to evaluate provider directory data elements. Responses provided have been used to update use cases.

Data elements were taken from the [IHE-HPD Provider Directory standard](#) (HPD) and fields from the Oregon Common Credentialing (CC) application. Elements in those sources, including those that are primary source verified (PSV) were indicated with an “x” in the column. The purpose of this exercise was to understand the following:

- 1) Which data elements are essential to be in the provider directory
- 2) The degree of accuracy for those elements
- 3) When they are needed (in regards to implementation phasing)

Nine PDAG members responded and their averaged responses are shown below:

| Field | Description (taken from primarily from HPD standard) | PSV | HPD | CC | 1) Essential | 2) Accuracy | 3) Timing |
|--|--|-----|-----|----|--------------|-------------|-----------|
| Organization - Accepting New Patients | Flag indicating whether the organization is accepting new patients | | | | 1.89 | 1.38 | 2.64 |
| Organization - FQHC/Community Health Center Flag | Flag indicating whether the organization is an FQHC or community health center | | | | 2.33 | 1.78 | 2.36 |
| Organization - Nights And Weekends Flag | Flag indicating whether the organization has after-hours operations | | | | 2.00 | 1.89 | 2.64 |
| Organization - PCPCH Designation and Tier | Patient centered primary care home designation and tier | | | | 2.22 | 1.56 | 2.21 |

| | | | | | | | |
|---------------------------------|---|---|---|---|------|------|------|
| Organization Address | Physical address information for an organization. Each type of address can be primary or secondary. Addresses that are no longer valid are marked as Inactive. Three types of addresses are supported: Billing Address (legal), Mailing Address, Practice Address | | x | x | 1.00 | 1.00 | 1.00 |
| Organization Contact | Multiple individuals who can be contacted in reference to this organization, including a phone number and e-mail address and fax. An individual role can be included in the name, instead of an individual. | | x | x | 1.29 | 1.43 | 1.42 |
| Organization Credentials | This includes certifications or licenses earned by an organization. | x | x | x | 1.44 | 1.44 | 1.81 |
| Organization Hours of Operation | | | | | 1.78 | 1.89 | 2.07 |
| Organization Identifier | National, Regional or local identifier that uniquely identifies an organization, that may be publicly shared. Some examples are: National Provider Identifier #, Tax ID # | | x | x | 1.22 | 1.00 | 1.25 |
| Organization Language | Language(s) that an Organization supports | | x | | 1.89 | 2.00 | 2.00 |
| Organization Name | This attribute contains multiple names for an organization including known names and legal name | | x | x | 1.22 | 1.11 | 1.13 |
| Organization Specialty | Organization's specialization, a specific medical service, a specialization in treating a specific disease. Some specialties are: <ul style="list-style-type: none"> • Psychiatry • Radiology • Endocrinology | | x | | 1.00 | 1.00 | 1.13 |

| | | | | | | | |
|--|---|---|---|---|------|------|------|
| Organization Status | The status of this organization. Active – This organization is currently in existence. Inactive – This organization is no longer in existence | x | x | x | 1.11 | 1.00 | 1.25 |
| Organization Type | The type of organization represented. Some values are: Hospitals, HIEs, IDNs, Associations, Labs, Clinics, Departments, Pharmacies, Practice | x | x | x | 1.56 | 1.39 | 1.38 |
| Provider - EHR Name and Version | | | | | 1.94 | 1.75 | 2.21 |
| Provider - CCO Affiliation | | | | | 2.00 | 1.38 | 1.93 |
| Provider - Hours Of Operation | Times and days when the provider is available to see patients | | | | 1.67 | 1.78 | 1.93 |
| Provider - Nights and Weekends Flag | Flag indicating whether the provider has after hours operations | | | | 1.78 | 1.89 | 1.92 |
| Provider Phone | Includes business phone, mobile, pager, fax | | x | x | 1.22 | 1.19 | 1.21 |
| Provider - Primary Care Provider Designation | | | | x | 1.44 | 1.11 | 1.56 |
| Provider "Identifiers" - NPI, Tax ID | National, Regional or local identifier that uniquely identifies an individual that is okay to be publicly shared. Some examples are: National Provider Identifier #, Tax ID #, Hospital Issued Identifier | | x | x | 1.44 | 1.22 | 1.25 |
| Provider Accepting New Patients | Flag indicating whether the provider is accepting new patients | | | | 1.89 | 1.67 | 2.44 |
| Provider Address | Physical address information for an individual. An address can be designated as primary or secondary. Addresses that are no longer valid are marked as Inactive. Three types of addresses are supported: Billing (or legal), Practice, Mailing. | | x | x | 1.00 | 1.00 | 1.00 |

| | | | | | | | |
|--|--|---|---|---|------|------|------|
| Provider Credentials | Includes certification(s), license(s) and degree(s) earned by an individual provider. Information includes the Credential #, the name of credential, issuing authority, issue date, valid dates. | x | x | x | 1.00 | 1.00 | 1.00 |
| Provider Date of Birth | | | | | 2.13 | 1.71 | 2.00 |
| Provider e-mail address | Electronic mailing addresses to receive general purpose communication but not related to medical records | | x | x | 1.78 | 1.38 | 1.71 |
| Provider Gender | | | x | x | 1.78 | 1.56 | 1.75 |
| Provider Home address | | | | x | 3.00 | 2.50 | 3.00 |
| Provider Language | Language(s) that the provider is fluent in. | | x | | 1.78 | 1.78 | 2.29 |
| Provider Name | Includes title, first name, middle name, last name, known names | | x | x | 1.00 | 1.00 | 1.00 |
| Provider Philosophy of care | Individual's sub-specialty that further describes their practice (chiropractor - sports injuries, pediatrician - neonatologist) | | | | 1.67 | 2.00 | 2.31 |
| Provider Practice Info | Telemedicine/full time part time | | | x | 1.56 | 1.88 | 2.29 |
| Provider Relationship (affiliations) | Business associations with an organization. There can be multiple types of relationship but this profile generically categorizes all relationship as "member-of". | | x | x | 1.44 | 1.22 | 1.69 |
| Provider Relationship (affiliations) Historic | | | | x | 2.00 | 2.00 | 2.36 |
| Provider Relationship (affiliations) start and end dates | Start and end dates for an affiliation | | | x | 1.67 | 1.67 | 2.19 |
| Provider Specialty | Individual's specialization, a specific medical service, a specialization in treating a specific disease. Some types are: psychiatry, | | x | x | 1.00 | 1.00 | 1.00 |

| | | | | | | | |
|---|---|---|---|---|------|------|------|
| | radiology | | | | | | |
| Provider SSN | | | | x | 2.63 | 1.67 | 2.50 |
| Provider Status | The status of this individual. Active – currently practicing Inactive – currently not practicing, Retired, Deceased | x | x | x | 1.00 | 1.00 | 2.69 |
| Provider Type | Type of individual provider (e.g., physician) | x | x | x | 1.00 | 1.00 | 1.13 |
| Secure Messaging - Certification | Various kind of certificate information (encryption, signing, attribute) for the individual | | x | | 1.88 | 1.57 | 2.17 |
| Secure Messaging - Electronic Service URI | Reference to an entry in a systems directory or to a services definition page where this organization has its electronic access points defined. | | x | | 1.88 | 1.57 | 2.17 |
| Secure Messaging - Organization Certificate | Various kind of certificates (encryption, signing, attribute) information for the organization. | | x | | 1.78 | 1.50 | 2.00 |
| Secure Messaging - Organization Medical Records Delivery Email Address | Electronic mailing address of an organization where medical or administrative records can be sent. | | x | | 1.75 | 1.43 | 1.83 |
| Secure Messaging - Provider medical records deliver email address (Direct secure messaging address) | Electronic mailing address of an individual where medical or administrative records can be sent | | x | | 1.33 | 1.25 | 1.29 |

STATE DATA SOURCES

As a homework exercise, PDAG members were asked to rank and evaluate 11 state data sources. The purpose was to understand the use of state data and prioritization of the data sources. Members were asked to rank each source based on a scale of 1 (being most important) to 10 (being least important). This information will also be used to inform discussions with the data sources:

| State data source | What data do you expect/need to | What is it going to be used for? |
|-------------------|---------------------------------|----------------------------------|
|-------------------|---------------------------------|----------------------------------|

| | get from this source | |
|--|---|--|
| (Rank 1) Additions and Mental Health (AMH) residential drug and alcohol treatment facilities | <ul style="list-style-type: none"> • Treatment modalities • Contracted payers • facility demographics (including location) • accepting patients • licensing | Referring patients for mental health services, coordination of care Identify non-credentialed providers for mental health and chemical dependency care Rolling out services to these orgs is easier when we can work with the parent org |
| CCO provider network tables (Rank 2) | <ul style="list-style-type: none"> • Identify which providers are affiliated with which CCOs. • Provider contact information, accepting patients, locations, hours, specialties | Determine network adequacy, look at patterns when people travel out of network for care, etc. Referrals with CCO networks (when applicable) Network adequacy Helps with enrollment and outreach and also ensure we are getting CCDs from network members to support CCO reporting |
| Medicaid - Provider Enrollment (Rank 3) | <ul style="list-style-type: none"> • Specialty, accepting patients, location • Identification of providers serving Medicaid • Medicaid ID | Referrals and coordination of care Health plan validation |
| Medicaid EHR Incentive Program: providers that have received payments for meaningful use/adoption of certified EHR technology (Rank 4) | <ul style="list-style-type: none"> • Flag providers that have received payments • stage of meaningful use • vendor and version • applicable dates • Identification of Medicaid providers | Evaluating/adjusting for impact of EHR technology Planning EHR integration - When we can integrate several practices that use the same vendor is saves money on both sides. |
| Patient Centered Primary Care Home (PCPCH) (Rank 5) | <ul style="list-style-type: none"> • Identification of PCPCH clinics • PCPCH tiers and when tiers were achieved • How tier was achieved <p>(note: cannot be a binary field)</p> | Evaluating/adjusting for impact of PCPCH status Referrals and coordination of care Network adequacy |
| Nursing facilities (Rank 6) | <ul style="list-style-type: none"> • facility demographics • licensing | Coordination/transfer of care Rolling out services to these orgs is easier when we can work with the parent org |

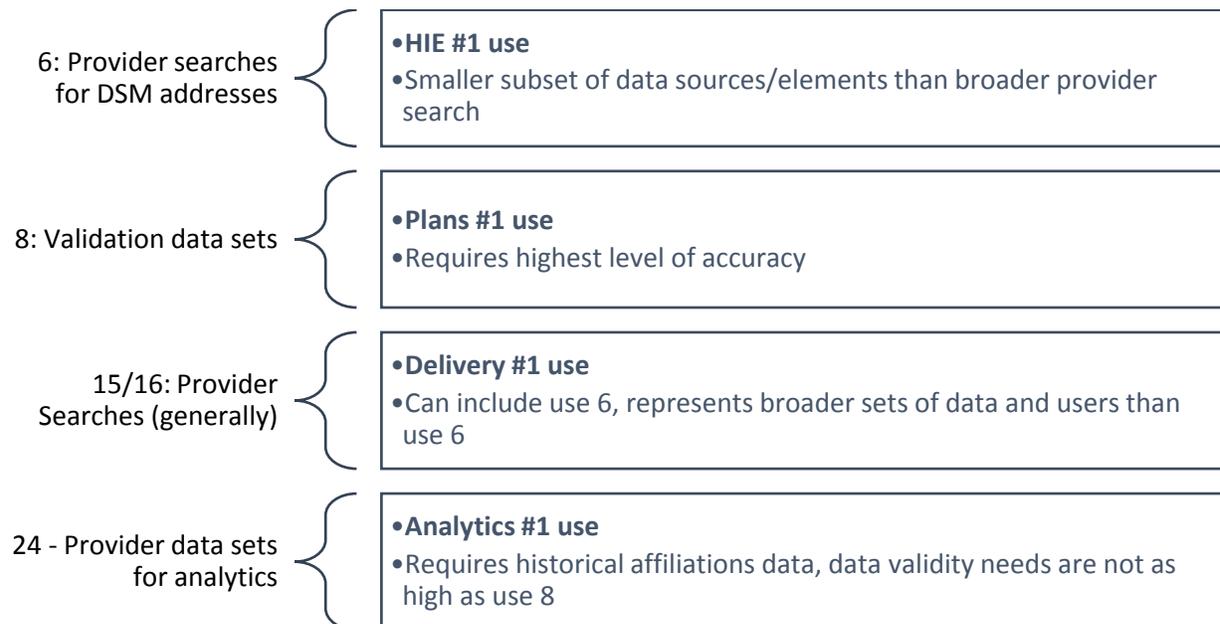
| | | |
|--|---|--|
| Children's Care (Rank 7) | | Coordination/transfer of care |
| Assisted Living and Residential Care Facilities (Rank 8) | <ul style="list-style-type: none"> • facility demographics • list of services provided by the organizations • population they serve • licensing | <p>Possible use for palliative care consulting; Coordination/transfer of care</p> <p>Rolling out services to these orgs is easier when we can work with the parent org</p> |
| People with developmental disabilities (Rank 9) | | Coordination/transfer of care |
| Medicare EHR Incentive Program: providers that have received payments for meaningful use (Rank 10) | <ul style="list-style-type: none"> • Flag providers that have received payments, stage of MU, vendor, and dates • Identification of Medicare providers | |
| Adult Foster Care (Rank 11) | | Coordination/transfer of care |

USE CASE REFINING SESSIONS SUMMARY: DECEMBER 2015

The Provider Directory Advisory Group (PDAG) was tasked with refining the prioritized uses, known as class 1 provider directory uses in the October and November 2015 PDAG meetings. Groups were broken out based on the following categories:

| | Health plans (Plans) | Health delivery (Delivery) | HIE | Analytics |
|---------------------------|---|--|--|----------------------------------|
| Participants | Liz Hubert Martin Martinez Jessica Perak Laura McKeane | Chris Boyd Mary Kaye Brady Monica Clark Kelly Keith Maggie Mellon Bob Power | Gina Bianco Mary Dallas Hongcheng Zhao | Stephanie Renfro Peter Graven |
| Facilitator/Scribe | Melissa Isavoran Rachel Ostroy | Wendy Demers Jason Miranda | Karen Hale Brittney Matero | Tyler Lamberts |

Class 1 uses include:



The desired outcome of the sessions was to produce refined uses cases which are included in this document. Each group was assigned an Oregon Health Authority facilitator and scribe to guide and document the discussions from participants during the meetings.

USE CASE 6 –PROVIDER SEARCHES FOR DIRECT SECURE MESSAGING (DSM) ADDRESSES

| Use Case Description | | |
|---|---|---|
| <p>Provider searches for DSM addresses (use 6) Use the provider directory to search for Direct secure messaging addresses. The search will allow the input of optional search criteria such as name, specialty, Telemedicine, geographic indicators (e.g. zip code, city or state).</p> | | |
| Initial users | Future users | |
| <ul style="list-style-type: none"> • Community Health Information Exchange (HIEs)* • Hospitals • Physician groups and clinics • Care coordinators <p>*on behalf of their users which can be hospitals, health systems, clinics, groups, plans, CCOs, and providers</p> | <ul style="list-style-type: none"> • Stand-alone Health Information Service Providers (HISPs)* – includes CareAccord • EHR vendor driven solutions* (e.g., ambulatory and inpatient EHRs) • Health systems, CCOs, and providers (including physical, behavioral health, dental, social service) through the web portal | |
| Preconditions | | |
| Assumptions and dependencies | Initial data sources | Future data sources |
| <ul style="list-style-type: none"> • Allow search from native systems – users do not need to leave their current workflow • Trust accredited HISP status must be known and only DSM addresses that are part of a trust community shown • Not all trust communities interact • HPD network of connected directories is established and functioning for the Directory • DSM addresses from the CareAccord flat file are still made available for those sources that are not able to connect to the HPD network of connected directories. • Queries returned and accessed through a user’s HIT solution (HISP, HIE, EHR, or CareAccord portal) are limited to the configuration of those solutions and may not support all fields/results that are in the Directory • Search criteria includes EHR restrictions (CCD, CCD-A, TIF, etc.) | <ul style="list-style-type: none"> • Connected HPD directories • CareAccord flat file and other flat files • Common Credentialing, including hospital privileging • Hospitals • Medicaid EHR Incentive Program payment data (state) • Medicare EHR Incentive Program payment data (CMS) | <ul style="list-style-type: none"> • Health plans – contracted providers • CCO provider networks (state) – including care coordination team members • PCPCH data (state) • Medicaid provider enrollment (state) • Residential drug and alcohol treatment (state) |

Common provider directory assumptions (applies to all uses)

1. Business Rules* are defined and followed in advance of data integration. Business rules will include:
 - Factors and calculations needed to produce a quality ranking score assessed to a source of data.
 - Matching algorithms for a unique provider with multiple data sources and exception handling processes for data that do not match.
 - Ranking of data sources based on the quality ranking score that assign precedence when there are multiple data sources for a unique provider (e.g., common credentialing data has a high degree of accuracy and is considered more authoritative than other sources).
 - Relationships that provide the ability to query the integrated data.
 - Which data elements are verified by the provider directory program operations team.
 - Which data sources and their associated elements contribute to the data set (data sources must meet data governance policies in order to be part of the provider directory).
2. The Provider Directory must include a minimum percentage of providers within Oregon and minimum amount of data in order to be a viable source of data.
3. Users have been properly authenticated and authorized to access the provider directory.
4. Data use agreements and authorizations with contributing data sources/connected HPD participants are established

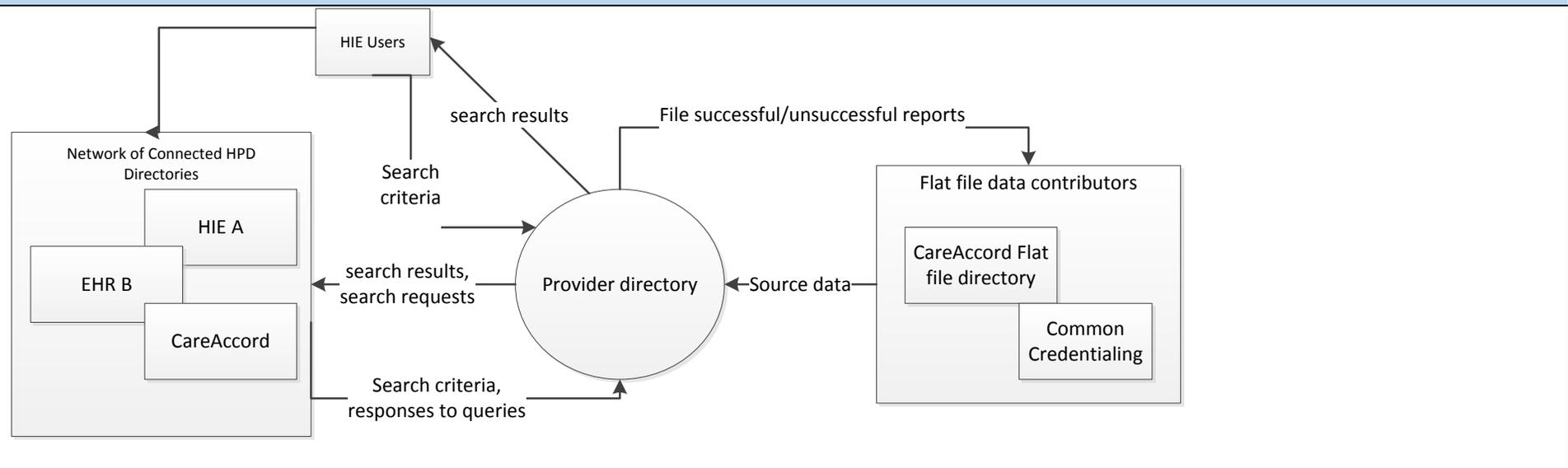
Data elements

| Initially required | Secondary phase | Future use or low priority |
|---|--|---|
| Organization Address - includes billing, legal, mailing, and practice | Organization - Accepting new patients | Organization - nights and weekends flag |
| Organization Contact | Organization - FQHC/Community health center flag | Organization language |
| Organization Credentials | Organization - PCPCH designation and tier | Provider - hours of operation |
| Organization Identifier | Organization hours of operation | Provider - nights and weekends flag |
| Organization Status (start and end dates) | Provider - CCO affiliation | Provider Philosophy of care |
| Organization Type | Provider accepting new patients | Provider Relationship (affiliations) historic |
| Provider Phone | Provider Language | |
| Organization Name | Provider date of birth | |
| Organization Specialty | | |
| Provider "Identifiers" - NPI, Tax ID | | |
| Provider address | | |
| Provider Credentials | | |
| Provider Name | | |
| Provider practice info <i>and web address link</i> | | |

Provider Relationship (affiliations)
 Provider Relationship (affiliations) start and end dates
 Provider Specialty
 Provider Status (start and end dates)
 Provider Type
 Provider - EHR name and version
 Provider – active license in other states
 Secure Messaging - Organization Certificate
 Secure Messaging - Provider medical records deliver email address (direct secure messaging address) – provider vs. establishment
 Secure Messaging - Certification
 Secure Messaging - Electronic Service URI
 Secure Messaging - Organization Medical Records Delivery Email Address
 Note: Data source, quality score needed on elements; also, may not need all data elements to be displayed to users but instead, compress to a limited data set that can be expanded by the user

Provider e- mail address
 Provider Gender
 Provider - Primary Care
 Provider designation

Context diagram



| Results | |
|---|---|
| <ul style="list-style-type: none"> • Data views display matched, normalized, and unified data from multiple sources for a distinct provider: <ul style="list-style-type: none"> ○ When multiple, identical records are returned for a provider, the record will only show up once ○ When there is missing data from one source such as a middle name, that is provided from another source, for a matched provider, the data will be merged ○ Unique affiliations are represented for a provider with start and end dates ○ Data with lower quality ranking scores may still be displayed as part of the matched record for a provider if it results in being the “best record” for a provider • Web interface to users will allow users to filter data and view results where only certain data that meet specified criteria will be included in the return of extract results • Query results may be accessed through <ul style="list-style-type: none"> ○ User’s HIT solution (e.g., EHR) ○ Directory web portal • Extract of results, in XML, CSV, TXT, Excel formats • Other exchange requirements are made apparent to users such as: <ul style="list-style-type: none"> ○ Attachments required (CCD/CCD-A) ○ Text messages only ○ Provider identifiers (e.g., must have an NPI) ○ Unique documentation identifier (file extensions allowable– not all types of documents are universally able to be transported) | |
| Examples of enabling activities and benefits | User Stories / Related Future Detailed Use Cases |
| <ul style="list-style-type: none"> • Security and privacy- knowing the right place to send and receive records • Complete one-stop shop for knowing who, where, how to contact providers (formerly use #14) • Improved care coordination/efficiency for discharge planning, etc. (formerly use #14) • Resource time/cost in managing directories decreased • Knowing the EHR vendor and version aids in implementation and rollout strategies • Helps providers find other providers that have adopted 2014 or 2015 Certified EHR Technology and are looking to exchange information in order to meet meaningful use (formerly use #7) | <ul style="list-style-type: none"> • Use will be similar to participation in FFD • Use information to validate current info but not replace it • Extend care coordination but will need to know Direct exchange restrictions |
| Key strategies for a successful implementation | |

- Must be simple and integrated into the existing workflow
- Users must see that it improves what they are doing now
- HIE vs point to point – allows data exchange where laws limit the access/release of patient data (e.g., FERPA, HIPAA, 42 CFR Part 2)
- Education around DSM

| Use Case Description | | |
|---|--|---------------------|
| <p>Validation data sets (use #8): The Provider Directory provides an authoritative gestalt of providers (e.g. Name, Degree, NPI, Specialty, etc.), clinics (e.g., Name, Street Address, PCPCH Tier, Tax ID etc.), medical groups, hospitals– as well as relationships between those entities (e.g., providers that belong to a clinic(s), clinics that belong to a medical group, payers and their networks, etc.) via a flat file extract to subscribers for the purpose of validating the subscribers own provider directories are accurate and current. The subscriber can validate a plan’s, health care organizations, or programs own provider directory data performing a comparison of the information within their Provider Directory to the large extract.</p> | | |
| Initial Users | Future Users | |
| <ul style="list-style-type: none"> • State (Office of HIT, other Internal State Provider Directories) • Health Plans • CCOs • Clinics • Hospitals • Providers (including members of the care team) • Regional HIEs | Vendors | |
| Preconditions | | |
| Assumptions and dependencies | Initial data sources | Future data sources |
| <ul style="list-style-type: none"> • Data Extracts are available on demand via a single agreed upon format to all consumers. • Data Extracts do not contain historical data; historical archive exists. • Views of the data elements that also includes source, date of data, and quality ranking score. • Only the most authoritative record is displayed. The highest level of data integrity is required for this use. • Health set of business rules are applied to rank data integrity. | <ul style="list-style-type: none"> • Common Credentialing • Hospital (privileging) • Connected HPD directories • Health plans – contracted providers • CCO provider networks (state) • Medicaid EHR Incentive Program payment data (state) • PCPCH data (state) • Medicaid provider enrollment (state) • Residential drug and alcohol treatment (state) | |

Common provider directory assumptions (applies to all uses)

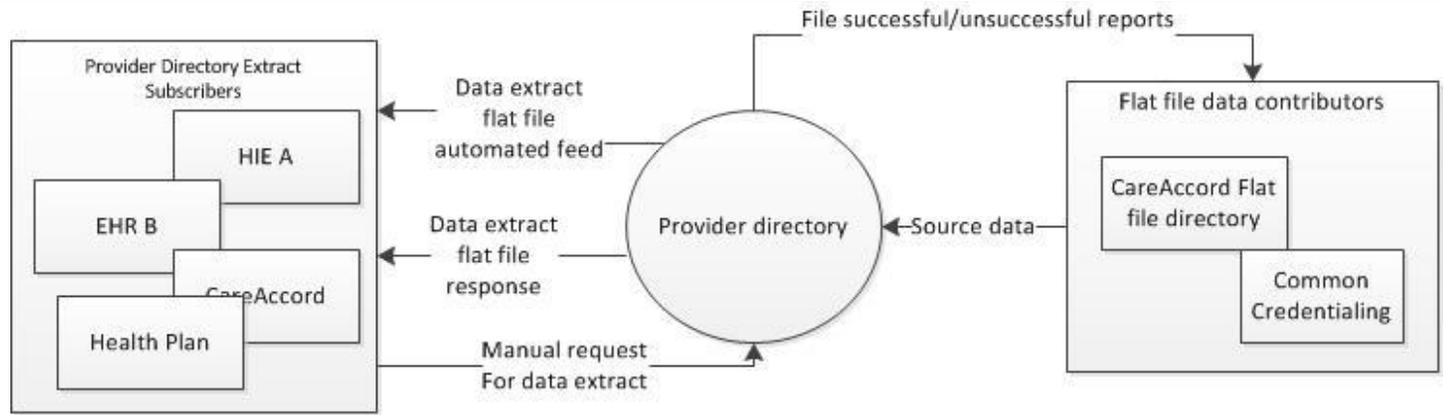
1. Business Rules* are defined and followed in advance of data integration. Business rules will include:
 - Factors and calculations needed to produce a quality ranking score assessed to a source of data.
 - Matching algorithms for a unique provider with multiple data sources and exception handling processes for data that do not match.
 - Ranking of data sources based on the quality ranking score that assign precedence when there are multiple data sources for a unique provider (e.g., common credentialing data has a high degree of accuracy and is considered more authoritative than other sources).
 - Relationships that provide the ability to query the integrated data.
 - Which data elements are verified by the provider directory program operations team.
 - Which data sources and their associated elements contribute to the data set (data sources must meet data governance policies in order to be part of the provider directory).
2. The Provider Directory must include a minimum percentage of providers within Oregon and minimum amount of data in order to be a viable source of data.
3. Users have been properly authenticated and authorized to access the provider directory.
4. Data use agreements and authorizations with contributing data sources/connected HPD participants are established

Data elements

| Initially required | Secondary phase | Future use or low priority |
|---|--|----------------------------|
| Organization - Accepting new patients Organization - nights and weekends flag Organization Address Organization Contact Organization Credentials Organization hours of operation Organization Identifier Organization language Organization Name Organization Specialty Organization Status Organization Type Provider - EHR name and version Provider - CCO affiliation Provider - hours of operation Provider - nights and weekends flag | Organization - FQHC/Community health center flag Organization - PCPCH designation and tier Provider date of birth Provider Relationship (affiliations) historic | |

| | | |
|---|--|--|
| Provider Phone Provider - Primary Care Provider designation Provider "Identifiers" - NPI, Tax ID Provider accepting new patients Provider address Provider Credentials Provider e- mail address (by specific activities) Provider Gender Provider Language Provider Name Provider Philosophy of care Provider practice info Provider Relationship (affiliations) Provider Relationship (affiliations) start and end dates Provider Specialty Provider Status Provider Type Secure Messaging - Certification Secure Messaging - Electronic Service URI Secure Messaging - Organization Certificate Secure Messaging - Organization Medical Records Delivery Email Address Secure messaging - Provider medical records deliver email address (Direct secure messaging address) | | |
|---|--|--|

Context diagram



Results

- Data extracts normalize and unify data from multiple sources for each distinct provider in the extract
- Data extracts produced by the provider directory contain a set of data elements which denotes the source, date of data, and quality ranking score
- Data extracts contain current authoritative data
- Web interface to users will allow users to filter data and extract results (local Provider Directory only) where only certain data that meet specified criteria will be included in the return of extract
- Data extracts may be exported in XML, CSV, TXT, Excel formats
 - Integrated database and views of the data elements that also includes source, date of data, and quality ranking score
 - Data displayed are only the most authoritative and accurate data for a given provider
 - Ability to pull data is seamless to the user no matter where the data is sourced.
 - Ability to select data elements from certain data sources and filter data based on certain criteria if setting up custom export of data

| Examples of enabling activities and benefits | User Stories / Related Future Detailed Use Cases |
|---|--|
| <p>Authoritative Provider data and data extracts from the provider directory can be used as a data source to:</p> <ul style="list-style-type: none"> • Validate individual Provider demographics, addresses, affiliations, etc. • Validate mass Provider demographics, addresses, affiliations, etc. using data extract. • Integrate/combine other sources authoritative Provider Directories into subscribers Provider Directory • Supplement existing data • Reduces redundant and duplicated administrative processes • Meet regulatory requirements | |

Key strategies for a successful implementation

Quality ranking score on every data element

| Use Case Description | |
|--|---|
| <p>Provider Search (use 15/16) Use the provider directory to initiate a search for a single provider or multiple providers with the ability to input optional search criteria such as name, specialty, telemedicine, geographic indicators (e.g. zip code, city or state). The user will be able to select one or more data sources to include in their search as well as indicate if the query should also be submitted to the HPD network.</p> <p>A. The search will be conducted against the state’s local integrated provider directory database. The provider directory search results will contains information stored in the database that meets the search criteria. The data returned will include a default set of data elements. The user will have the option of configuring the data elements included in the result set.</p> <p style="text-align: center;">And/or</p> <p>B. The search will be conducted against the connected HPD data sources. The provider directory search results will contain information stored in the database that meets the search criteria. The data returned will include a default set of data elements. The user will have the option of configuring the data elements included in the result set. The data elements available will be limited based upon what is supported by the HPD format. Extracts containing large sets of data or wild card searches may not be provided or are limited due to data-use agreements. The data contained in the search results performed against the Federated HPD sources will not be stored in the local integrated provider directory database.</p> | |
| Initial Users | Future Users |
| <ul style="list-style-type: none"> • State programs and offices (OHA analytics, Office of HIT, Department of Human Services, Health Systems) • Health Plans • CCOs • Clinics • Hospitals (including Hospital owned or associated Clinics) • Providers (including members of the care team) • HIEs- including Community HIEs, EHR vendor driven solutions, and CareAccord • IPAs | <ul style="list-style-type: none"> • Small Clinics (without access to large organization shared EHR or HIE) • Individual Providers (probably private practice without access to large organization shared EHR or HIE) |

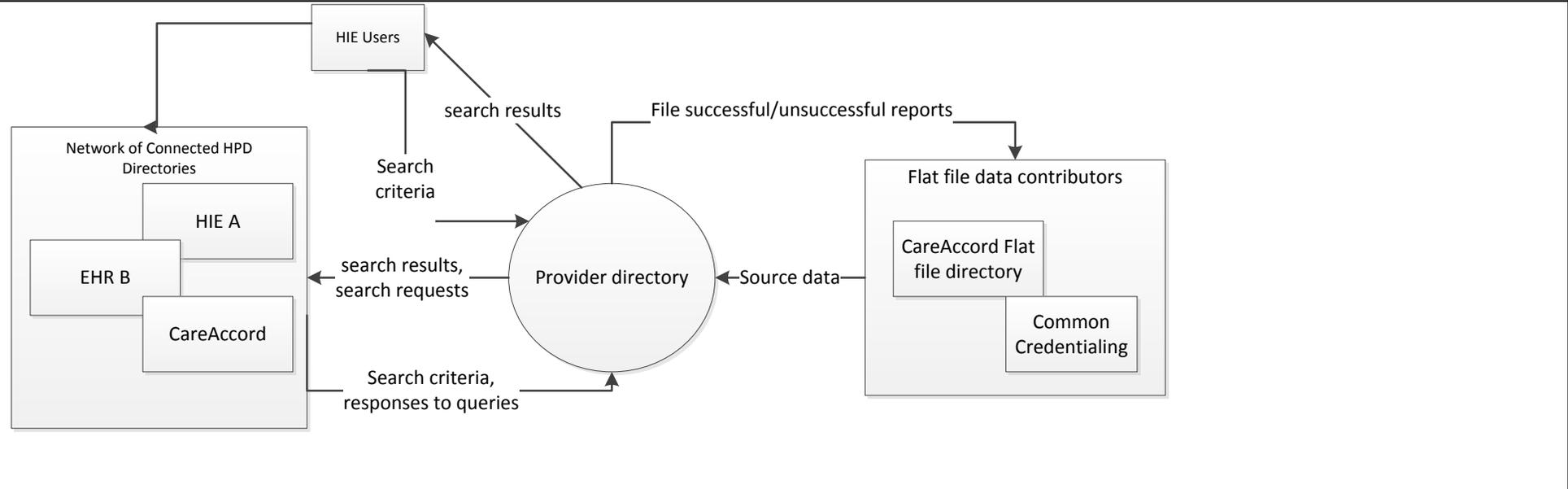
| Preconditions | | |
|--|---|---|
| Assumptions and Dependencies | Initial Data sources | Future Data Sources |
| <ul style="list-style-type: none"> Trust accredited HISP status must be known and only DSM addresses that are part of a trust community shown HPD network of connected directories is established and functioning for the Directory DSM addresses from the CareAccord flat file are still made available for those sources that are not able to connect to the HPD network of connected directories. Queries returned and accessed through a user's HIT solution (HIE, EHR, or CareAccord portal) are limited to the configuration of those solutions and may not support all fields/results that are in the Directory Ability to support search criteria is available to the user to limit search results. Data extracts are provided via a minimum agreed upon data set to consumers. Data extracts do not contain historical data. Views of the data elements that also includes source, date of data, and quality ranking score All Commonly Credentialed Practitioners with Medicaid ID's will be present in some form within the Provider Directory. | <ul style="list-style-type: none"> Local state provider directory that will include integrated data from the following: <ul style="list-style-type: none"> Common Credentialing CareAccord flat file Health plans – contracted providers CCO provider networks (state) Medicaid provider enrollment (state) Connected HPD directories | <ul style="list-style-type: none"> PCPCH data (state) Residential Drug/Alcohol Treatment (state) Hospital (privileging) Medicaid EHR Incentive Program payment data (state) |
| Common provider directory assumptions (applies to all uses) | | |
| <p>1. Business Rules* are defined and followed in advance of data integration. Business rules will include:</p> <ul style="list-style-type: none"> Factors and calculations needed to produce a quality ranking score assessed to a source of data. Matching algorithms for a unique provider with multiple data sources and exception handling processes for data that do not match. Ranking of data sources based on the quality ranking score that assign precedence when there are multiple data sources for a unique provider (e.g., common credentialing data has a high degree of accuracy and is considered more authoritative than other sources). Relationships that provide the ability to query the integrated data. Which data elements are verified by the provider directory program operations team. Which data sources and their associated elements contribute to the data set (data sources must meet data governance policies in order to be part of the provider directory). <p>2. The Provider Directory must include a minimum percentage of providers within Oregon and minimum amount of data in order to be a viable source of data.</p> | | |

- 3. Users have been properly authenticated and authorized to access the provider directory.
- 4. Data use agreements and authorizations with contributing data sources/connected HPD participants are established.

| Data elements | | |
|---|---|---|
| Initially Required | Secondary Phase | Future Use or Low Priority |
| Organization Address Organization Contact Organization Credentials Organization Identifier Organization Name Organization Specialty Organization Status Organization Type Provider - EHR Name and Version Provider - CCO affiliation Provider Phone Provider "Identifiers" - NPI, Tax ID, Medicaid ID Provider Address (with Clinic Name) Provider Credentials Provider e-mail Address (with Type Indicator e.g. Primary, Preferred, Office Email, etc.) Provider Name Provider Relationship (affiliations) – including payer network Provider Relationship (affiliations) Start and End Dates Provider Specialty Provider Status Provider Type Secure Messaging - Certification Secure Messaging - Electronic Service URI Secure Messaging - Organization Certificate | Organization - Accepting New Patients Organization - FQHC/Community Health Center Flag Organization - Nights and Weekends Flag Organization - PCPCH Designation and Tier Organization Hours of Operation Organization Language Provider - Nights and Weekends Flag Provider Date of Birth Provider Gender Provider Language Provider Relationship (affiliations) historic Provider SSN Provider - hours of operation Provider - Primary Care Provider Designation Provider Practice Info (Telemedicine Indicator) Provider Philosophy of Care | Addition of all Licensed Provider Types (TBD selecting which specific Provider Types apply to this specific use case e.g. Optometrists, Behavioral Health, Dental, Pharmacists, Routine Vision, Alternative Care) <i>Provider Accepting New Patients (group discussed solution to support accepting new patients is complex)</i> |

Secure Messaging - Organization Medical Records
 Delivery Email Address
 Secure messaging - Provider Medical Records Deliver
 email Address (Direct Secure Messaging Address)
 Hospital Affiliations (From Common Credentialing)

Context Diagrams



Results

- Integrated results set that includes data descriptors including source, date of data, and quality ranking score.
- Seamless integration of results presented to the user.
- Ability to select data source(s) and filter data based on filter criteria while viewing results via the web portal.
- Ability to export data.
- Data extracts display matched, normalized, and unified data from multiple sources for a distinct provider:
 - When multiple, identical records are returned for a provider, the record will only show up once.
 - When there is missing data from one source such as a middle name, that is provided from another source, for a matched provider, the data will be merged.
 - Unique affiliations are represented for a provider with start and end dates.
 - Data with lower quality ranking scores may still be displayed as part of the matched record for a provider if it results in being the "best record" for a provider.
- Data extracts produced by the provider directory contain a set of data elements which denotes the source, date of data, and quality ranking score.

| <ul style="list-style-type: none"> • Web interface to users will allow users to filter data and view results where only certain data that meet specified criteria will be included in the return of extract results. • Data extracts may be exported in XML, CSV, TXT, Excel formats. • Query results may be accessed through <ul style="list-style-type: none"> ○ User's HIT solution (e.g., EHR) ○ Directory web portal • Extract of results, in XML, CSV, TXT, Excel, RDF formats | |
|--|--|
| Enabling activities and benefits | User Stories / Related Future Detailed Use Cases |
| <ul style="list-style-type: none"> • Validated data • Security and privacy- knowing the right place to send and receive records • Complete one-stop shop for knowing who, where, how to contact providers • Improved care coordination/efficiency for discharge planning, etc. (use #14) • Resource time/cost in managing directories decreased • Helps providers find other providers that have adopted 2014 or 2015 Certified EHR Technology and are looking to exchange information in order to meet meaningful use (formerly use #7) | <ul style="list-style-type: none"> • Acute Care/ED finding a provider for Referrals to out of network or to providers outside of known geographic regions • Look-up out of network providers to locate DSM for Referrals or Care Coordination • HPO/CCO Validate/Clarification to resolve confusing or conflicting information about a Provider • Determine Credentialing / Network Affiliations • Determine DSM Address for Hospital |
| Key strategies for a successful implementation | |
| <ul style="list-style-type: none"> • Simple to use • Intuitive • Must work every time | |

| Use Case Description | | |
|---|--|--|
| <p>(24) Provider data sets for analytics: The provider directory makes an extract of the flat file data (current and historical) available to analytics extract subscribers. The extract will contain information about providers (e.g. Name, Degree, NPI, Specialty, etc.), clinics (e.g. Name, Street Address, PCPCH Tier, Tax ID, etc.), medical groups, hospitals, and payers (including CCOs) - as well as affiliations between these entities (e.g. providers that belong to a clinic(s), clinics that belong to a medical group, etc.).</p> <p>Knowing the effective dates (e.g., provider start and end dates with a particular clinic) is essential. The user will have the option of configuring the data elements included in the result set.</p> | | |
| Initial Users | Future Users | |
| <ul style="list-style-type: none"> • State <ul style="list-style-type: none"> ○ OHA Analytics ○ OHA Office of HIT ○ OHA PCPCH • Research/ analytics departments at hospitals, health systems, clinics, plans, and academic centers <ul style="list-style-type: none"> ○ OHSU-CHSE ○ Q-Corp ○ Providence CORE ○ Neil Wallace at PSU ○ Oregon Healthcare Workforce Institute | <ul style="list-style-type: none"> • State <ul style="list-style-type: none"> ○ DHS Office of Forecasting and Research ○ Public Health • Research/ analytics departments at hospitals, health systems, clinics, plans, academic centers, and community/private organizations <ul style="list-style-type: none"> ○ OCHIN | |
| Preconditions | | |
| Assumptions and Dependencies | Initial Data Sources | Future Data Sources |
| <ul style="list-style-type: none"> • Historical data are available but will be limited at implementation. As data changes, historical data will be available. • Required level of data accuracy is not as high as other provider directory uses • Data from the network connected HPD directories may be limited based on ability of participating directories to respond to ‘wild card’ searches for providers and caching ability of the PD | <ul style="list-style-type: none"> • Common credentialing • Hospital (privileging) • <i>Connected HPD directories*</i> <p>*Only be able to pull current data and would cache historical data</p> | <ul style="list-style-type: none"> • PCPCH data (state) • Medicaid EHR Incentive Program payment data (state) • Medicare EHR Incentive Program payment data (CMS public data) • Medicaid provider enrollment (state) • CCO provider networks (state) • Health plans – contracted providers |

| | | |
|--|--|---|
| <ul style="list-style-type: none"> • Primary care and common specialties (e.g. OBGYN, radiology, dentistry, mental health) are included with information for at least 80% of all Medicaid providers statewide | | <ul style="list-style-type: none"> • Residential drug and alcohol treatment (state) • FQHC (state/OPCA?) • Other existing provider directories (e.g. Q-Corp, OCHIN-FQHC) |
|--|--|---|

Common provider directory assumptions (applies to all uses)

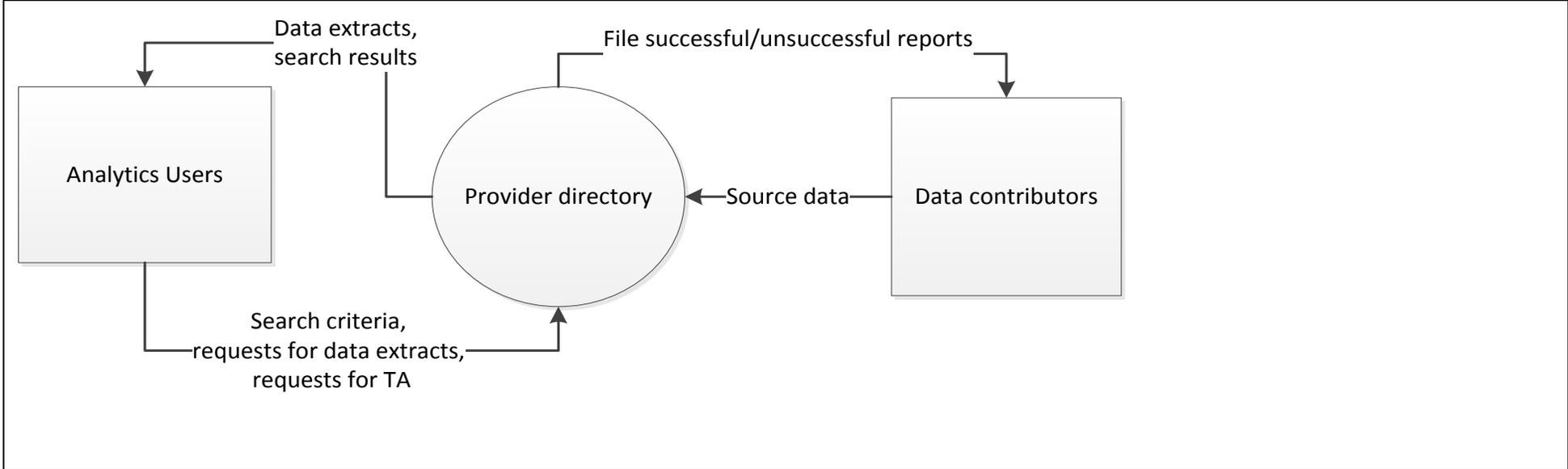
1. Business Rules* are defined and followed in advance of data integration. Business rules will include:
 - Factors and calculations needed to produce a quality ranking score assessed to a source of data.
 - Matching algorithms for a unique provider with multiple data sources and exception handling processes for data that do not match.
 - Ranking of data sources based on the quality ranking score that assign precedence when there are multiple data sources for a unique provider (e.g., common credentialing data has a high degree of accuracy and is considered more authoritative than other sources).
 - Relationships that provide the ability to query the integrated data.
 - Which data elements are verified by the provider directory program operations team.
 - Which data sources and their associated elements contribute to the data set (data sources must meet data governance policies in order to be part of the provider directory).
2. The Provider Directory must include a minimum percentage of providers within Oregon and minimum amount of data in order to be a viable source of data.
3. Users have been properly authenticated and authorized to access the provider directory.
4. Data use agreements and authorizations with contributing data sources/connected HPD participants are established

Data elements

| Initially Required | Secondary Phase | Future Use or Low Priority |
|---|---|---|
| <ul style="list-style-type: none"> • Organization address – includes billing, legal, mailing, and practice • Organization identifiers (NPI, Tax ID, Medicaid ID, etc.) • Organization name • Organization specialties • Organization type (e.g., hospital, CCO, HIE, plan, lab) • Provider Primary Care Provider designation • Provider identifiers (NPI, Medicaid ID, etc.) • Provider credentials (degrees) • Provider address (practice) | <ul style="list-style-type: none"> • Organization - FQHC flag • Organization - Rural Health Center flag • Organization - School-Based Health Center flag • Organization - Indian/Tribal Health Center flag • Organization - PCPCH designation, tier, qualifications for designation, and recognition date • Organization - Accepting new patients | <ul style="list-style-type: none"> • Organization status • Provider email address (not related to medical records) • Provider name • Provider Status • Organization credentials (certifications and licenses) • Organization hours of operation • Organization language(s) • Provider hours of operation • Provider nights and weekends flag • Provider - Accepting new patients • Provider credentials (certifications and licenses) • Provider gender |

| | | |
|---|---|---|
| <ul style="list-style-type: none"> • Provider Relationship (affiliations) • Provider Relationship (affiliations) start and end dates • Provider Specialty • Provider Type | <ul style="list-style-type: none"> • Organization nights and weekends flag • Organization Start/End dates • Provider EHR vendor, product, and version • Provider language • Provider original licensure date • Provider practice info (telemedicine, full-time/part-time) | <ul style="list-style-type: none"> • Provider Philosophy of care • Provider Address (billing, legal, mailing) |
|---|---|---|

Context diagram



Results

- Data extracts display matched, normalized, and unified data from multiple sources for a distinct provider:
 - When multiple, identical records are returned for a provider, the record will only show up once
 - When there is missing data from one source such as a middle name, that is provided from another source, for a matched provider, the data will be merged. Users will be able to know the data sources for the elements in the merged record.
 - Unique affiliations are represented for a provider with start and end dates

- Data with lower quality ranking scores may still be displayed as part of the matched record for a provider if it results in being the “best record” for a provider.
- Data extracts produced by the provider directory contain a set of data elements which denotes the source, date of data, and quality ranking score
- Data extracts contain current and historical data and may be filtered on date range
- Web interface to users will allow users to filter data and view results where only certain data that meet specified criteria will be included in the return of extract results
- Data extracts may be exported in XML, CSV, TXT, Excel formats

| Examples of enabling activities and benefits | User Stories / Related Future Detailed Use Cases |
|--|---|
| <p>Analytics data extracts from the provider directory can be used as a data source to:</p> <ul style="list-style-type: none"> ● Enable matching of data, such as claims data, to a variety of characteristics such as PCPCH tier, CCO affiliation, plan affiliation, hospital privileging, etc. ● Drill down to report at a variety of levels of care, such as at a health plan, hospital, HIE, provider, and practice level and highlight how care may vary by practice location or by program affiliation (PCPCH, CCO) (formerly use #18) ● Better monitoring of quality and access to care ● Report on the effects of new policies and programs, increase the accuracy and viability of that work ● Control for various provider/entity characteristics. (E.g., Estimate the effects of CCOs while controlling for the effects of PCPCH) ● Network adequacy monitoring (formerly use #20) ● Assess practice flow patterns ● Identify clinics or groups within a CCO that require intervention because they are not meeting benchmarks or thresholds for a program or to highlight clinics or programs that are performing well (formerly use #13) ● Identify clinics or groups that performing well and ability to isolate what works for improving quality and/or reducing cost (e.g., FQHCs doing a better job caring for Medicaid patients and promote best practices for other clinics to follow) (formerly use #19) ● Support the Medicaid EHR Incentive program audits by having access to historical affiliations data, allowing linkages from providers to their groups and clinics (formerly use #10) | <ul style="list-style-type: none"> ● Link it with claims data to identify who/where care is being provided ● Sample research questions <ul style="list-style-type: none"> ○ Network adequacy ○ Practice variation ○ Effects of policies implemented in specific practice sites ○ Evidence of “spillover” of coordinated care model |

- | | |
|--|--|
| <ul style="list-style-type: none">• Support identification of which EHRs are being used by providers / practices in the Medicaid and Medicare EHR incentive programs; generate information on EHR market share | |
|--|--|

| | |
|---|--|
| Key strategies for a successful implementation | |
|---|--|

- | | |
|--|--|
| <ul style="list-style-type: none">• To the extent possible, keep it simple – provide the best result for each provider/organization (may be more than one result if affiliations have changed)• Make historical data available• Make extracts available in usable formats (e.g., txt/csv)• Allow for user specifications (e.g., include xx specialties as of xx date) | |
|--|--|

PROVIDER DIRECTORY PROPOSED FEE STRUCTURE PRINCIPLES: FEBRUARY 2016

Below are draft fee structure principles developed by the Provider Directory Advisory Group that will be used as a foundation and basis for the provider directory fee structure:

1. Administration of the financing mechanism will be well-defined and as simple as possible.
2. Fees will be transparent and justifiable in how they are developed and maintained.
3. Fees will be balanced considering the benefits accrued and the respective user resources.
4. Fees will not be a barrier to participation but will be adequate to produce predictable incomes that support services and sustainability.
5. Customized enhancements that are approved by the governance body/steering committee, will be borne by provider directory users.
6. Federal and State investment to stimulate implementation of statewide technology will be leveraged.
7. Investment and adoption by as many stakeholders and users will be encouraged to support economies of scope and scale, and support overall success.

FEE STRUCTURE OPTIONS ANALYSIS: MARCH 2016

| | Benefits | Challenges | Considerations |
|-------------------------|--|---|--|
| Option 1 – Usage | <ul style="list-style-type: none"> • Same concept for all orgs – how you use the provider directory determines which tier you fall into • Keeps separation of users for portal and for data mart • Cost of managing the fee structure is the simplest • Concept is familiar – similar to other fee structures in place now for general systems | <ul style="list-style-type: none"> • Need to get a better understanding of how many users would actually use the system - hard to predict revenue, users, and uses • Is it the most appropriate way to gauge use? • User Based Pricing models work well for better established products with clear use benefits or companies with enough upfront investment money. They require more up front funding because it takes time for the "Use Benefit" information to spread and bring sufficient customers thereby sufficient income. If operating costs are low enough this could work. Otherwise estimating \$500,000 per year to operate and only getting 100 users would require \$5,000 per user and that would be very hard for a small organization to want to afford that • There's an inherent risk that people will try to be frugal and pay for/use fewer licenses; they might use a license number for more than one user • May be difficult to reach sustainability – one user per organization would not be sustainable • Unfair to charge entities with large resources the same price as small mom and pop clinics; users are different • Difficult to determine data mart subscription or transactional use | <ul style="list-style-type: none"> • May need to audit and calculate use based on # logins/# queries per user • Increase the number of users in each tier or define more buckets <ul style="list-style-type: none"> • Restructure the packages - It doesn't seem like there's enough separation between the plus, premium and enterprise levels. Maybe premium should be listed as 20-50 users and enterprise is above that • Flat access fee may be appropriate • Base subscription for users and special/large uses could be priced separately • Has to be some limit amount on extracts; otherwise it would be a data mart • Include special pricing for disadvantaged or safety-net providers so they can participate at the lowest level • Favorite option for one group |

| | | | |
|-------------------------------|---|---|--|
| Option 2 – Type of Org | <ul style="list-style-type: none"> • Larger organizations will get more value out of the provider directory and this structure will be more equitable to smaller organizations and clinics • Removes deterrent for signing up users • Fee tiers are adaptive to different organization types | <ul style="list-style-type: none"> • By having all of these layers within the fee structure gets messy. For example, if an integrated system has hospitals, clinics, a CCO, health plan, etc., it will get very complex to track and parse out fees with so many elements • May be harder to administer than option 1 but there are likely established processes • Unfair as scaled to have larger organizations take on the cost • Managing and monitoring the system could be administratively complex and burdensome on larger organizations • Concern over if State organizations are being equitably charged vs other participants • Opens up for errors | <ul style="list-style-type: none"> • Model can include a usage based category or tier of line items that can be used and grow over time • There's the same need for adjusting the number of users for the levels, see comments in fee structure #1 • Trying to make this be available for everyone is going to be difficult • Need to add a safety net category • Maybe a flat fee per use? • Subscription fee based on user may be more accurate • For CCOs, lives change monthly and also number of lives for some cross state organizations – would those counts be for both or just Oregon? • Overall revenue may not be reflective of actual amount of resources consumed by that organization so from a maintaining the solution fee it may not be equitable. • Fee structure type is not possible and should be taken off the table • Favorite option one group |
| Option 3: Revenue | <ul style="list-style-type: none"> • This option is the cleanest and will be the easiest for the State to administer • If we are wanting to be inclusive of all option #3 is best • Simple idea – revenue is the proxy for size and seems fair • Guaranteed income | <ul style="list-style-type: none"> • Need to flesh out how to administer this for an integrated system that has both a health plan and a health system (e.g. Providence or Samaritan Health) • Is revenue really a good proxy for size across all entity types? • Will still have to administer audit protocols for this model and there is a cyclical nature of profit and revenue • Difficult to determine annual revenue (copy of financials?) • Would be more work for the organization to determine | <ul style="list-style-type: none"> • IPAs don't have gross sales and have 3000 members – what is the right category for them? • Large revenues would share more of the cost burden in this structure • Some providers bring in more revenue than some other providers as well so maybe it's a plus OR a negative that some providers may feel like they are carrying an unfair portion of the fee even though they are only 1 user • How does usage affect the system? Some users may use large amounts of |

| | | | |
|--|--|--|---|
| | | | <p>system resources which is not contemplated here</p> <ul style="list-style-type: none"> • Include special pricing for disadvantaged or safety-net providers so they can participate at the lowest level • Dr. Ozanich mentioned some folks only use for DSM addresses. Is the value a combination of revenue and the use? Should use be considered in this as well? • For revenue to work maybe it would work better in concert with special discounts/adjustments that are talked about like contributor discount and federally designated safety net provider discount. • Favorite option for one group |
|--|--|--|---|

Early adopter comments:

- General comments:
 - Early adopters bring value to the provider directory
 - It will be important to define when the discount begins and ends.
- Parameter considerations
 - Early adopters would “sign up” within the first 6 months, but won’t have to complete integration (because it might not be possible if a lot of people sign up) during that time period.
 - Look at example of EDIE and offering subsidy. Maybe if you sign up within the first 6 months you get a discount based on an annual fee. For example, if someone signs up in the middle of the year, they still get the total discount offered based on the annual fee.
 - The discount fee should be substantial enough to get people signed up right away. 30% for the first year sounds reasonable because it will motivate people to sign up early.
 - Any time you’re an alpha or beta tester you get a reasonable discount, such as 30% for the first year.
 - The first year is the only time early adoption time. No discount rates should be offered after that.

Fee Discount comments:

- Data is often shared across multiple healthcare entities. When considering discounts, who should get the discount? As far as who should contribute, we should be selective so that the plan with the highest amount of quality data should be sourced. More data sources=more complexity.
- It would be very difficult to define/determine what “good data” is... what’s the criteria?

- It would be very challenging to operationalize this.... How do you even define this criteria?
- Why should this be offered? Who benefits from this?
- Are we wanting to encourage contributors?
- How many would we accept?
- If we only want a few golden sources and that ends up to be just a handful, then these are “one-offs” and may not constitute a predefined discount.
- We may only be able to get “accepting new patients data” from multiple sources (plans).
- Maybe a discount is not enough to pay for the cost of gathering and contributing the data.
- Do we want to push for early contributors?
- Early adopter discount should be the only discount offered

Thoughts around whether fees for initial participation which will include onboarding should be higher or lower compared to ongoing fees.

- The business model will need to include how the costs will be spread among all users and be sustainable. We wouldn't want to see people not participate because of a larger startup costs
- Having two costs could be an impediment to getting people/organizations onboard. It should be a subscription fee without a separate startup fee. Eliminating the initial set up fee again leads back to the fee principle of “Administration of the financing mechanism will be well-defined and as simple as possible”.

Other comments:

- Challenge across the structures: Until there's a sense of the cost it's difficult to define the thresholds that people will be willing to pay for. A rough order of magnitude is needed.
- Instituting a new process for getting provider data from the state-level provider directory vs. current processes will need to be assessed by those who work with provider data now
- Functionality and ease of viewing the data is favored over “fancy” graphics in the provider directory solution

COMMUNICATIONS STRATEGIC PLAN: SEPTEMBER 2016

Oregon Statewide Provider Directory

Communications Strategic Plan

September 2016

Overview

The Statewide Provider Directory provides an accurate set of provider data such as contact information, health information exchange addresses, and clinic affiliations to healthcare entities. The directory will enable care coordination, promote efficiencies for operations, and serve as a resource for health care analysis for healthcare entities. In recognition of the complexity of the project, functionality, uses, and/or users will be implemented in a phased approach which will be a component in developing the communications plan.

The Office of Health IT (OHIT) has been working with internal and external stakeholders on the development of the state-level provider directory since 2013. However, there is a need to ensure that we are identifying and reaching out to all stakeholders and the planning around this activity needs to be revisited. There are also other emerging provider directory efforts that stress the need for active stakeholder communication and engagement to ensure clarity and avoid confusion.

Objectives

- Create awareness and garner support from health care entities
- Define ways the provider directory functionality matches stakeholder needs and creates value
- Delineate how the provider directory fits in with the Health IT Portfolio
- Promote use and uptake of the provider directory
- Encourage collaboration and transparency

Audiences

Healthcare entities including:

- | | |
|---|---|
| <ul style="list-style-type: none">• Providers and clinics• Payers• CCOs• Hospitals and Health Systems• Independent Physicians Associations• Health Information Exchanges | <ul style="list-style-type: none">• Healthcare Research• OHA and DHS departments• Oregon health care-related associations• Oversight bodies: HIT Oversight Council• Advisory groups: OHA's CCO HIT Advisory Group, OHLC Administrative Simplification Committee |
|---|---|

Key messages

- The problems the provider directory is solving and how
- The benefits to having an authoritative complete source of provider data
 - Promotes efficiencies for operations
 - Enables care coordination and health information exchange
 - Serves as a resource for health care analysis

- When the provider directory will be operational
- What data are in the provider directory and how it works
- Who can use the provider directory
- Who will pay for the provider directory and how much
- How the provider directory program will attend to help desk needs and be staffed
- How the data in the provider directory will be protected and monitored for appropriate use

Spokesperson(s)

- OHIT: Karen Hale, Susan Otter, Rachel Ostroy, Melissa Isavoran
- Provider directory champions: PDAG and others

Channels and Tools

| Channels | Tools |
|--|--|
| <ul style="list-style-type: none"> • OHA websites & home page <ul style="list-style-type: none"> ○ OHIT, including common credentialing ○ Provider services homepage ○ OHIT newsletter and e-blasts • OHA Health System Transformation newsletter • Media stories – when and where appropriate • OHA social media outlets • Through partner organizations websites and newsletter stories • Stakeholder meetings • User training sessions | <ul style="list-style-type: none"> • Fact sheets and FAQs • Presentations • Association newsletter articles and e-bulletins • Direct mailers • Partner organization’s websites and social media outlets • Industry publications (news articles, advertising) • Webinars • Facebook/Twitter • Youtube videos |

Strategies and Tactics

2016

- ✓ *Increase key stakeholders’ awareness of PD and value & Ensure vested stakeholders are informed of progress*
 - Develop ambassadors
 - Promoters, Key influencers, Spokespeople
 - Define next-phase targeted audiences
 - Finalize communications plan
 - Participate in national and state conferences
 - Present to advisory groups and key associations
 - Convene stakeholders
 - PDAG and IAG
 - Launch website

Early 2017

Vendor Onboard:

- ✓ ***Increase awareness to potential users, Ensure right people know about services and benefits; targeted outreach & Build trust and endorsement***
 - Convene stakeholders
 - Advisory/user groups
 - Present to advisory groups/associations
 - Initiate branding and marketing for new product
 - Provide training and outreach to new users/focus groups
 - Participate in national and state conferences
 - Adjust based on prior stage experience

Late 2017/Early 2018

PD Launch:

- ✓ ***Secure initial adoption/uptake & Increase user base***
 - Conduct targeted outreach and promotions
 - Convene user groups
 - Respond to feedback
 - Gather user stories
 - Provide training and outreach to new users
 - Present to advisory groups and associations
 - Participate in national and state conferences