

## Introduction

Our growing understanding of the interplay between medical, behavioral and social factors in maintaining and improving health has inspired many efforts to effectively link medical, behavioral, and social care in the community setting. We know that **people move between organizations as they receive care**, and, in their wake, or organizations create multiple social and medical ‘care silos’ filled with disconnected data. The current COVID-19 pandemic has made it abundantly clear that we need to improve cross-sector care now by ‘coordinating the coordinators’ and connecting social and medical data. We need to start by organizing our approach to detect and address social determinants of health (SDoH).

We have made some progress in addressing SDoH through clinical and population health efforts over the past decade, but much work remains to be done. In December 2019, as the State Innovation Model (SIM) demonstration moved toward its conclusion, the Michigan Department of Health and Human Services (MDHHS) requested that the Michigan Health Information Network Shared Services (MiHIN) convene a series of statewide SDoH workshops. The workshop series built upon the work of the Community Health Innovation Regions (CHIRs) in developing SDoH screening and Clinical-Community Linkages to enhance cross-sector care. **The ultimate goal of the workshop series was to inform a statewide SDoH Use Case that would enable SDoH data exchange** between health care organizations, community social service organizations, and other key care providers for purposes of direct care coordination as well as population health assessment and improvement.

The SDoH workshop series, conceived before the COVID-19 pandemic, has become more relevant in its wake. Disruptions in the fabric of everyday life—unemployment, school closures, serious illness—have exposed the real-life consequences of existing health and social disparities and resulted in an increased need for social outreach and social services support in communities across Michigan. There is an urgent need to invest in improving SDoH treatment to address the current and future needs of Michiganders.

Sponsored by MDHHS and led by MiHIN, the SDoH Workshop Series commenced in March 2020. The SDoH Workshop Series had the following objectives and deliverables.

### *SDoH Workshop Series Objectives*

1. To convene multi-sector stakeholders across Michigan to understand the current environment, regional priorities, concerns and barriers related to SDoH data collection, exchange and use
2. To identify preferred technologies for normalizing and categorizing SDoH data in order to promote the collection and use of data, the exchange of data across organizations, and to support the facilitation of payment for social risk data and intervention activities
3. To foster collaboration among stakeholders in an effort to share knowledge, build efficiencies, and advance our collective efforts in addressing health related social needs

### *SDoH Workshop Series Deliverables*

1. Development of an executive brief outlining workshop findings and recommendations
2. Enhanced SDoH Use Case

## Accomplishments

### Attendees and Participation

MiHIN hosted three virtual workshops on March 31, May 26 and June 23, 2020. 49 organizations and 12 sectors were represented, with an average of 101 stakeholders attending each workshop. Participants were encouraged to contribute their unique organization and community perspectives by participating in polls, responding to pre- and post-workshop homework, and voicing their feedback and questions during and between workshops. Figure 1 depicts the average ratio of sectors represented in the three workshops. More information on attendees and their organizations can be found in Appendix A.

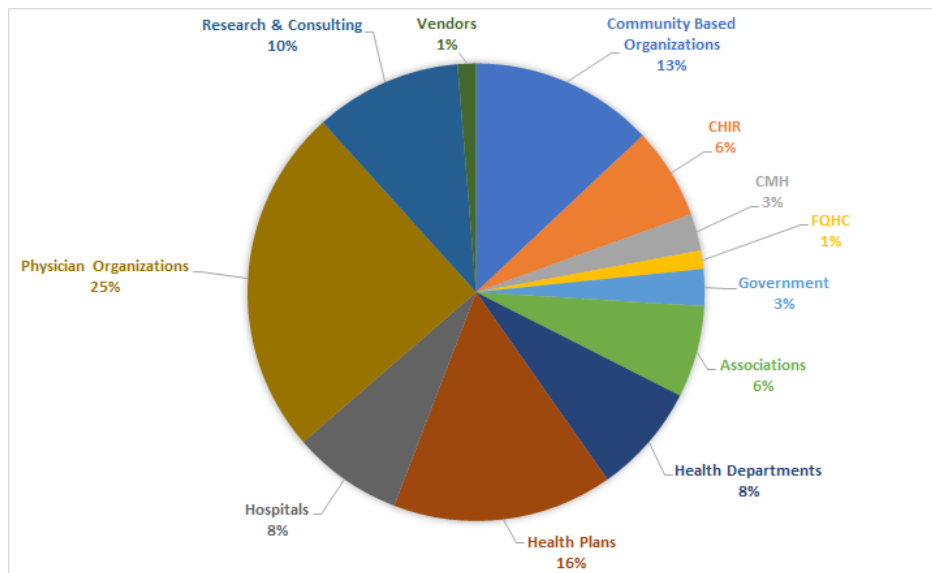


Figure 1. Workshop Participants by Affiliation

## Topics

Workshop topics were chosen to expose participants to the broad range of issues related to cross-sector data exchange and data interoperability. Realizing that some participants were highly experienced in health information exchange (HIE) while others had very limited knowledge, topics were carefully sequenced. The first workshop introduced a range of topics, highlighting basic definitions and principles of ethical data use and proposed a set of data justice principles to guide this work. The second workshop featured a discussion of MiHIN’s long-term vision for the creation of a technology infrastructure that enables standardized SDoH data collection and exchange to support several use cases: care coordination, social interventions, community health improvement, population health management, risk adjustment and research. Presenters introduced the concept of Community Information Exchange as a means of bringing together community organizations and health care stakeholders to co-design scalable local solutions using MiHIN shared services and solutions. Presenters proposed three phases of work to standardize SDoH screening data (phase 1), diagnosis data (phase 2), and treatment/intervention data (phase 3), with the goal of working collaboratively with the national Gravity Project/HL7 initiative. The second and third workshops also went into more depth to explore a series of operational issues related to the exchange of SDoH screening data; standardizing content, normalizing data, and formatting data to support exchange between current and ‘nontraditional’ clients (community-based organizations).

Before each workshop, we sent prospective and preregistered attendees ‘homework’ assignments. Before the first session, we asked about the current status of SDoH screening and data use in their organizations and their perceptions about the ethical use of data and

goals for SDoH data exchange. Before the second session, we asked participants to rank their priorities for SDoH domains to address in the first phase of standardization work; Before the third session, we surveyed participants' current knowledge of and experiences in developing core elements of Community Information Exchanges. We believe that these preparatory exercises contributed to the success of the workshop series, as they led to several 1:1 conversations with participant organizations as well as robust discussions between presenters, MiHIN staff and participants during workshop sessions.

For added detail on content and topic sequencing, please refer to the workshop slide decks, included in Appendix B.

| Workshop #1   | Workshop #2   | Workshop #3  |
|---|---|--|
| <ul style="list-style-type: none"> <li>•Background &amp; Objectives of SDoH Workshop Series</li> <li>•Defining SDOH</li> <li>•Understand stakeholder current environment</li> <li>•The ethical uses of SDoH data</li> </ul> | <ul style="list-style-type: none"> <li>•SDoH Data Justice Principles</li> <li>•MiHIN's SDoH Vision</li> <li>•Importance of normalizing SDoH data</li> <li>•Domain inconsistencies and complexity</li> </ul> | <ul style="list-style-type: none"> <li>•Consensus on SDoH Data Justice Principles</li> <li>•SDoH First Phase Priority Domains</li> <li>•Intro. to Community Information Exchange</li> <li>•Intro. to Diagnosis and Treatment Data</li> </ul> |

Figure 2. Workshop Topics

## Stakeholder Support

The workshop series confirmed that key stakeholders are highly supportive of MiHIN's vision for a comprehensive solution for SDoH data exchange and are committed to this work moving forward. Participants uniformly agreed that the work carried out by the five SIM CHIRs on enhanced SDoH screening and clinical-community linkages represents a real step forward in connecting medical and social care providers. The majority were also in agreement that the creation of a full Community Information Exchange (CIE) would be an important next step that will require additional effort on the part of all stakeholders, in particular, community-based organizations (CBOs) that have not traditionally participated in shared infrastructure development work.



In a post-workshop survey, 100% of respondents stated that they believe the SDoH Use Case would benefit their populations, and every respondent also stated that they would participate in follow-up SDoH workshops.

More importantly, during and after the workshops several organizations initiated conversations with MiHIN staff regarding onboarding for the SDoH Use Case and more in-depth collaboration to support development and implementation of local CIEs to build upon the foundation of the CHIRs. Here are a few highlights from these conversations.

- Currently, MiHIN has 8 organizations that are onboarding for SDoH, 17 organizations that are in production, and 1 organization that has shown interest.
- MiHIN is collaborating actively with major health care payers, including BCBSM, Priority Health and Medicaid plans, to incentivize enhanced sharing of SDoH screening data.
- Several large regional or statewide community-based organizations, including United Way, Michigan 2-1-1, and the Area Agencies on Aging Association of Michigan, are interested in participating in a statewide consortium to advance the CIE concept.
- The leaders of two prominent health care convening organizations, Marianne Udow-Phillips of the Center for Health & Research Transformation (CHRT), and Tom Dalhborg, Executive Director, and Steve Williams, Executive Director Emeritus, of the Michigan Center for Clinical Systems Improvement (MiCCSI), have expressed strong support for the creation of a statewide 'SDoH consortium' to guide efforts to build scalable community-medical partnerships to develop community-integrated health networks.
- This last conversation has moved forward rapidly, with active collaboration between CHRT and Mi-CCSI on the broad steps in creating a consortium that could assist CBOs and medical care organizations in developing sustainable partnerships and governance structures to support cross-sector care. This preliminary work led in turn to our Recommendation #4 below.

## Key Takeaways

### *Takeaway #1*

The majority of participants (over 60%) stated that their organizations have standard protocols in place for collecting SDoH data and a system in place for SDoH outcome tracking. While most have protocols and systems in place, the systems vary widely across organizations and are for the most part 'siloed' and unable to interoperate with other systems and care partners.



### *Takeaway #2*

In addition to exchanging SDoH data at the individual patient/client level for care coordination purposes, it will become increasingly important to share aggregated and de-identified SDoH data across communities and with public health officials, social services organizations, health payers, and researchers to improve our understanding of population health needs, make informed decisions on enhanced service delivery, and to produce social care models that can better support clinical/community linkages.

### *Takeaway #3*

A statewide SDoH data strategy must go beyond the simple exchange of SDoH screening data. The national Gravity Project collaborative has described a conceptual framework for SDoH data standards (see Figure in Appendix C) that involves collection, exchange and use of three defined types of SDoH data – Screening, Diagnosis and Intervention – all of which are necessary to enable accurate identification and management of social problems. Standards for coding and exchange will be needed for each type of data.

### *Takeaway #4*

In June 2020, the Michigan Medicaid Program released requirements for Medicaid health plans to collect SDoH data related to the following domains: Food, Housing, Education, Utility Assistance, Employment, Stress, Anxiety and Depression. The first four domains listed align with the domains identified as priorities by most workshop participants. Stress, Anxiety, and Depression may be considered behavioral health conditions, more so than SDoH domains.

### *Takeaway #5*

Participants agreed that the Gravity Project Data Justice Principles (Appendix D) are consistent with the broad goals and specific purposes for SDoH data collection and exchange, and that they can provide a strong foundation for building multi-sector trust in a statewide SDoH Use Case. Workshop participants reached consensus that these principles should be followed by all participants in the development and implementation of the SDoH Use Case.

### *Takeaway #6*

There was widespread interest by participants in the further development of Community Information Exchanges (CIEs). A CIE is a technology and collaboration infrastructure that facilitates care coordination between social service, health care and other organizations, as



well as population health planning, by enabling broad sharing of patient-level information. A fully developed CIE features both ‘human infrastructure’ (active engagement, collaboration, and shared governance between community members, care providers, and stakeholders) and ‘technical infrastructure’ (the information technology platform(s) and data exchange standards that support data sharing across organizations).

The SIM CHIRs have each taken some steps toward development of local CIEs, and some POs have implemented pieces of the technical infrastructure. In our survey assessing participants' CIE readiness, we found that:

- 94% of respondents have some form of community resource directories in place
- 36% (essentially the CHIRs) have closed-loop referral systems in place, some are working on it, others are less far along
- Most respondents have longitudinal care tracking in place, 33% are actively working on it
- Half (50%) have the ability to analyze SDoH screening and referral data, with 42% actively working on it
- Only two respondents report that they have cross-sector data exchange ability to and from an EMR. Organizations are very interested in this capacity but have not yet implemented it.

## Recommendations

*Recommendation #1: MiHIN Uses a Phased Approach for SDoH Use Case Design and Implementation.*

To remain aligned with developing national standards for social information exchange, MiHIN proposes to use the Screening/Diagnosis/Treatment conceptual framework employed by the Gravity Project collaborative. MiHIN recommends that the SDoH Use Case be developed in three distinct phases of data exchange design work: (1) SDoH screening; (2) social problem diagnosis; and (3) social problem treatments and interventions. In each phase of work, consideration will be given to the foundational, structural, semantic and organizational interoperability of the specific data to be coded and exchanged.







### *Recommendation #2: MiHIN Employs Data Mapping Constructs to Normalize Screening Results for Each SDoH Domain*

Although a statewide ‘standard’ SDoH screening instrument would simplify data collection, exchange and aggregation, communities and organizations have consistently preferred the flexibility of custom local screening tools that they believe are a better solution to address local needs and priorities. MiHIN proposes to continue to support multiple SDoH screening options by developing mapping tables to ‘normalize’ screening responses from different questionnaires. Normalizing SDoH data requires that semantic, threshold and temporal consistency is maintained between “yes”/”no” responses to different screening questions within each domain (for example, food insecurity). Maintaining consistency is particularly difficult for complex and heterogeneous domains such as housing, and MiHIN will need to work with participating organizations to develop and approve operational protocols to normalize responses to enable data exchange between organizations using different SDoH screening questionnaires.

### *Recommendation #3: MiHIN Normalizes Priority SDoH Domains to Start*

As mentioned above, MiHIN will need to work with participating organizations to develop and approve operational protocols to normalize responses within each SDoH domain. MiHIN recommends that this normalization process be pilot tested in a first wave of work to standardize the SDoH domains most highly prioritized by stakeholders; Food, Housing, Transportation, Utility Assistance, Mental Health, health care Finances and Employment, followed closely by Education and Social Isolation. In our pre-workshop homework, the majority of respondents told us that Food, Housing, Transportation, Utility Assistance, and health care Finances should be MiHIN’s top priority. To align with state Medicaid priorities and requirements for health plans, we’ve included Employment in the first wave.

### *Recommendation #4: MDHHS Supports the Concept and Development of a Statewide Social Health Consortium and Resource Center*

The development of local CIEs will require that CBOs become more equal and effective partners to medical organizations. This can be accomplished by following the example set by the medical sector in the development of provider organizations (POs), which link many health care practices, providers, and hospitals into a functional unit through a common human and technology infrastructure. The development of POs was greatly facilitated by enhanced HIE capacity. Drawing from the collective experience of several communities across the U.S., we support the development of social care provider organizations: (“Social POs”) that can link local CBOs into a functional unit through a common infrastructure, the Community Information Exchange (CIE). The Social PO can provide structure, local governance, and shared resources to enable and sustain more effective cross-sector care for individuals, and the enhanced data exchange made possible through linkage of HIE and CIE can support population health use cases. The SIM CHIRs provide an early proof-of-concept for Social POs, but to this point CHIRs have engaged only a limited number of CBOs and (to our knowledge) have not yet developed sustainable models for governance or local extension.







**A fully-developed CIE will consist of 'human infrastructure'** (Social PO) that provides active engagement, collaboration and shared governance between community members, care providers and stakeholders, **and 'technical infrastructure'** that provides the information technology platform(s) and data exchange standards that support data sharing across organizations.

MiHIN proposes to develop standards to support the technical infrastructure--but providing assistance to communities in developing the Social PO/ human infrastructure is beyond MiHIN's scope.

**MiHIN supports the concept and development of a statewide Social Health Consortium and Resource Center to facilitate adoption of a common vision and operating model for cross-sector service delivery.** The Consortium would engage community (CBOs and community leaders) and medical/ behavioral care (organizations and payors), as equal partners with MiHIN, MDHHS, and public health as committed participants. Consortium members would partner with national experts and participate in national collaboratives to develop and implement best practices as they emerge. The Consortium would be in a position to develop a blueprint (or to update the Michigan Blueprint for Health) to guide communities in developing local CIE capacity, support statewide standards for data exchange, and partner with MiHIN on technical development needs.

#### *Recommendation #5: MiHIN Continues SDoH Stakeholder Engagement*

Based on participants' survey responses and multiple additional one-on-one conversations, it is apparent that stakeholders have a strong interest in continuing their active role in the development of MiHIN's SDoH Use Case. The MiHIN SDoH team has already identified a high level of interest from payors and large CBOs in collaborative work to standardize methods for social diagnosis and intervention data collection and exchange. We expect that we will need to convene both small group meetings and large-scale workshops to extend the SDoH Use Case in this direction.

It is also apparent that we need to more actively engage important community-side collaborators. Community-based organizations (CBOs) were clearly underrepresented in this workshop series; although CBOs represented 20% of invitees, they made up only 7% of attendees. We strongly support additional outreach efforts to engage large (statewide) and smaller (regional or local) CBOs and have already begun that process.

#### *Recommendation #6: MDHHS Continues to Support SDoH Data Sharing Strategy Through Existing Federal Match Funds*





The comprehensive solution for SDoH data exchange outlined above will require additional waves of multi-sector collaborative work with local, state and, and national stakeholders. MiHIN requests MDHHS support of a Medicaid MMIS APD activity called the **Smart Communities & SDOH project** (up to \$12 M/year for two years which requires \$1.2M/year for match). Our vision would be to build upon the SIM regional expertise, but expand into additional geographies such as Detroit, Saginaw, GR, etc. with a greater focus on health equity & maternal child health to better support the SafetyNet population. We are also looking for a way to incorporate the national SDOH work related to the standardization of the data championed and supported by the SDoH Workshop stakeholders, by the national group called the GRAVITY project and perhaps the National Association of Community Health Centers (NACHC). Lastly this will support and leverage the existing statewide HIE infrastructure and adapt to include CIE functions.

## Conclusion

Multi-sector stakeholders across Michigan convened to understand the current environment, regional priorities and, concerns and barriers related to the collection, exchange, and use of SDoH data. Preferred technologies were discussed that would be used for normalizing and categorizing SDoH data to promote the collection and use of data, the exchange of data across organizations, and to support the facilitation of payment for social risk data and intervention activities.

Stakeholders collaborated to share knowledge, build efficiencies and advance the collective efforts in addressing health-related social needs. While this work was beneficial, more discovery needs to be done to identify the technical workflow that is necessary to bring this to fruition. To address the intensified SDoH needs, in combination with the needs of COVID, the value that the SDoH CIE can bring to the stakeholders should ideally have immediate action and needs support. MiHIN needs support for this work so it can continue the progress already made by SIM and potentially lead the nation in SDoH data exchange.

Our vision for the future of cross-sector care and population health improvement in Michigan is built upon the premise that local communities can self-organize and effectively partner with medical organizations to develop **Community Integrated Health Networks**, and that MiHIN can assist networks by creating a statewide **Community Information Exchange** technology infrastructure that will provide the scalable technical infrastructure necessary for their success.

With the State's support and the continued involvement of key stakeholders, we feel strongly that our recommendations will advance the exchange of SDoH data across the state and we look forward to advancing this work.



## Appendix A - Workshop Attendance Report

| First Name | Last Name      | Organization   |
|------------|----------------|--|
| Mark       | Ackerman       | UM School of Information                                   |
| Ashley     | Agnew          | Ascension Medical Group                                    |
| Louis      | Albrant        | MDHHS  |
| Debbie     | Aldridge       | Community Connections Hyb and Benzie Leelanau Health Dept. |
| Brian      | Allison        | Michigan Medicine  |
| Beverly    | Ann            | Aetna  |
| Angie      | Applewhite     | University of Michigan Medicine                            |
| Susan      | Armbruster     | Physician Health Plan                                      |
| Yasir      | Bakko          | OPNS   |
| Tasha      | Ball           | United Way for Southeastern Michigan                       |
| Erin       | Barrett        | District Health Department #10                             |
| Brad       | Barron         | MDHHS  |
| Susan      | Bartys         | Great Lakes Physician Organization                         |
| Liz        | Batey          | HVPA   |
| Nancy      | Baum           | Livingston – Washtenaw CHIR                                |
| Dawn       | Beaird         | BCBSM  |
| Almda      | Bencomo        | Ascension  |
| Kathy      | Bouchard-Wyant | Sparrow  |
| Dan        | Boyle          | UPHP   |
| Alica      | Brace          | MPHI   |
| Gina       | Buccalo (Dr.)  | United Retiree Medical Benefits Trust                      |
| Brian      | Bunte          | Ascension Medical Group                                    |
| Ellen      | Bunting        | Michigan Data Collaborative                                |
| Mary       | Burns          | Covenant Health Partners                                   |
| Ayse       | Buyutur        | Livingston – Washtenaw CHIR                                |
| David      | Bye            | BCBSM  |
| Tashia     | Carter         | Jackson CHIR   |
| Tina       | Champion       | Answer Health  |
| Jaye       | Clement        | Henry Ford Health System                                   |
| Katherine  | Commey         | MDHHS  |
| Rebecca    | Copeland       | University of Michigan Medicine                            |
| Leah       | Corneil        | Michigan Medicine  |
| Ryan       | Cowmeadow      | Area Agencies on Aging Association of Michigan (AAAAM)     |
| Chavie     | Cramer         | Henry Ford Allegiance Health                               |
| Thomas     | Dahlborg       | Mi-CCSI  |
| Aarti      | Dave           | MDHHS  |
| Crystal    | DeCoster       | Answer Health  |
| Kelley     | Dehn           | TMF Health Quality Institute                               |
| Consultant | DeJonge        | Medical Advantage Group (CIPA & PMC)                       |

|             |           |   |
|-------------|-----------|---|
| Patty       | DeLoof    | United Healthcare                                   |
| Xavier      | Endress   | Greater Flint Health Coalition, Genesee CHIR        |
| Dawn        | Fisher    | District Health Department #10                      |
| Mary        | Fisher    | Michigan Medicine                                   |
| J.          | Fletcher  | HVPA  |
| Jamie       | Forbes    | Saginaw Transit Authority Regional Services (STARS) |
| Steven      | Frazier   | MidMichigan Health                                  |
| Li          | Fusen     | IHA   |
| Guy         | Gauthier  | Priority Health                                     |
| Dante       | Gray      | Aetna   |
| Kristen     | Gray      | Michigan Medicine                                   |
| Joseph      | Guibord   | HVPA  |
| Laurie      | Gustafson | Henry Ford Allegiance Health                        |
| Heidi       | Gustien   | AAANM   |
| Lynn        | Hagan     | Molina Healthcare                                   |
| Kim         | Harrison  | Priority Health                                     |
| Yasmine     | Hassan    | BCBSM   |
| Jessica     | Hemingway | Genesys PHO   |
| Christina   | Hildreth  | Metro Health PHO                                    |
| Hanna       | Hillier   |   |
| Kimberley   | Holbrook  | Aetna   |
| John        | Holiday   | Genesee Health System                               |
| Jeff        | House     | Mott Children's Health Center                       |
| Jill        | Howard    | Meridian Health Plan                                |
| Christopher | Jackson   | MDHHS   |
| Julia       | Jackson   | TMF Health Quality Institute                        |
| Adria       | Jackson   | City of Detroit Health Department                   |
| Joanne      | Jarvi     | Jewish Family Services of Washtenaw County          |
| Colene      | Johnson   | MDHHS   |
| Jennifer    | Kasper    | Meridian Health Plan                                |
| Maureen     | Kirkwood  | Health Net of West Michigan                         |
| Suzie       | Knoff     | MidMichigan Health                                  |
| Laurie      | Kopack    | United Way for Southeastern Michigan                |
| Brett       | Koretzky  | Henry Ford Health Plan                              |
| Sharon      | Kraydich  | The Physician Alliance                              |
| Bob         | Kreha     | Brightstreet Group                                  |
| P.          | Kruger    | Blue Cross Complete of Michigan                     |
| Lori        | Kunkel    | Greater Flint Health Coalition, Genesee CHIR        |
| Lauren      | La Barge  | Michigan Medicine                                   |
| Nina        | Lavi-Hoke | TMF Health Quality Institute                        |
| Mark        | Lazar     | MedNetOne   |
| Fusen       | Li        | IHA   |

|          |             |   |
|----------|-------------|---|
| Emily    | Llore       | Health Department of NW Michigan  |
| Julie    | Lowry       | Henry Ford Allegiance Health  |
| June     | Ludy-Klink  | Pine Rest   |
| George   | Lundin      | Lake Huron PHO  |
| Lori     | Lynn        | Mel Trotter Ministries  |
| Alicia   | Majcher     | Michigan Institute for Care Management and Transformation, UM Medical Group |
| Melissa  | Major       | Meridian Health Plan  |
| Jamie    | Mallory     | Wexford PHO   |
| Jeremy   | Maney       | Great Lakes Physician Organization  |
| Lee      | Marana      | UPHP  |
| Lisa     | Mason       | Greater Detroit Area Health Coalition                                       |
| Kelly    | Matter      | Health Dept. of NW Michigan   |
| Mindy    | Matthews    | Affinia Health Network  |
| Ewa      | Matuszewski | MedNetOne   |
| Michelle | Maxim       | IHA   |
| Sandy    | McKenna     | Molina Healthcare   |
| Michael  | Mclean      | Meridian Health Plan  |
| Anu      | Mehta       | Beaumont ACO / Beaumont Medical Group                                       |
| Dan      | Meiste      | Metro Health PHO  |
| Sally    | Mellema     | District Health Department #10  |
| Joseph   | Miller      | Henry Ford Allegiance Health  |
| Erin     | Mobley      | The State of Michigan   |
| Jennifer | Morse       | Central Michigan Health Department  |
| Jeff     | Morse       | Merit Informatic Solutions Consulting LLC                                   |
| Emily    | Mueller     | United Way for Southeastern Michigan  |
| Pat      | Murray      | Blue Cross Complete of Michigan   |
| Jenifer  | Murray      | Northern MI   |
| Patrick  | Murray      | Blue Cross Complete of Michigan   |
| Cathie   | Nicholson   | TMF Health Quality Institute  |
| Lisa     | Nicolau     | Northern Physician Organization   |
| Cherie   | Nyhuis      | Medical Advantage Group (CIPA)  |
| Jill     | Nylander    | Legal Services of Eastern Michigan  |
| Ashleigh | Palmer      | MidMichigan Health  |
| Kate     | Pearson     | Metro Health PHO  |
| Alex     | Plum        | Henry Ford Health System  |
| Jennie   | Pollack     | 211 Michigan  |
| Kayla    | Pung        | MidMichigan Health  |
| Michael  | Ramsey      | Muskegon  |
| Jennifer | Richardson  | Priority Health   |
| Michelle | Roberts     | Molina Healthcare   |
| Kenyata  | Rogers      | Aetna   |

|          |             |  |
|----------|-------------|--|
| Heather  | Rye         | Michigan Medicine                                  |
| Karly    | Saez        | Medical Advantage Group (PMC)                      |
| Matt     | Samocki     | MiHIA  |
| Vinita   | Saran       | Molina Healthcare                                  |
| Lee      | Schultheiss | Integrated Health Partners                         |
| Amy      | Schultz     | Jackson Health Network                             |
| Ashley   | Schwartz    | McLaren Physician Partners                         |
| Jessica  | Serman      | UPHP   |
| Ellyn    | Serra       | Northern Physician Organization                    |
| Vivian   | Shearer     | Health Department of NW Michigan                   |
| Emily    | Shunatona   | TMF Health Quality Institute                       |
| Karolina | Skrzypek    | BCBSM  |
| Sarah    | Slocum      | Altarum Institute                                  |
| Kirk     | Smith       | Greater Flint Health Coalition; Genesee CHIR       |
| Ryan     | Smith       | CMS  |
| K        | Snyder      | UAW Retiree Medical Benefits Trust                 |
| Mark     | Socks       | Henry Ford Allegiance Health                       |
| Jessica  | Steinhart   | Ascension  |
| Jane     | Sundmacher  | Northern MI CHIR                                   |
| Faiyaz   | Syed        | Michigan Primary Care Association                  |
| Clare    | Tanner      | MPHI   |
| Karin    | Teske       | University of Michigan Medicine                    |
| Myra     | Tetteh      | BCBSM  |
| Sharon   | Theut       | United Healthcare                                  |
| Blane    | Travis      | Metro Health PHO                                   |
| Janee    | Tyus        | Michigan Community Health Worker Alliance (MiCHWA) |
| Claire   | Voorhies    |  |
| Susan    | Vos         | Mi-CCSI  |
| Marie    | Wendt       | Great Lakes Physician Organization                 |
| Forrest  | White       | Altarum  |
| Beatriz  | Whitmore    | Integrated Health Partners                         |
| Emily    | Williams    | UnitedHealthcare                                   |
| Steve    | Williams    | Mi-CCSI  |
| Michael  | Wilson      | HVPA   |
| Shannon  | Wilson      | Priority Health                                    |
| Pam      | Wrafle      | Sparrow  |
| Lauren   | Yaroch      | Ascension St. Mary                                 |
| Terry    | Young       | Meridian Health Plan                               |
| Trevor   | Youngquist  | MDHHS  |
| Daniel   | Zajac       | BCBSM  |
| Michael  | Zaroukian   | Sparrow  |



## Appendix B - Workshop Slide Decks



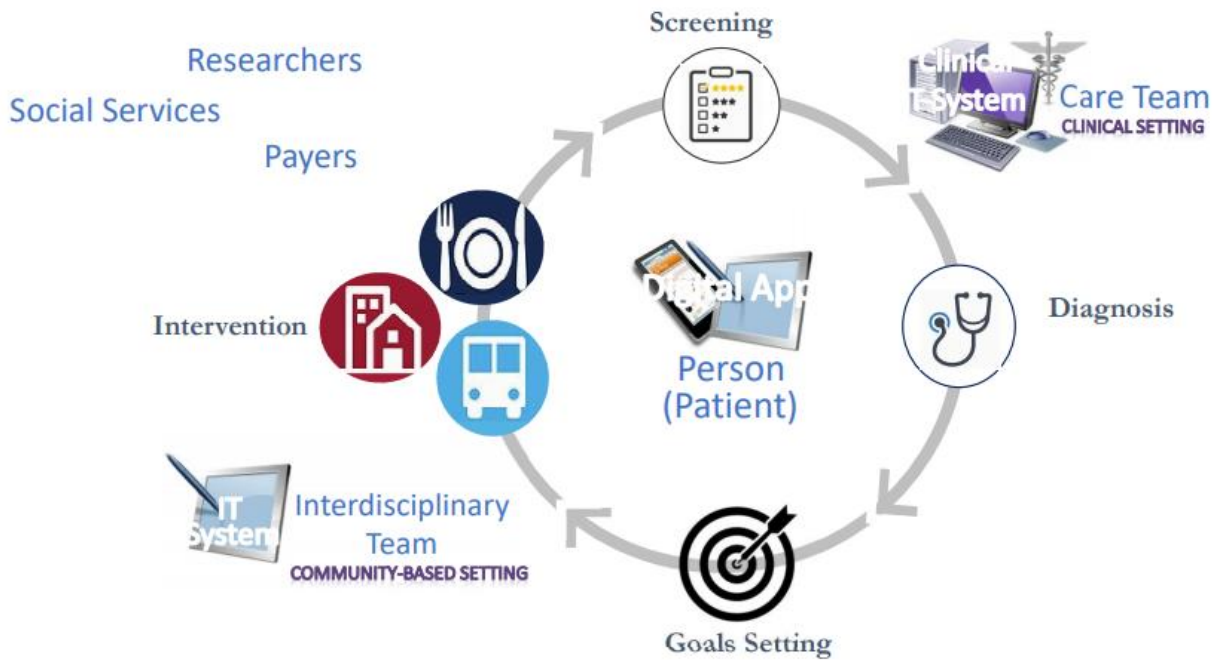
To interact with the slide deck, double-click the image above and press Enter to run the slide show.





## Appendix C - Gravity Project Conceptual Framework for SDOH Data Collection, Exchange and Use

### Conceptual Framework



**GOAL:** **data-level interoperability** by enabling electronic documentation and exchange of SDOH data among all relevant users of data.

Source: Gravity Project HL7 Presentation

## Appendix D - Gravity Project Data Justice principles



### COMMUNITY AND PATIENT PRINCIPLES FOR ELECTRONIC HEALTH INFORMATION EXCHANGE AND DATA STEWARDSHIP

March 19, 2020<sup>1</sup>

Electronic health information exchange and technology can improve health outcomes, empower people to participate actively in their care, generate research data to improve population health and, and improve the effectiveness of our health system and. People and communities need the benefits to individual and population health that electronic health information exchange and technology can achieve. We need the better health care outcomes for individual patients; the better decision making and care coordination among doctors and patients; the greater engagement of patients and families in their care. We need the better public health outcomes; the improved quality, safety, and, and efficiency of health care; the integration of data on social and environmental determinants of health; the reduction of unnecessary care and costs. We need the deeper, more comprehensive understanding of individual and population health that electronic health information exchange can provide.

People and communities also want the better privacy and security of health information that health information technology can provide. Comprehensive privacy and security protections and fair information practices, in turn, engender the public trust necessary to adopt health information technology widely and achieve the benefits of electronic health information exchange for all.

The nine principles below are core expectations and minimum criteria that should govern the design and implementation of health information exchange and technology nationwide. Individuals and communities will use these principles to benchmark and evaluate efforts to

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<sup>1</sup> These principles are based upon "[Consumer and patient principles for electronic health information exchange in California](#)" (June 21, 2010), a set of consensus principles developed by Consumers Union and 22 other diverse organizations representing the needs and perspectives of communities and people across California and the nation.



implement electronic health information exchange and technology. We will also use these principles to evaluate whether policymakers and providers ensure the requisite public transparency and trust necessary to succeed. We urge policymakers, providers, technology developers, and other stakeholders to adopt and use these nine principles as well.

These principles are interdependent, and the benefits, effectiveness, protections, and balance of any one may depend in significant part upon one or more other principles.

### **PRINCIPLES**

**i) IMPORTANT BENEFITS FOR INDIVIDUAL HEALTH:** Electronic health information exchange and technology should be designed and used to improve individual health care and its quality, safety, and efficiency. Patients should have ready and complete electronic access to their health data as well as relevant tools and educational resources, in their primary or preferred languages, to make meaningful use of that information. The technology should facilitate active engagement of patients in their health care, and engagement of family members and others as the patient chooses or law provides. It should enable full coordination of the patient’s care among diverse providers and systems. It should enhance the privacy and security of the patient’s health information and reduce costs.

**ii) IMPORTANT BENEFITS FOR POPULATION HEALTH:** Electronic health information exchange and technology should also be designed and used to improve health for the public and communities at large, such as promoting healthy environments and preventing unhealthy environments; reducing and preventing chronic diseases, epidemics, and health disparities; promoting patient safety and preventing medical errors; measuring and reporting the quality and performance of providers and facilities, and the comparative effectiveness of treatments; and reducing the cost of health care.

**iii) INCLUSIVITY AND EQUALITY:** All people should have full and equal use of electronic health information exchange and technology and their benefits, including underserved low-income communities, communities of color, people speaking primary languages other than English, people with disabilities, seniors and youth, immigrant residents, and rural and inner-city communities.

**iv) UNIVERSAL DESIGN, ACCESSIBILITY AND INTEROPERABILITY:** Electronic health information exchange and technology should be designed and built to meet the diverse needs of all people and communities from the outset, without barriers or diminished function or quality for some. Universal design anticipates and accommodates, for example, the differing needs of older people and younger people; of people from diverse cultures and communities and the need for cultural competency; of people who use diverse languages at



home and the need for linguistic competency and translation; of people with diverse abilities and disabilities; of people across the range of income levels; of people across the range of literacy in reading, health care, and electronic technology. Different systems and different patients and providers should interconnect easily.

**v) PRIVACY AND SECURITY:** Health information exchange and technology must promote trust and protect the privacy, security, confidentiality, and integrity of health data. Strong privacy and security policies should be established to accomplish these ends, which are then supported by the technology necessary to implement and enforce them. To this end, health information exchange and technology should be further governed by the data stewardship rules and fair information practices specified in Appendix A, and sufficient security safeguards should protect all health data against such risks as loss or unauthorized access, destruction, use, modification, or disclosure. Both policy and technology should incorporate innovations that can enhance individual privacy and security and address new risks.

**vi) PREVENTING MISUSE OF HEALTH DATA:** Electronic health information exchange and technology should protect against misuses of health data, including the use of health data to deny or restrict health care or insurance coverage; restrict or deny credit or other financial benefits; engage in unsolicited marketing to patients and consumers; restrict or deny employment or housing; and deny or restrict a patient's rights under the law, including a patient's rights in matters of law enforcement, national security, and immigration enforcement.

**vii) PARTNERSHIP AND HIT LITERACY:** Electronic health information exchange and technology should connect patients, providers, public health officials, and consumers as partners in personal and public health care. Such partnership requires that patients and consumers be informed in their primary languages about how to use health information exchange and technology well, and about patients' rights, remedies, and responsibilities.

**viii) ACCOUNTABILITY:** Entities that collect, access, or use health data, and the governmental agencies that oversee them, must be held accountable for realizing the benefits of health information exchange for all people and communities.

**ix) ENFORCEMENT:** Entities that collect, access, or use health data, and the governmental agencies that oversee them, must be held accountable for enforcing the protections of health information exchange for all people and communities. Sufficient resources and adequate legal and financial remedies must exist to address breaches or violations. The



benefits and protections of health information exchange are public goods, and enforcement proceedings should be transparent and public.

## **SPECIFIC PRINCIPLES FOR PRIVACY AND SECURITY OF HEALTH INFORMATION**

Under principle 5 above, Privacy and Security, health information exchange and technology should be further governed by the following data stewardship rules and fair information practices.

**5(1) OPENNESS AND TRANSPARENCY:** All data stewards should make their policies and practices regarding health information open and transparent to patients and to the public generally. Data stewards should inform individuals about what personal health information exists about them, for what purpose or purposes it may be used, who can access and use it, and who retains it. Data stewards should also maintain and provide individuals with corresponding audit trails.

**5(2) COLLECTION LIMITATION:** Personal health information should only be collected for specified purposes, should be obtained by lawful and fair means, and, where possible, with the knowledge and consent of the data subject.

**5(3) PURPOSE SPECIFICATION AND MINIMIZATION:** The purposes for which personal health data are collected should be specified at the time of collection, and only the information reasonably necessary for those purposes should be collected.

**5(4) DATA INTEGRITY AND QUALITY:** All personal health data collected should be relevant to the purposes for which they are to be used and should be accurate, complete, and current. Accuracy in identifying both a patient and his or her records with little tolerance for error is an essential element of health information exchange. There must also be transparent mechanisms to help patients and organizations to correct or “clean” their data in the event that errors or omissions are discovered.

**5(5) USE AND DISCLOSURE LIMITATION:** Personal health information should be used, exchanged, or disclosed only for the purposes specified, and only the information needed to accomplish the purpose should be used, exchanged, or disclosed. Data stewards should immediately notify patients of breaches of privacy, security, or these limitations regarding their personal health information, and comply with all laws regarding such breaches.



**5(6) INDIVIDUAL PARTICIPATION AND CONTROL:** Each entity that controls, accesses or uses personal health data should inform an individual upon request whether it has personal health information relating to the individual. Each individual has the right to obtain from the entity a copy of the individual’s personal health data within a reasonable time (at no or minimal charge), and in a form and language that the person can readily understand; if there are legal reasons why a copy cannot be provided, the individual has a right to know why the request was denied and to appeal the denial. Each individual has the right to challenge the collection, content, retention, use or disclosure of personal health information relating to them, including the right to have the particular information corrected, completed, amended, omitted, or expunged.

**5(7) LOCAL CONTROL:** Personal health information should remain in the control of the patient and the physicians and institutions that are directly involved with his or her health care. Local control also builds upon existing infrastructures (augmented as necessary to adhere to these principles, to ensure interconnection and interoperability, and to incorporate innovations), so that we may realize the benefits of health information exchange more quickly.

*Source: Based upon Markle Foundation/Connecting for Health’s Common Framework of Policy Principles and Technology Principles (2006).*