



Oregon Community Information Exchange:
*Environmental Scan Report to
HIT Commons Governance (updated 8/31/19)*

IN PARTNERSHIP WITH

OREGON HEALTH
LEADERSHIP COUNCIL

Oregon
Health
Authority

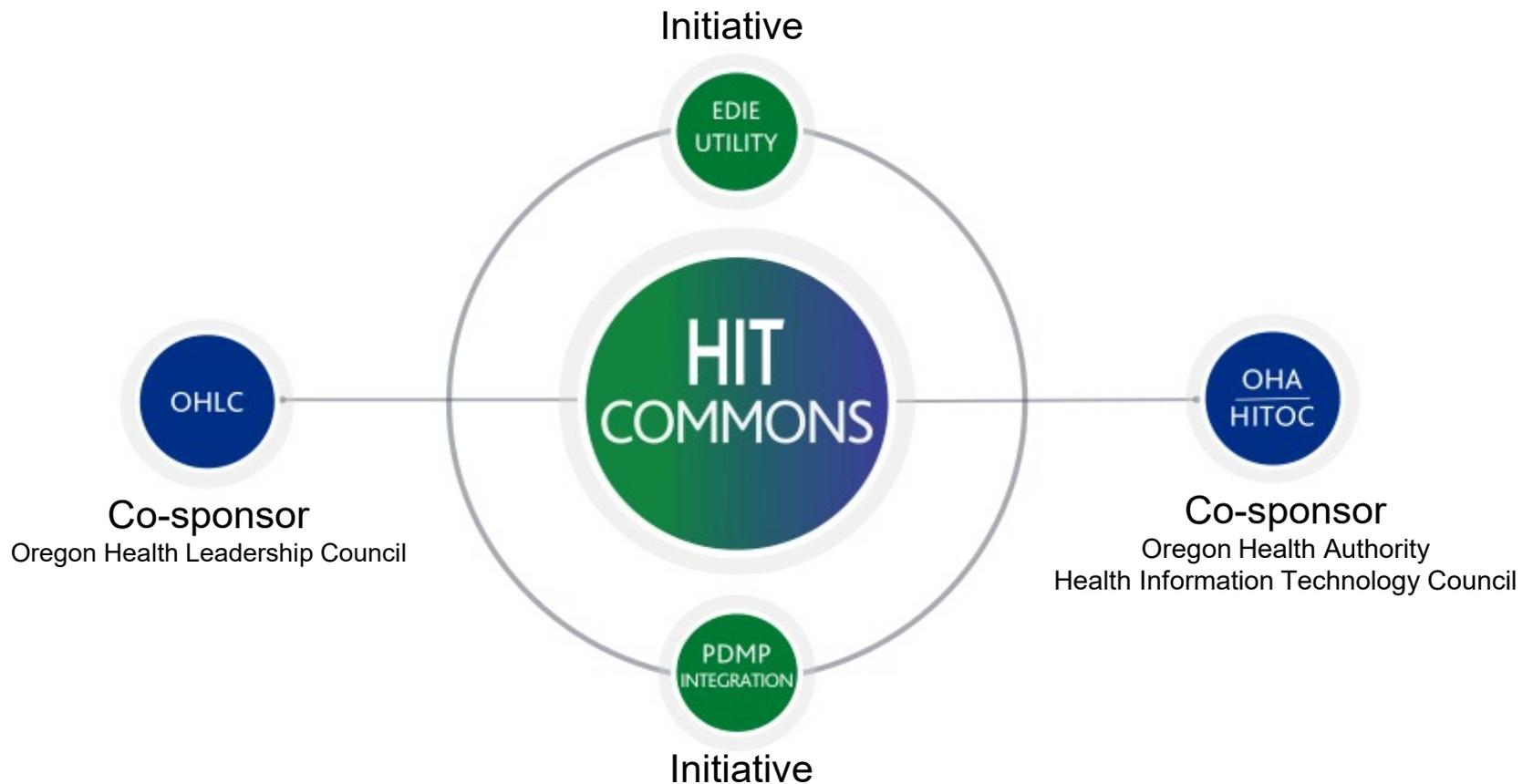
Outline

- Why and When Did We Begin this Work?
- Environmental Scan Activities
- What We've Learned to Date
- Early Considerations for an Oregon CIE
- Recommendations & Next Steps
- Appendix
 - Stakeholder interview list
 - Stakeholder interview summaries
 - Reference document list
 - Vendor comparison tables

HIT Commons and exploratory work in Community Information Exchange (CIE)

HIT Commons

A shared public/private governance partnership to accelerate and advance health information technology in Oregon

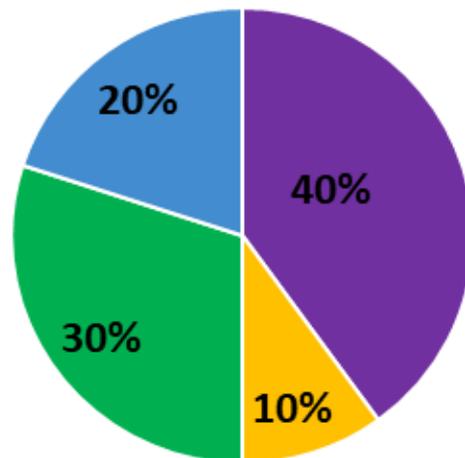


HIT Commons Partnership

- To date, the partnership has launched the EDIE Utility (hospital event notification system connecting hospitals, CCOs, health plans, clinics, behavioral health and others), and
- The Prescription Drug Monitoring Program (PDMP) Integration.
- Work in development includes the Oregon Provider Directory testing and soft launch phase and exploratory work in Community Information Exchange (CIE).

Why Focus on Social Determinants of Health?

Factors that determine health outcomes*



Social
Determinants of
Health & Health
Equity

■ Social & Economic

■ Physical environment

■ Healthy behaviors

■ Clinical care (quality and access)

Source: County Health Rankings Model. University of Wisconsin Public Health Institute. 2014. *This model does not include biology/genetics.

SOCIAL DETERMINANTS AND SOCIAL NEEDS: MOVING BEYOND MIDSTREAM



Health Affairs, January 2019

Meeting Individual Social Needs Falls Short Of Addressing Social Determinants Of Health

Alignment with Oregon Priorities

- A top priority for Oregon health system transformation is addressing Social Determinants of Health (SDOH)
 - Oregon Health Policy Board focus
 - CCO 2.0
 - HIT Oversight Council's strategic planning work
- Oregon health systems and communities have already begun investing in SDOH infrastructure
- Collaborative work via HIT Commons could ensure that efforts are pooled and standardized to accelerate progress, reduce variation and improve effectiveness

Where to Start?

Community Information Exchange (CIE)

- **Multidisciplinary Community Partners Network**—Community-Based Organizations (CBOs), public agencies and health care providers
- **Resource Directory**—serves as a data repository of shared community resources and connects health care, human and social services partners in real-time to improve the health and well being of communities
- **Integrated Technology Platform**—supports closed loop referrals and bidirectional exchange of information
- **Other Components**—common SDOH assessments, network standards, workflows, data analytics, metrics, legal and funding strategies

March 2019 HIT Commons Board Meeting

- Given market activities in SDOH, HIT Commons staff sought approval for exploratory, planning work
- Heard presentations from:
 - Kaiser Permanente re Thrive Local planning work
 - Regional Community Health Network (RCHN) facilitated by Project Access NOW
- Board unanimously approved exploratory work for HIT Commons staff to include an Environmental Scan and other development work

CIE Environmental Scan and Early Learnings to Date

Environmental Scan Activities

Developed Task Order with OHA to begin this work

- Initiated monthly SDOH alignment meetings with OHA team

Reviewed existing documents (SIREN, 211SanDiego)

- Able to draw on other efforts, strategies
- See appendix for table of reference documents

Briefings/communications to key stakeholder groups

- Briefing at April HITOC meeting; continued alignment with HITOC strategic plan
- Email announcement/materials to: HITOC, HITAG, HCOP, OHLC Board, OHLC Council, HIT Commons Governance, Admin Sim

Conducted ~20 vendor and stakeholder interviews

- Developed detailed interview guide; but interviews were wide ranging
- Attended OHA Innovation Café on SDOH
- See appendix for interview list & summaries

Continuing to monitor Oregon SDOH market

What We've Learned

Significant interest in this topic

- Communications announcement generated lots of email follow up
- Stakeholders see CCO 2.0 alignment with Medicare and Commercial SDOH efforts
- Interview focus: gather initial information + build relationships + share consistent HIT Commons message

Three vendors leading the way in Oregon

- Unite Us
- Aunt Bertha
- VistaLogic/Clara

Substantial vendor analysis conducted by others

- See vendor comparison in appendix
- Vary by price, implementation/support model, level of analytics and reporting

What We've Learned

- Health care systems/plans entering this space:

Samaritan

- Launched w/ Unite Us (April 2019)
- Early stages of referral network—13-14 referrals to date
- Top SDOH focus: Housing, Food, Transportation
- Supportive of statewide CIE solution

Kaiser

- Announced national launch with Unite Us (May 2019)
- Pacific NW Region to lead implementation (Summer 2019)
- Supportive of statewide CIE solution

PacificSource

- Existing contracts with Reliance and Clara/VistaLogic
- Did some exploratory vendor analysis but 'wait and see' decision made
- Supportive of statewide CIE solution

What We've Learned

- Health care systems/plans entering this space:

Providence

- Partnership with Project Access NOW using VistaLogic/Clara in 8 Oregon hospitals for inpatient SDOH referral work. SDOH screening currently occurs in Epic EHR and exploring future Epic community referral functionality
- Interested in statewide CIE but key concerns are enterprise-wide platform alignment and CBO capacity and needs in this space

Legacy

- Most SDOH work conducted in Epic 'Wheel'
- No plans to purchase off the shelf vendor solution but would integrate, particularly if platform available via Epic Orchard
- Interested in shared resource directory and identifying community social needs investments

Moda/EOCCO

- Commercial (OEBC/PEBB) C3 Program for high cost/high need population. Care managers connect to PCPCH, enhanced benefits, address SDOH needs
- EOCCO—SDOH efforts coordinated through CCO Community Advisory Councils (CACs) and grant funds. Investments in Community Health Worker (CHW) training & reimbursement
- Supportive of statewide CIE solution

What We've Learned

- Health care systems/plans entering this space:

OHSU

- Piloting Epic 'Wheel' in primary care and some inpatient/outpatient care management teams
- School of Nursing long-standing SDOH work with Interprofessional Care Access Network (I-CAN) using Self Sufficiency Matrix for screening & referral
- School of Dentistry incorporating SDOH screening into patient intake, assessment & training
- Supportive of statewide solution and key interests cited: connecting to updated resource directory, EPIC integration, and ongoing SDOH research on promising strategies/outcomes

Trillium/ Health Net

- Contracted with Aunt Bertha (March 2019) for a statewide subscription. Rebranded as "Trillium Resource Exchange—T REX"
- Initial upload of Trillium database. Now managed by platform functionality. Piloting several social needs screeners
- Future plans to assist network with EHR integration

What We've Learned

- Other Oregon projects/partners need consideration:

211info

- MOU with Unite Us and making joint presentations
- View their role as resource database and referral navigation
- Interested in statewide approach to funding model

VistaLogic/Clara

- In use with Project Access Now partners (Portland Metro) & Columbia Gorge CCO
- In use with ORPRN's Accountable Health Communities and OHA/PHD MCH programs
- Some SDOH data sharing w/ Reliance (early stages)

Reliance

- eReferrals product (integrated or stand alone)
- Community Health Record integration of SDOH data/referrals
- Key interest in interoperability of vendor platforms

OCHIN

- Intends to build integrations with Unite Us, Aunt Bertha, NowPow
- Will offer clients local solutions until Epic integration of multiple referral platforms is possible

What We've Learned

Emerging stakeholder support for a coordinated statewide effort

- But details matter and some Oregon efforts need extra consideration
- Goal may be alignment on core areas (directory, screening, metrics & reporting)

Recognition that efforts needs to be rooted in community

- Social services sector and community-based organizations (CBOs) are critical design partners—confirmed at national CIE Summit in San Diego
- CBOs face significant capacity issues due to funding restraints, staff turnover & fragmented workflows

Privacy/Security Concerns

- Ground them in legal agreements structure/ROIs
- Need for state & private sector legal advisors

No interoperability standards across platforms

- But national efforts are underway

Early Considerations: Build in features flexibility

**Resource
Directory**

**Referral
Management**

**Privacy
Protection &
Consent**

**Social needs
screening
(integrated)**

**Bidirectional
data exchange**

**Care
coordination &
management**

**Analytics &
metrics
reporting**

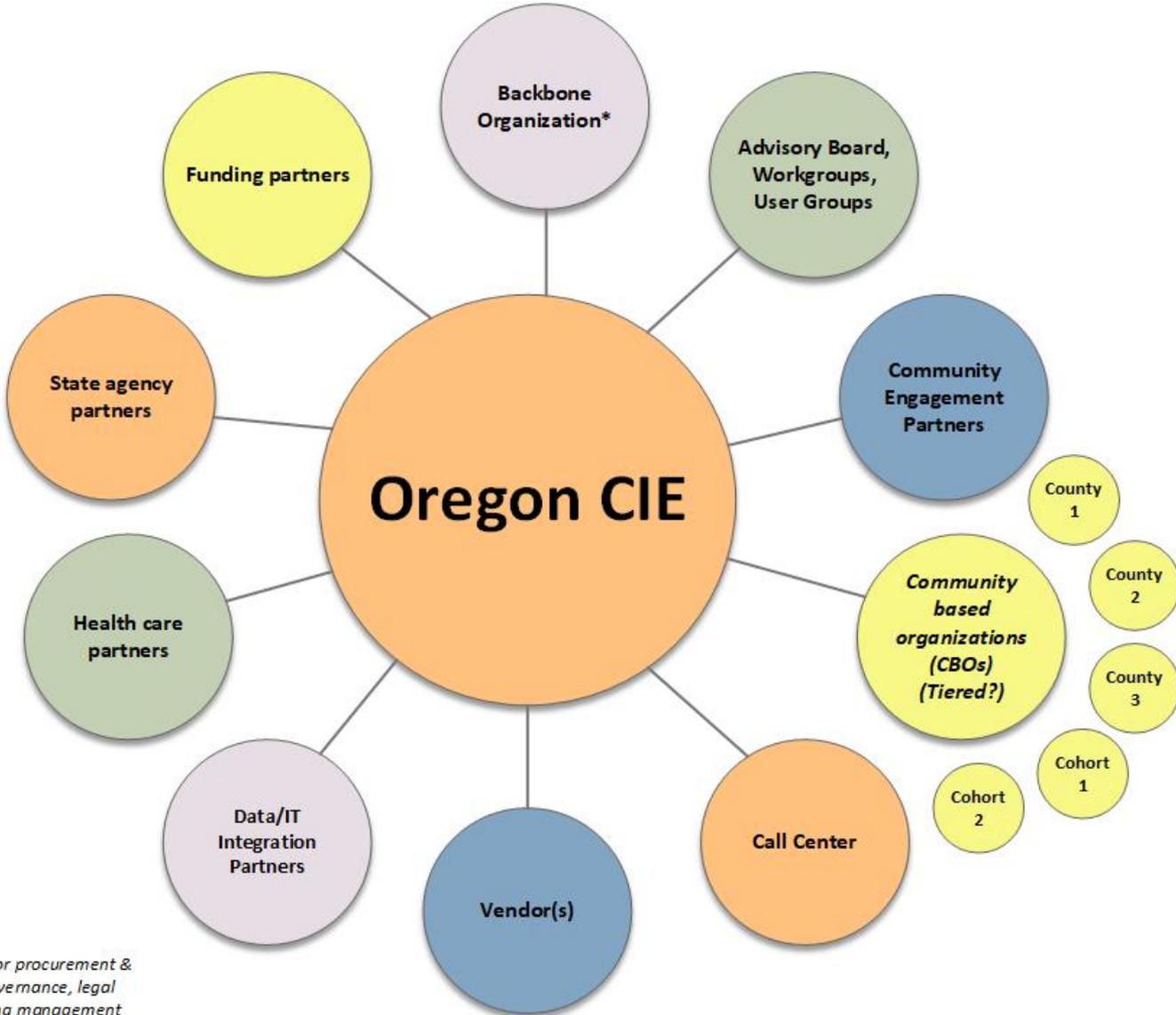
Not every partner will want all the same features, or all features at once

Early Considerations: Sharing Patient Data—Limited or Broad?

- Patient demographics
- Income and benefits
- Screening results
- Referrals information
- Alert information (EMS, criminal justice, hospital ADT)
- Care team (engaged case managers)
- Program enrollment
- Privacy records (consent forms)
- Other data sources/documents from community-based organizations (HMIS, clinical data)

San Diego CIE Summit: “Collect only the data you need and use all the data you have! Dump data you’re not using. Don’t collect for a future business case”

Early Considerations: *Multi-Sector, Multi-Partner Effort*



**Can include: vendor procurement & management, governance, legal framework, funding management*

Early Considerations: Potential Roles for HIT Commons

(1) Backbone Organization

- Statewide vendor procurement & requirements for alignment w/ other vendor solutions
- Legal agreements framework
- Governance & funding
- Community collaboratives
- Adoption and spread

(2) Support Organization

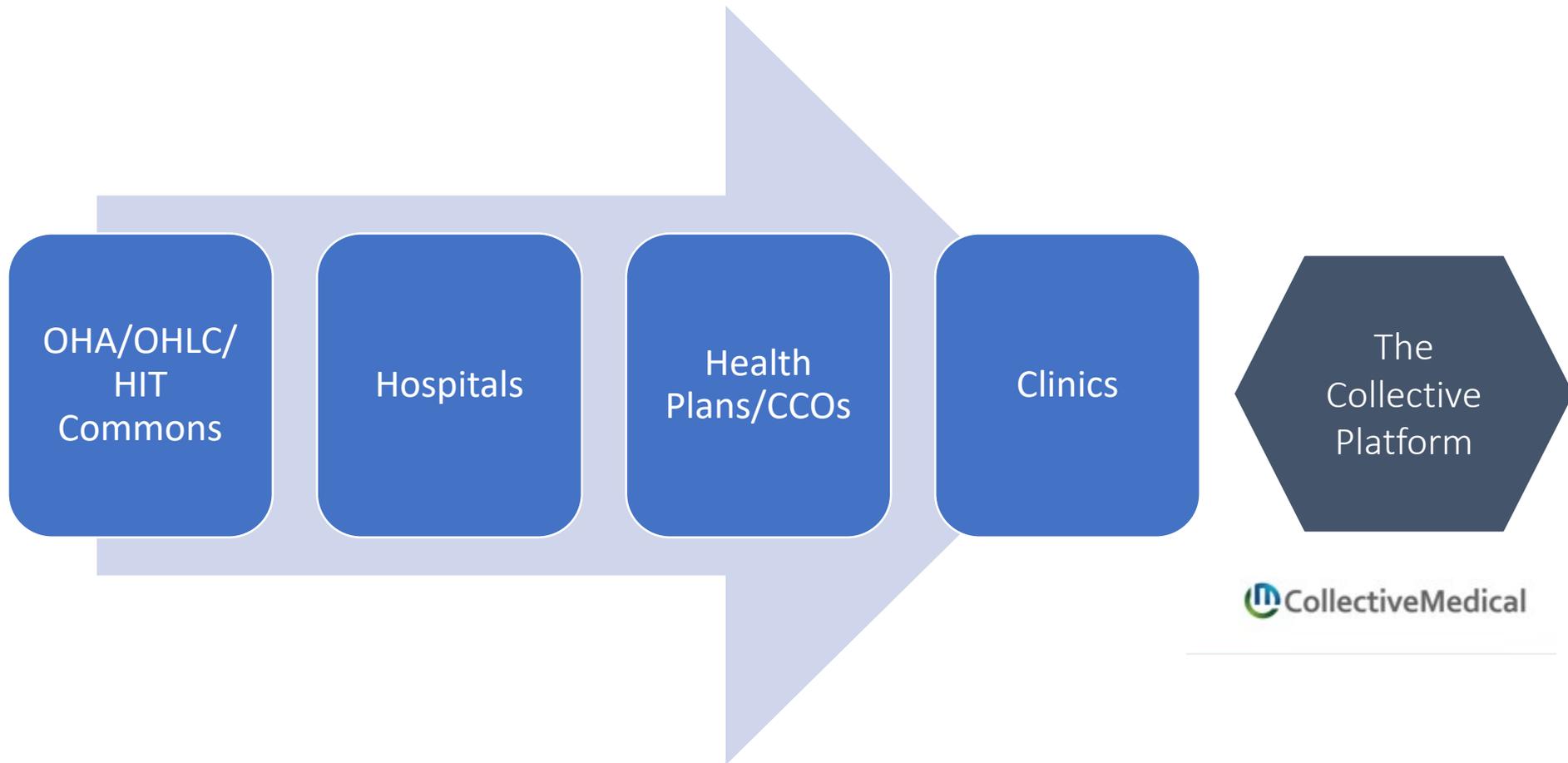
- Governance & vendor recommendations
- Community network alignment (facilitation)
- Community convening (as requested)
- Workflow/upskilling/technical assistance
- Cross-sector communication & cultural change management

(3) Hybrid Model

- Limited vendor contract for interested communities/partners
- Support Organization roles (as requested)

How is this work the same or different from previous HIT Commons efforts?

EDIE/PreManage: All-to-One Approach



Oregon CIE: Alignment of various efforts



OHA/OHLC/HIT
Commons

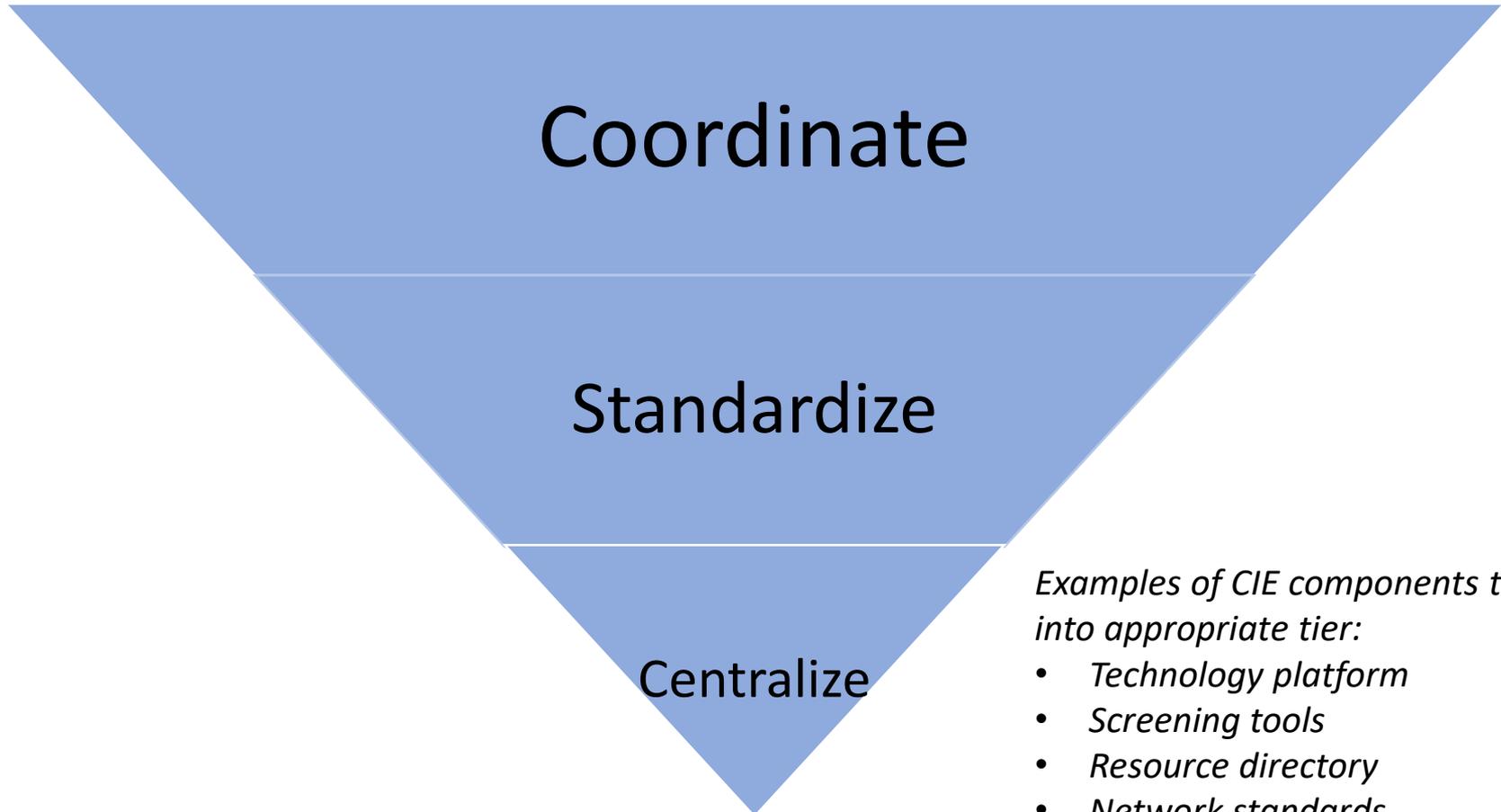


Health
Plans/Systems

Hospitals/Clinics/
Community Partners



Oregon CIE: Alignment Framework



Examples of CIE components to sort into appropriate tier:

- *Technology platform*
- *Screening tools*
- *Resource directory*
- *Network standards*
- *Metrics*

Conclusions, Recommendations & Next Steps

Conclusions

- Too early to assume single platform for a statewide utility
- Opportunities for collaboration exist on two fronts:
 1. OHLC: Work in partnership with Kaiser/Thrive Local to engage Portland and other early adopters
 2. HIT Commons: Work with stakeholders statewide to assess opportunities for alignment of efforts
- HIT Commons and OHA management team will regularly brief key stakeholders (e.g., OHLC Board, HITOC, CCO HITAG, HIT Commons Governance) on the parallel efforts

Recommendations

OHLC / Phase 1 CIE Committee

Portland-metro and early adopter effort to focus on:

- Common resource directory
- Common screener/assessment
- Community & Community Based Organization (CBO) engagement strategy
- Coordination center assessment & development
- Network standards alignment
- Workflows & learning collaboratives
- Common consent & legal agreements
- Shared data strategy
- Common metrics, reporting & evaluation
- Funding strategy, including group/bulk pricing options

Recommendations

HIT Commons / CIE Advisory Group

Broad stakeholder effort to develop a statewide CIE roadmap to include:

- Statewide map of CIE efforts/gaps
- Common screener/assessment alignment or best practice sharing
- Common resource directory or alignment/best practices
- Community & Community Based Organization (CBO) strategy
- Alignment of regional initiatives statewide with the Phase 1 CIE effort, as applicable
- Platform integration & transition strategies, including network standards

Recommendations

HIT Commons / CIE Advisory Group (*cont'd*)

- Alignment with OHA Medicaid and statewide efforts to align screening practices
- Workflows & learning collaboratives
- Common legal agreement templates or alignment/best practice sharing
- Common metrics, reporting & evaluation or alignment/best practice sharing
- Shared data strategy
- Synergy with other HIT Commons initiatives (e.g., EDIE, OPD)
- Potential funding or incentive opportunities

Stakeholder Review & Action

Audience	Date	Outcome/Action
OHLC Council	July 11, 2019	Agreement on recommendations
HIT Commons Governance	July 25, 2019	Approved HIT Commons Advisory Group
OHA HITOC	Aug 1, 2019	Briefing to ensure strategic alignment. Outcome: alignment confirmed
OHLC Board	Aug 6, 2019	Approved OHLC Steering Committee
OHA/OHLC Stakeholders & Interviewees	Summer/Fall 2019	Communication update to stakeholders, interviewees, key committees

Appendix

Stakeholder interview list

Stakeholder interview summaries

Reference document list

Vendor comparison tables

Stakeholder Interviews

Organization	Key Contacts	Interview Date	SDOH Platform Selected or Implemented
Convention			
Innovation Café	Multiple via presentations	6/5/2019	Multiple in use statewide
Network Partner			
Project Access NOW	Janet Hamilton	5/1/2019, 6/13/19	VistaLogic/Clara
211info	Dan Herman	5/2/2019 & 5/31/19	Unite Us
Oregon Business Council, Oregon Healthiest State Initiative	Sarah Foster	6/13/2019	n/a
OHSU, Accountable Health Communities	Bruce Goldberg, Anne King	7/29/2019	VistaLogic/Clara
OMA	Joy Conklin, Courtni Dresser	7/15/19	n/a
OAHHS	Andy Van Pelt	TBD	TBD
OPCA	Carly Hood-Ronick	TBD	TBD
CCO Oregon	Samantha Shepherd	Fall 2019	n/a

Stakeholder Interviews

Organization	Key Contacts	Interview Date	SDOH Platform Selected or Implemented
State			
State of North Carolina	Elizabeth Cuervo Tilson (Betsey) Christina Schmitt	4/30/2019	Unite Us
OHA	Lisa Parker, Kristin Bork, Chris DeMars, Sara Kleinschmit, Stephanie Jarem, Amanda Peden, Britteny Matero	Monthly alignment meetings	n/a
OHA Public Health Division	Cate Wilcox	Target: Sept 2019	VistaLogic/Clara
Oregon Department of Human Services	Angela Leet	Target: Sept 2019	TBD
CCO SDOH contacts	Multiple (see 2.0 applications)	Fall 2019	TBD
Vendor			
Unite Us	David Caress	4/11/2019	n/a
Reliance	Erick Maddox	5/7/2019	n/a
OCHIN	Kim Klupenger, Jennifer Stoll, Shane Hickey	5/15/2019	Unite Us & Aunt Bertha & NowPow integrations
VistaLogic	Keary Knickerbocker	5/24/2019	n/a
Aunt Bertha	Chris Bryan	5/29/2019	n/a

Stakeholder Interviews

Organization	Key Contacts	Interview Date	SDOH Platform Selected or Implemented
System			
Trillium CCO/HealthNet	Amanda Cobb	5/2/2019	Aunt Bertha
PacificSource	Kate Wells, Marian Blankenship, Michael Heidenreich	5/13/2019	Reliance & VistaLogic
Kaiser	Nicole Friedman, Sarita Mohanty, Tracy Dannen, Debbie Karman	5/20/2019	Unite Us
Samaritan	Ronda Lindley-Bennet	5/22/2019	Unite Us
Providence	Pam Mariea-Nason, Ann Kirby	5/28/2019, 7/26/19	VistaLogic/Clara
Legacy	Melinda Muller and team	6/14/2019	Epic 'Wheel'
LifeWorks NW	Mary Monnatt	6/18/2019	No formal platform
Moda Health/EOCCO	Jim Rickards, Sean Jessup	6/21/2019	No formal platform
Portland Coordinated Care Association (PCCA)	Craig Wright, Elizabeth Sublette, Jill Leake	6/21/19	No formal platform
Health Share	Christine Bernsten	8/1/19	Some partners on VistaLogic/Clara
OHSU	Adrienne Buesa and team	8/19/19	Epic 'Wheel'

Stakeholder Interview Summaries*

Organization	Interview Summary
Convention	
OHA Innovation Café	<p>OHA's Innovation Café: <i>Strategies for Addressing the Social Determinants of Health</i> featured plenary sessions and over 40 roundtable sessions highlighting SDOH efforts around the State. Dozens of projects focused on varied populations (e.g., mothers and children, aging, CCO population, rural residents, homeless and food insecure individuals) and utilized both low-tech and high-touch strategies built from the ground up (e.g., Community Uplift in rural Central Oregon) and others using software technology designed to close the loop of health care and social service referrals (e.g., Bridges to Health Pathways utilizing VistaLogic's Clara platform in Columbia Gorge CCO). A key takeaway from the Café is that there is a lot activity across many SDOH domains underway throughout Oregon on various systems/platforms, using different screeners and connecting in different ways to the same CBOs. This highlights the role the HIT Commons could play in aligning efforts. See Café presentation book for additional details: https://www.oregon.gov/oha/HPA/dsi-tc/Pages/Innovation-Cafe.aspx</p>
Network Partner	
Project Access NOW	<p>Project Access NOW (PANOW) has been using the VistaLogic/Clara platform for its SDOH referral and navigation work. Originally launched through implementation of the Pathways Community HUB national model of care coordination services, PANOW now envisions a <i>Regional Community Health Network</i> to support patients with resources and social needs referrals in the Portland Metro area. PANOW has deep relationships with approximately 25 CBOs and houses approximately 7 patient navigators to coordinate referrals and resources for patients. Health systems and hospital community benefit dollars help support the work of PANOW and shared projects coordinate referrals needs of patients as they discharge. PANOW partnerships are formalized, with a governance structure and executive team that meets monthly. PANOW is open to a new community-wide closed loop referral platform and is interested in being engaged as a community partner in this work. PANOW cites key challenges as capacity and turnover of CBOs to support this work and making sure SDOH referrals are cross-sector driven and not health care driven. Key partners to include from PANOW's perspective are Corrections and the Office of Equity and Inclusion. PANOW has been holding the vision of a <i>Regional Community Health Network</i> for some time and eager to be involved in seeing it move forward.</p>

*Within each organization type, summaries are listed in order of interview date. Summaries provided for all interviews conducted as of August 31, 2019.

Stakeholder Interview Summaries

Organization	Interview Summary
Network Partner 211info	<p>For 211info, the delivery of SDOH and integration with clinical health is their key strategy to support the Triple Aim. Key areas of focus include navigation at scale with the 211info call center, resource database navigation, and investment spending in building out their database. Their current technology platform is ReferNet (vendor is RTM designs) but they are looking to upgrade their system.</p> <p>211info is currently requesting additional funding from the Oregon legislature in the next biennium. Additional funding would expand 211info's Engagement Coordinators (currently have 3 on staff; legislative ask is for 8 new coordinators to expand to 24/7 call center since 35% of calls come in when not staffed).</p> <p>In July 2018, 211info executed an MOU with Unite Us for joint marketing and discussions are underway about database sharing. 211info's database has integrations built with VistaLogic/Clara, Pollywog (child development), Bridges to Health/Project Access NOW. Integration discussions are underway with OCHIN and Reliance.</p> <p>211info cites key challenges of a statewide community information exchange to include: community benefits duplication and no organizational accountability for referrals, risk of medicalization of SDOH, and ensuring that metrics are designed with the human element in mind. 211info is excited and encouraged by OHA and OHLC working together as a catalyst to move this work forward. Initial guidance from 211info are that the implementation should be regional, but the risk of fragmentation and duplication make a statewide roll-out preferable, if feasible.</p>

Stakeholder Interview Summaries

Organization	Interview Summary
Network Partner Oregon Business Council, Oregon Healthiest State Initiative	<p>Oregon Healthiest State (OSH) initiative in operations for the past four years used the Blue Zones Project as a community organizing framework to focus on health and well being. Three communities were the initial target for this work: Klamath, Umpqua/Grants, and The Dalles. OSH focused on hiring a community backbone organization which is typically 4-5 staff in each community. Key leadership included health care and CCO leaders, elected officials, school superintendents, and large employers. Efforts were cross-sector (including grocery stores and schools along with traditional health care partners) and focused on civic engagement and policy framing.</p> <p>Governance included backbone organization, steering committees, sector-based committees and community-specific champions. Key goal was to align on the same set of measures to improve health and well being. The initiative originally used the Gallup Well being Index but now all communities select their own measures, such as the BRFSS and other physical health measures, and build strategies and action plans based on the selected measures. OSH is transitioning out of active management of the initiative since communities are now ready to lead on their own. Transition work focused on making long term system changes which is generational and helping communities reset workplans.</p> <p>OSH sees key challenge for SDOH work in making connections seamless and easier for individuals in communities. OSH is excited by OHLC/HIT Commons efforts and can help convene partners in their three communities as they have activated the local leadership there. Key interest in aligning the state on 2-3 priorities, such as Housing and Food Insecurity (for example) and identifying: here's what we know, here's the gap, here's what we can do? OSH recommends strong alignment with CCO CACs and the Governor's office on SHIP (State Health Improvement Plan).</p>
OHSU, Accountable Health Communities	<p>Oregon Accountable Health Communities (OAHC) is a CMS 5 year-grant funded project focused on social needs designed to identify health-related social needs of Medicaid and Medicare patients. The project currently involves 5 CCOs and 45 clinics in 9 counties and screens patients using the AHC screener tool. Screening priorities focus on housing, food, utilities, transportation and violence. Patients receive a tailored summary of community resources and high-risk patients receive personalized navigation services. Enrolled sites use the VistaLogic/Clara platform for screening and exchanging data and integrations with 211Info for the referral resource database. Current challenges include readiness of clinical settings for SDOH work in their current workflow. Clinics receive \$10 per screen complete in Year 1, \$1/screen in subsequent years and \$100 for navigation services provided. The CMS grant runs through April 2022.</p>

Stakeholder Interview Summaries

Organization	Interview Summary
Network Partner	
OMA	<p>OMA is active in the broad area of SDOH through its education and policy work. On the education side, OMA's 2020 Annual Conference (Sept 2020) will have its primary focus on SDOH. In 2019, OMA initiated a quarterly presentation series on topics of interest for its members, such as aging, addiction, LGBTQ, and refugees. OMA's Continuing Medical Education (CME) work is guided by an education committee and will look at adding SDOH topics for coming CMEs (e.g., trauma informed care). OMA's education work also includes broad communication of materials to members and could be leveraged for Oregon CIE communications.</p> <p>On the policy side, to date OMA has joined coalitions of stakeholders for advocacy on SDOH topics such as firearm injury prevention and cultural competency. OMA has not yet developed its policy priorities for 2020/2021 but its policy committee will be discussing SDOH among others as a potential priority area.</p> <p>OMA can help support an Oregon CIE through connections to national AMA efforts on SDOH and emerging discussions on closed loop referral systems.</p>

Stakeholder Interview Summaries

Organization	Interview Summary
State	
State of North Carolina	<p>The State of North Carolina is in the early stages of implementing NCCare360, a statewide coordinated care network connecting health care and human services partners together to create the opportunity for health for all North Carolinians. NCCare360 leverages funding from a Medicaid 1115 waiver, health systems, and a private foundation (Foundation for Health Leadership and Innovation—FHLI) for the effort. The driving force behind the coordinated statewide approach was that many SDOH activities were underway in the state and they wanted to get ahead of the curve and select one approach and platform. NCCare 360 selected Unite Us as the technology platform for the initiative because of their architecture, ability to be flexible in implementation, and deep approach to community engagement.</p> <p>NCCare360 launched in April 2019 and is rolling out county by county with plans to be statewide by the end of 2020. NCCare360 governance structure includes DHHS and FHLI as the lead organizations (with a joint MOU around data sharing), a large advisory council and then vendor contracts with Unite Us, United Way of NC/211, and Expound Decision Systems. Metrics under consideration are process measures to track implementation and referrals, with the goal of including health equity, health outcomes and ROI metrics down the road. More information is available at: https://www.ncdhhs.gov/about/departments/initiatives/healthy-opportunities/nccare360</p>
Vendor	
Unite Us	<p>Unite Us currently contracts with Samaritan Health System and Kaiser Permanente for work in Oregon (and nationally for Kaiser). Unite Us builds coordinated care networks and utilizes a technology platform for closed loop referrals, communication and patient tracking. To date Unite Us has set up over 50 community networks in 17 states and Washington, DC, brought more than 7,200 community-based organizations onto its technology platform and helped 10.7M individuals access needed health and social services. Unite Us has built in screening tools such as PRAPARE and AHC and can support custom screening builds. Unite Us supports Single Sign On integration (SSO) and is currently integrated with Epic, Salesforce and iCarol. Unite Us is also available via Epic App Orchard.</p>

Stakeholder Interview Summaries

Organization	Interview Summary
Vendor Reliance	<p>Reliance works in the SDOH space through its Community Health Record (CHR) and eReferrals products. The CHR has a statewide footprint in one capacity or another and Reliance recently completed an integration with Epic and is exchanging data with the VistaLogic/Clara platform. The CHR has the capacity to integrate various SDOH data elements and current work is piloting a small set of SDOH metrics.</p> <p>The eReferrals product footprint runs from the Columbia Gorge, to southern Oregon, then to the coast. The referrals functionality can be integrated into CHR or as a standalone product. Reliance does a lot of the CBO convening in Southern Oregon to support the eReferrals product implementation.</p> <p>Reliance’s key concerns of a statewide CIE include: no technical standards yet exist for exchanging referrals across platforms. Until they do, efforts run the risk of creating referral silos. Reliance is not supportive of a one vendor solution in Oregon but that each community should try to implement an approach that works locally. A cohort approach to implementation (e.g., CBOs in Housing, CBOs in Food Insecurity) seems to work well as opposed to a county by county approach since people move across counties for services. Reliance’s guidance to the HIT Commons is to support communities in this work and to help address culture and workflow change with the CBOs and health systems newly working together in this space. HIT Commons could also assist with facilitating vendor interoperability requirements, network standards agreements and convene user groups to support this work.</p>
OCHIN	<p>OCHIN is exploring SDOH platforms to support its clients across 18 states. Current plans include building integrations with Unite Us, Aunt Bertha and NowPow. OCHIN is partnering with Kaiser on Thrive Local in regions where the two organizations overlap. OCHIN’s deployment strategy is two-pronged: (1) deploy at a clinic or regional level and ask clients to choose the platform with a footprint in their region; (2) work with Epic to develop code to sort overlapping resource directories in separate platforms to avoid conflicting information due to differing data refresh schedules. OCHIN is interested in supporting a statewide CIE and key concerns are integrating the technology at a low cost and alignment of technical backend of platform functionality.</p>

Stakeholder Interview Summaries

Organization	Interview Summary
Vendor	
VistaLogic	<p>VistaLogic’s Clara product footprint is mostly Oregon-based. Examples of Oregon implementations include: Pathways model with PANOW since 2009, 4 Early Learning Hubs, OHA Maternal and Child Health (MCH) Home Visiting Program, and OHSU’s Accountable Health Communities grant. Clara’s intent is to be the “EMR for Social Services”. Clara is a generalized model to meet the needs of unique programs and groups of individuals or families with screening and referral coordination. VistaLogic has created a universal screening and application eligibility process which is in use in one California project. Clara is a modular product with an “erector set of components” to support client’s networks. VistaLogic’s approach is a collective development process built from user side and deployed to all. Super users can build screeners themselves within the platform. VistaLogic has built integrations w/ Reliance, OCHIN Epic, and 211info and hosts the 211info mobile application.</p>
Aunt Bertha	<p>Aunt Bertha strives to be known as “the social care network”. Nationally to date, Aunt Bertha has 1.9M users, 170+ customers, including 15 multistate customers. Searches are nationwide with programs in every zip code. Aunt Bertha has 15,000 CBOs in its network now, with 2,000 new ones added a month. Aunt Bertha has a contract with Centene, the parent company of HealthNet/Trillium CCO. To date, 28,575 searches have occurred on Aunt Bertha platform. 236 claimed programs exist in Oregon. Most activity is in Lane County (with Trillium CCO) and Portland metro counties via HealthNet. The Aunt Bertha data team makes updates to the resource directory daily in house and within 48 hours with new CBO information. Service Line Agreements (SLAs) are in place to update CBO information every 6 months. Built in screeners include PRAPARE, AHC, and Staying Healthy Assessment, but clients can opt for a custom build. Aunt Bertha supports Single Sign On integration (SSO) and has integrations with Epic, Cerner and Salesforce. Aunt Bertha is also available via Epic App Orchard.</p>

Stakeholder Interview Summaries

Organization	Interview Summary
Trillium CCO/HealthNet	<p>Trillium CCO contracted with the platform Aunt Bertha in March 2019 and rebranded as “Trillium Resource Exchange—T REX. Prior to launch, Trillium had been working on SDOH for over a decade, maintaining their own resource list which became quickly outdated. Staff relied substantially on the White Bird Clinic (a Eugene-based CBO) publication, but it was a paper based annual publication only.</p> <p>Trillium reviewed other vendors— Unite Us and NowPow—but did not complete a formal RFP process. Centene (corporate parent company) already contracted with Aunt Bertha so HealthNet/Trillium CCO aligned with the same platform. Trillium Community relations manages the program. The CCO Community Advisory Council (CAC) is closely involved to help with CBO engagement. An Executive Committee guides the work and approves funding requests from CBOs. Patient risk assessments are done for all new members and screenings ask about housing, food and transportation. Trillium is also piloting Simple Screens and the PRAPARE tool in clinic offices and working on EHR integration with Aunt Bertha to engage more clinics in closed-loop referrals. Trillium is interested in discussions about a statewide OCIE effort.</p>
PacificSource	<p>Pacific Source’s efforts in SDOH are most active through its two CCOs--Columbia Gorge CCO and Central Oregon CCO, although they are seeking to align SDOH work across all lines of business (LOBs). The platform VistaLogic is in use in the Gorge, and Reliance is used in Central Oregon through a partnership with the Central Oregon Health Information Exchange (COHIE).</p> <p>PacificSource conducted informal evaluations of Unite Us, NowPow, and Aunt Bertha but continues to work for now with their local vendor partners because of existing work and partnerships. Closed loop referrals are happening in the Gorge but not yet in Central Oregon as Reliance is working on software upgrades for eReferrals functionality. PacificSource Foundation is staying close to this work to ensure that community investments are strategically aligned with identified social needs.</p> <p>Reliance may organize and centralize the SDOH data in Central Oregon, PacificSource is open to connecting to other platforms for needed functionality and is open to joining a statewide CIE effort.</p>

Stakeholder Interview Summaries

Organization

Interview Summary

Kaiser

Kaiser Permanente (KP) signed a contract with Unite Us in April 2019 for national implementation in its footprint of 8 states and the District of Columbia over the next three years. The effort is branded as *Thrive Local* and the Pacific Northwest region will be the first region to deploy and will establish a community partner network by the end of 2019. By 2022, 39 geographic community partner networks will be established throughout KP's footprint.

Pacific Northwest launch planning has 3 buckets of work: launching a resource directory, integrating the platform into health plan and medical group existing workflows, and Health Connect (Epic) integration, with SSO as the first objective. KP envisions a simultaneous external launch as soon as CBOs and others are ready. KP wants the effort to be community owned—Thrive Local is only internal branding. KP envisions one Tri-County Metro network by the end of 2019. In order for that network to function well, many organizations need to come together on the same platform and in the same effort. KP has sent over 300 outreach letters to CBOs and other potential partners. KP developed a screening tool internally to address transportation, food insecurity, housing, financial concerns, social isolation, caregiver support, interpersonal violence and other domains. KP is open to discussion and decisionmaking around a community agreed upon social needs screening tool.

Thrive Local metrics include process metrics (number of staff trained and use tool on a daily basis; # of referrals and # of referral needs that were met), improved clinical outcomes and increased provider satisfaction. Kaiser is very interested in joining with other health system leaders and CBOs for early work in the Tri-County metro to develop the effort to scale toward a statewide CIE.

Stakeholder Interview Summaries

Organization	Interview Summary
Samaritan	<p>Samaritan launched their SDOH work with Unite Us in April 2019. In their platform selection process they were looking for two main functions: a common intake process and a closed loop referral system. They evaluated NowPow, Health Leads and a couple of other vendors. Health Leads ultimately referred Samaritan to Unite Us.</p> <p>Prior to launch, Samaritan held several educational/informational seminars for local CBOs and other partner organizations. Unite Us attended these sessions to provide info (about technology, benefits, ROI, etc.) and fielded questions from the CBO participants.</p> <p>Two months post implementation, approximately 13-15 closed loop referrals have occurred. CBOs in their community have been very receptive to this process. Screening areas of focus for new patients are: housing, food and transportation. Key challenges cited by Samaritan include gaining buy-in from hospitals and clinic adoption; Epic integration is on the horizon. Samaritan is interested in a statewide CIE solution to ensure sustainability of CBO engagement and funding for the network.</p>
Providence	<p>Providence has a long-running partnership with Project Access NOW and houses dedicated spaces in each of its 8 Oregon hospitals where caregivers address SDOH and triage to available resources. Staff utilize VistaLogic/Clara to perform their community-based referral needs. They have found the project to be successful in all their hospitals despite variations in patient population and needs. Providence is also utilizing Epic's SDOH 'Wheel' for screening patients and is interested in using Epic community referral functionality in the future. Providence will keep current referral functionality on VistaLogic/Clara for now but is interested in joining a statewide effort around SDOH particularly around collaboration on a statewide resources directory. Providence's key concern for this work is the need for adequate funding for CBOs to enable them to increase capacity to meet the needs of increased referral volume. If CBO capacity and funding are not addressed, CBOs will begin denying applications for direct services at a more frequent rate than in the current system.</p>

Stakeholder Interview Summaries

Organization

Interview Summary

Legacy

Legacy is spending a lot of time on SDOH in various departments but is not looking at off the shelf technology vendors for SDOH screening and referral work. Legacy has turned on Epic Wheel to use standardized screening questions across 10 domains but Legacy is just getting started with the Wheel and wants to be more systematic in its use (e.g., LMG not yet using Wheel). Legacy acknowledges that the Wheel is not as robust as Unite Us or other platforms since Epic cannot yet send non-clinical referrals to CBOs.

Care managers currently use a shared document of all SDOH resources which acts as a referral database---ideally Legacy would like this in Epic. Care managers mark a social need as complete when a plan is in place and documented in EHR. An alert will come up in Epic to notify care managers of patients' social needs and progress notes are documented in Epic.

SDOH data and metrics are fragmented at this point throughout Legacy although work is underway on maternal racial/ethnic disparities and pediatric food insecurity. Legacy is also considering pilots in safety net and midwifery clinics to train residents in SDOH screening through the OHSU/ORPRN Accountable Health Communities screening and referral grant.

Legacy is interested in joining a community effort to build a shared resource directory together with Portland partners and would be open to platforms available via Epic App Orchard because API integrations are more feasible via that route. Legacy is also very interested in shared data from social needs screening to help guide community investments.

Stakeholder Interview Summaries

Organization	Interview Summary
LifeWorks NW	<p>LifeWorks NW (LFNW) started as a navigation agency but determined it was better suited as a provider. LFNW is not using any formal platform for SDOH screening and referral work but through regular behavioral health care, LFNW knows that the social needs of their patients are typically housing and vocational rehab—and it is always hard to know capacity of these organizations for taking referrals. A key concern for LFNW is that community resources change hourly and there is no adequate level of capacity for all social needs. LFNW recognizes that CBOs have the relationships and persistence to support patients as their lifeline until they are placed and work tirelessly to maintain and constantly update Excel spreadsheets of resources, sometimes even keeping known referral sources to their own CBO since supply is low.</p> <p>LFNW is interested in a CIE platform and would be hope it could address the availability of addiction beds, i.e., many case workers are focused on the same patients and all put the patient on the same wait lists, so often there are multiple duplicate entries making the wait list look longer than it is. Other key interests for LFNW: What is the intended outcome of this work, e.g., closed loop referral or active engagement with peers/partners/navigators? Can CBOs get paid for connecting patient to resources? Will the platform stratify patients by risk, e.g., patients with 1-3 social needs=referral out to resources; 4-6 needs=need Community Health Worker (CHW) assistance, 7+ needs=more intensive case management. How will a platform integrate with EHRs?</p>
Moda Health/EOCCO	<p>Moda/EOCCO is not using a formal platform for SDOH screening and referral but doing work with community health workers (CHW) and PCPCHs with documentation in Epic. Commercial efforts focused on OEBB/PEBB C3 Program (comprehensive care coordination) for individuals in top 10% of costs and ED/IP utilization/condition (e.g., diabetes, depression) thresholds. Care managers connect to PCPCH, enhanced benefits (e.g., waived copays), and work to identify other SDOH factors. No formal SDOH screener is in use but depression, ACES, patient activation questions are asked. Interventions for social needs are coordinated through referrals to CBOs (e.g., fitness, social isolation services) or care managers rely on PCPCH for coordination. Care managers keep a list of identified partners and manager referrals via phone. For Medicare Advantage population, Moda is using IVR technology to assess fall risk and other gaps in care and connect member to care management as needed. <i>(continued next slide)</i></p>

Stakeholder Interview Summaries

Organization

Interview Summary

Moda Health/EOCCO *(continued)*

For EOCCO, SDOH efforts are coordinated through 12 CACs and grant funds are aligned with CCO Incentive metrics. EOCCO is making investments in CHW training program and reimbursement for CHW services. Examples of grant funded projects include Veggie Rx program which administers healthy food coupons to members. EOCCO has worked extensively with OSU Extension to develop a CHW training program tailored to EOCCO geography. Entities can now bill EOCCO for CHW services. CHWs have good insight and relationships with CBOs in the small communities of EOCCO.

Moda/EOCCO is supportive of statewide CIE development. Workflow integration and interoperability are key concerns as CHWs currently document in Epic. Moda is also on the path to become a trauma informed organization and sees natural alignment with the CIE work and that effort.

Portland Coordinated Care Association (PCCA)

PCCA focused its discussion of SDOH screening and referral on The Portland Clinic SDOH workflow. Current SDOH work is managed via Epic and Excel spreadsheets—no platform vendor solution is under consideration. The Portland Clinic is not using Epic Healthy Planet module or Epic Wheel currently, but may look to do so in the future.

Screening for social needs occurs for all patients enrolled in care management (about 1% of patients) and yearly for all other patients. Social workers complete assessments in three areas: Food insecurity, Ability to Pay for Rx, and How the patient wishes to be contacted for follow up. Care managers purposely do not ask about housing because of known limited capacity. The Portland Clinic is looking to expand social needs screening to domestic violence and social isolation. All positive screens are put into the Epic in basket for social worker follow up. Social workers in each clinic site use Excel-based resources directory to find and print needed resources for patients. Social workers maintain the directory based on personal relationships with CBOs and use it to document the outcome of the referral so they can include in CPC+ reporting. Pediatric clinics use ACES and have referral connections with Morrison Children & Family Services. Suicide screening is done separately via PHQ9 and positive screens have a separate workflow. The Portland Clinics has a small project with Project Access Now for urology follow up (~15 cases/year). Other small projects exist with Nourish (food boxes in NE Portland) and the PCCA Foundation awards micro grants to CBOs for SDOH needs. PCCA is very interested in joining collaborative CIE effort for this work and sees alignment with cost, quality and outcomes goals.

Stakeholder Interview Summaries

Organization

Interview Summary

OHSU

OHSU is working on SDOH efforts on several fronts, including primary care, inpatient and outpatient care management, the School of Nursing and the School of Dentistry. In terms of integration, OHSU is in early stages of implementing the Epic Wheel and piloting with Gabriel Park primary care clinic and with some inpatient and outpatient care management teams. As part of CCO 2.0, OHSU intends to use the Epic Wheel systemwide.

Primary Care OHSU Richmond Clinic (FQHC) has been an early adopter on many initiatives for OHSU (e.g., Collective/PreManage). For about 6 months, the Richmond clinic has been piloting universal patient screening at every visit using the a 'PRAPARE-like' screening tool. Screening occurs via paper and then a dot phrase in Epic captures needs which are then captured in the Epic flow sheet. Once needs are identified, a warm handoff occurs to CHWs or a care team member for those with behavioral health. needs From there, referrals to CBOs occur. No closed loop referrals are occurring unless the CHW specifically follows up with the CBO.

Inpatient and Outpatient care management teams are focused on testing out workflow and resource issues and calibrating the level of follow up work the SDOH screening creates. Inpatient care management teams are also testing out SDOH screening in bundled payment work for sepsis and congestive heart failure patients. Three care managers are doing the screening at each transition of care following the inpatient visit and assessing how to do the appropriate SDOH handoff to CBOs.

School of Nursing houses the Interprofessional Care Access Network, or I-CAN. Students from the Schools of Nursing, Medicine, Dentistry, Public Health, and the College of Pharmacy form interprofessional teams to help individuals and families in underserved communities address barriers to health related to SDOH. I-CAN is active in 6 neighborhoods (3 in PDX and 3 at regional campuses) and involves 34 community partners including PCPs, FQHCs, dental clinics, social service agencies, CBOs, Fire departments, etc. Faculty in residence exist in each neighborhood and the focus is on doing "pre-primary care" for high risk vulnerable populations. Workflow includes use of the "Self Sufficiency Matrix" screener and clients are screened every 12 weeks in their homes/community settings with follow up referrals coordinated with patient consent. Outcomes achieved to date: decreased hospitalizations, decrease ED visits and decreased EMS visits/calls.

Stakeholder Interview Summaries

Organization

Interview Summary

OHSU

School of Dentistry is incorporating SDOH into various areas of focus, including adding SDOH questions to the patient intake form which is completed by the patient, adding SDOH questions with prompts to the assessment in the electronic dental record allowing the dental students and providers to address social needs directly, and working with dental students and providers to address SDOH at the beginning of treatment to treat the whole person and identify barriers to oral health that might result in canceled appointments. Efforts are also focused on successfully incorporating SDOH into the curriculum for first year dental students and coordination with various social work programs to assist dental students chairside with SDOH issues. The School is also working on costs of care and access to oral health and reducing those barriers to care for low income individuals.

Key issues for SDOH screening and referral work as noted by the OHSU interviewees include, how to access an updated resource directory, Epic integration needs/challenges, and ongoing research questions/needs to track SDOH efforts/progress/promising strategies.

Key Reference Documents

Organization	Document Name
211SanDiego	CIE Toolkit: Collaboration and Cross-Sector Data Sharing to Creating Healthier Communities, November 2018
CIE Summit, April 24-26, 2019	Informal Summit notes provided by OHA staff. Available presentations & perspectives on Summit gathered from interviewees who attended.
SIREN, UCSF	<ul style="list-style-type: none">• Community Resource Referral Platforms: A Guide for Health Care Organizations, April 2019• Screening Tools Comparison, 2018 <i>(Note: SIREN website has a wealth of research, implementation tools and other and will be ongoing resource through Oregon CIE development)</i>
National Interoperability Collaborative (NIC)	Partnerships, Programs and Platforms: Addressing Social Determinants of Health through Multi-Sector Data Sharing, April 2019
Reliance, Regional Community Health Network (Project Access NOW)	Making the Case for Integration of Health Care and Social Services/Social Determinants of Health through Health Information Exchange, January 2019
Institute for Medicaid Innovation, Jan 2019	https://www.medicaidinnovation.org/images/content/2019-IMI-Social-Determinants-of-Health-in-Medicaid-Report.pdf

Key Reference Documents

Organization	Document Name
State of North Carolina (Healthy Opportunities NC)	NCCare360: Resource for State Governments to Address Social Determinants of Health
NCHIIN	NCHIIN Care Coordination Platform Onboarding Document, with support from DASH, the Robert Wood Johnson Foundation
Collective Medical	California Value Proposition: Collective and Senate Bill 1152 (functionality to support a 'Homeless Discharge Plan')
211Info	211Info Advisory Committee Presentation, April 2019
Kaiser Permanente, May 6, 2019 via PR Newswire	Kaiser Permanente Launches Social Health Network to Address Social Needs on a Broad Scale
Unite Us, Data Series Q1 2019	Medical and Social Care Network powered by Unite Us Demonstrates \$320,000 in Annualized Medicaid Savings in Under Six Months
Health Affairs, January 2019	Meeting Individual Social Needs Falls Short Of Addressing Social Determinants Of Health
Health Affairs, May 2019	Medicaid Investments To Address Social Needs In Oregon And California
Health Affairs, July 2019	To Improve Outcomes, Health Systems Invest In Affordable Housing

Vendor Comparison Tables

(from SIREN, UCSF)

Features	Aunt Bertha	CharityTracker	CrossTx	Healthify	NowPow	One Degree	Pieces Iris	TAVConnect	Unite Us
Version	Enterprise Platform	CharityTracker	CrossTx	Coordinate	PowRx	One Degree Premium	Pieces Iris	TAVConnect	Unite Us
Resource Directory									
Type	Comprehensive	Focused	Focused	Comprehensive	Comprehensive	Comprehensive	Comprehensive	Focused	Focused
Vetting	Vendor, with input on additional resources by customer, CBO, or end users	Customer	Customer	Vendor, with additional inclusion criteria suggested by customer	Vendor and customer	Vendor and customer	Customer and vendor	Customer and vendor	Customer and vendor
Maintenance	By vendor; every 180 days	By participating organizations and by network administrator, as needed	By participating organizations, as needed	By vendor; every 90 - 180 days.	By vendor; every 180 days	By vendor every 180 days for most	By participating organizations as needed and by vendor every 180 days	By vendor every 180 days	Ongoing by participating organizations or coordination center
User flagging	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Screening									
Built-in social needs screening tools	PRAPARE, AHC, and more	No	Yes	PRAPARE, AHC, WE CARE, Healthify proprietary tool, and more	PRAPARE, AHC, and more	4 domain-specific tools	Question bank by domain	Vendor-designed screening tool; PRAPARE; library of 120+ assessments	PRAPARE, AHC, Health Leads, DPP, proprietary tool; others supported
Customization	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Responsive recommendations	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Search Options									
Categories	10 major categories 300+ service types Created and uses Open Eligibility taxonomy	Custom categories and service types	Custom categories and service types	13 major categories 326 service types 121 eligibility types Open Referral interoperable	23 major categories 250 service types	9 service areas, categories 200+ granular tags Created and uses Social Services Data Standards	25 customizable categories - also by service types	Uses AIRS taxonomy	20 major categories 150+ service types Mapped to AIRS taxonomy, ICD-10 Z codes, and Open Referral Interoperable.
Search fields	Coverage area, Service Category, Free-text search, including service description, service name, provider name, etc. Additional search tool configuration.	Service category, Service provider name, Service description	Location, Service provider name, Service description	Location, Search radius, Service Category, Eligibility Category, Regional Results, Preferred Status, Network Status	Location, Search radius, Service Category, Condition algorithms	Location, Service provider name, Need, Service description, Service category, Program eligibility, Hours of operation. Additional custom search fields where relevant.	Program name, Need, Service category	Social category, Location, Service area, Eligibility criteria, and others	Service Category, Location, Search Radius, Program Eligibility, Hours of operation. Additional custom search fields where relevant.
Filters	200+ filters	2 filters	10+ filters	6 filters	11 filters	5 filters	3 filters	10 filters	10 filters
User favorites	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
End users	Staff Public	Staff Public (add-on fee)	Staff	Staff Patients (through API integration with Patient/Member portal) Public (white-labeled site)	Staff Patients	Public Patients Staff	Staff	Staff Patients (in app, web portal, and/or API integration with patient/member portal)	Staff Patients Public

Features	Aunt Bertha	CharityTracker	CrossTx	Healthify	NowPow	One Degree	Pieces Iris	TAVConnect	Unite Us
Version	Enterprise Platform	CharityTracker	CrossTx	Coordinate	PowRx	One Degree Premium	Pieces Iris	TAVConnect	Unite Us
Referral									
<i>Referral-sharing modes</i>	Print, Email	Print	Provider-facing	Print, Email, Text	Print, Email, Text	Print, Email, Text	Print, Email	Email, App	Print, Email, Text
<i>Benefit enrollment</i>	No	No	No	No	No	Yes	No	Yes	No
<i>Social service referral notification</i>	Email, Text	Email, In-application	Email	Email, In-application	In-application	Email, Text	Email, In-application	Email, In-application	Email, In-application
<i>Referral tracking</i>	Referral-sending staff Receiving agency	Receiving agency	Referral-sending staff Receiving agency	Referral-sending staff Receiving agency	Referral-sending staff Receiving agency	Referral-sending staff Patient Receiving agency	Receiving agency	Receiving agency Patient (in MyTAV app)	Senders, recipients, patients, and other patient care teams in the network.
Longitudinal case management	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Reporting/analytics									
<i>Built-in reporting</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>Custom reports</i>	On request	On request	Directly via Tableau	On request	On request	On request	On request	Directly via Looker	Via BI Tool and on request
<i>Data export formats</i>	CSV, data warehouse API	CSV	CSV, HL7, JSON	HL7, API, CSV to SFTP	On request	On request	CSV, XLS	CSV, SFTP, secure email	CSV
Languages	Built-in Google Translate with enhanced native Spanish translation; Non-machine translations for screening tools upon request	No translation at this time	Available upon request	Built-in Google Translate. Non-machine translation for screening tools upon request.	Arabic, Mandarin, Polish, Somali, Spanish included for resources. Screening tool translation upon request.	Spanish	Spanish	Spanish (available in MyTAV patient app only)	Available upon request
EHR integration									
<i>Direction</i>	Bidirectional Module	Not currently	Bidirectional Module	Bidirectional Module (directory)	Bidirectional Module	Bidirectional; EHR integration available but not implemented	Bidirectional Module	Bidirectional	Bidirectional Module
<i>Supported integration standards & interface</i>	APIs, HL7, SMART on FHIR, web services, others upon request	API in development	HL7, APIs, FHIR	HL7, APIs	HL7, vendor APIs, web services	APIs	HL7, FHIR, APIs	HL7, FHIR, X12, vendor APIs, others upon request	APIs, SMART on FHIR
SSO	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time to deploy	0-3 months	1-2 months	0-3 months	Directory: 1 month Closed-loop: 4 - 6 months	2-3 months	0-1 months	1-3 months	3 months	1-3 months

Side by Side Comparison Table

Features	Aunt Bertha	CharityTracker	CrossTx	Healthify	NowPow	One Degree	Pieces Iris	TAVConnect	Unite Us
Version	Enterprise Platform	CharityTracker	CrossTx	Coordinate	PowRx	One Degree Premium	Pieces Iris	TAVConnect	Unite Us
Cost structure	One-time build fee Monthly fee for unlimited number of users Add-ons: custom insights, EHR integration, live-chat search help	One-time build fee Per seat license Add-ons: customizations at hourly rate	One-time Integration Fees Per seat license with volume discounts	One-time fees Enterprise and network licensing	One-time fees Per seat license Other pricing: contact vendor	One-time fees Monthly fee for unlimited users	One-time implementation Annual enterprise SaaS fees	Enterprise: One-time build fee, unlimited licenses, ongoing PMPM CBOs: Low to no monthly subscription	Licensing Included: implementation costs, ongoing account management and tech support, and network growth
<i>Estimated cost for the full feature version</i>	\$3500/month for unlimited users, plus one-time onboarding fee of \$8000	\$324/user/year; volume discounts available	\$45/user/month; volume discounts available	Pricing will range based on client requirements and size; contact vendor	\$95/user/month; volume discounts available	Contact vendor	For a CBO or clinic: \$2500-5000/year For a health system + partner CBOs: \$50-125,000/year	Contact vendor	Varies based on size and license seats.
Vendor profile									
<i>Status</i>	For-profit	For-profit	For-profit	For-profit	For-profit	Non-profit	For-profit	For-profit	For-profit
<i>Founded</i>	2010	2006	2010	2013	2015	2012	2015	2011	2013
<i>Geographic reach</i>	50 states	46 states	31 states	50 states	7 states	2 states	4 states	10 states	20 states

<i>Feature Descriptions:</i>					
<i>Version</i>	The name of the version that is described in this table. When several product lines exist, the full feature version is described.	<i>Search options User favorites</i>	Can users keep a preferred list of favorite resources? Can users make comments on listings that other users can see? Can users 'send' a resource listing to another user?	SSO	Do they support single sign-on?
<i>Resource directory Type</i>	Comprehensive: the directory is intended to include all available resources in a geographical area, often drawing upon web-scraping, partnerships with existing resource directories and any lists kept by the customer's staff. Can contain one or more focused networks of active referral partners. Focused: the directory consists of the customer's partners	<i>End users</i>	Who can search for resources? Is it just the staff users, or is there a patient-facing portal that can be used via kiosk or tablet without creating an account? Is there a public portal?	<i>EHR integration Direction</i>	Can patient data and/or screening results be pulled into the platform from the EHR? Can referral data be pulled into the EHR from the platform? Is the platform available as a module inside the EHR?
<i>Vetting process</i>	Who determines if a resource is appropriate for inclusion? Possible answers: the vendor, the customer. The vendor may offer it as an optional service.	<i>Referral Referral modes</i>	How can patients see the list of referrals?	<i>Supported integration standards & interface</i>	Includes data standards e.g. HL7, FHIR and interfaces e.g. APIs
<i>Maintenance</i>	Who scans resource listings to ensure they are up-to-date? How is information updated: web searching, calling or even visiting the agency? If the vendor does it, how often is the resource verified? Can users flag resources in need of update or removal to the vendor in real time?	<i>Benefit enrollment</i>	Can patients apply for public benefits within the platform?	<i>Time to deploy</i>	How long would it take them to set up with a new client?
<i>Screening Built-in Social Needs Screening Tools</i>	e.g., PRAPARE, AHC, Health Leads, WE CARE	<i>Referral Social service referral notification</i>	How does the social service provider receive notification of a patient referral?	<i>Cost structure</i>	Do any one-time fees apply? What is the ongoing fee structure? Options: PMPM: Per member (beneficiary) per month; License: Per seat (user); Enterprise: Per entity, may encompass CBO users; Network/Region: For an entire network of entities
<i>Customization</i>	The ability to add custom screening tools/assessments.	<i>Closed-loop process</i>	Who can signal that the patient has connected with the resource?	<i>Estimated cost for the shown version</i>	See vendor profile for complete price list.
<i>Responsive recommendations</i>	Recommends resources based on responses to screening questions	<i>Longitudinal case management</i>	Is there a way to view the history of a patient's screening results/recorded needs, assistance received and interactions? Can members of the care team communicate with each other?	<i>Vendor profile Status</i>	Is the vendor a for-profit or non-profit corporation?
<i>Search options Categories</i>	How comprehensive of social needs categories? Are resources categorized by the needs addressed and services provided? How granular are the needs? Can they be customized?	<i>Reporting/analytics</i>	Does the platform have a set of reports the customer can generate? Can the customer build their own reports? What data export methods are available?	<i>Founded</i>	What year was the vendor founded?
<i>Filters</i>	How can you restrict what results are shown? We only show the number of filters; for list, see vendor profile	<i>Languages</i>	What is translated and into which languages? Note: Google Translate contains > 100 languages	<i>Geographic reach</i>	How many states does the vendor have customers in? Note that some platforms have multi-state or national customers.