Social Determinants of Health Data Exchange for Chronic Disease Prevention Initiative

Workgroup Meeting #5: Review and Discuss Use Case 2
Welcome

Thank you for joining CDC’s Social Determinants of Health (SDOH) Public Health Use Case Workgroup for Chronic Disease Prevention meeting!

Due to the large number of attendees, participants are muted upon entry.
- This call is being recorded; recording will be available on the Workgroup Confluence page following the meeting.

You are encouraged to actively participate in the discussion using the Zoom chat feature (bottom of the Zoom Meeting window). You can also use the Reactions feature to raise your virtual hand and ask a question live.

Please send all chats to Everyone.

We will review and address all comments submitted. If you are experiencing technical difficulties, please contact savannah.mueller@emiadvisors.net.
## Today’s Agenda

<table>
<thead>
<tr>
<th>Topic</th>
<th>Time</th>
<th>Presenter(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welcome Remarks</td>
<td>15 minutes</td>
<td>Gabriela Gonzalez</td>
</tr>
<tr>
<td>Recap Feedback on Use Case 1 Components</td>
<td>20 minutes</td>
<td>Amy Zimmerman</td>
</tr>
<tr>
<td>Review and Discuss Use Case 2 Personas and Story</td>
<td>15 minutes</td>
<td>Sheetal Shah</td>
</tr>
<tr>
<td>Review and Discuss Use Case 2 Components</td>
<td>35 minutes</td>
<td>Sheetal Shah</td>
</tr>
<tr>
<td>Next Steps/Homework</td>
<td>5 minutes</td>
<td>Gabriela Gonzalez</td>
</tr>
</tbody>
</table>
Workgroup Participation

● If you have not already done so, we invite you to officially join the Workgroup as a member. You can check your membership status and if others from your organization have registered. Please review the existing membership here: https://confluence.hl7.org/display/GRAV/Join+the+CDC+Social+Determinants+of+Health+%28SDOH%29+Public+Health+Use+Case+Workgroup

● Please whitelist cdcsdohworkgroup@lists.hl7.org. Add the email address to your contacts to filter out of spam, or contact your IT personnel for help.

● For all other Workgroup information, please contact:
  ○ Gabriela Gonzalez at gabriela.gonzalez@emiadvisors.net
  ○ Savanah Mueller at savanah.mueller@emiadvisors.net
  ○ CDC NCCDPHP Point of Contact: Kailah Davis at lui9@cdc.gov
# Workgroup Schedule & Activities

90-minute Zoom Meeting every other week for a total of 8 sessions

<table>
<thead>
<tr>
<th>Date</th>
<th>Workgroup Meeting</th>
<th>Homework</th>
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<tbody>
<tr>
<td>4/20</td>
<td><strong>CDC SDOH Public Health Workgroup Kickoff</strong>&lt;br&gt;• Initiative Background, Orientation, and Introduction to Business Case</td>
<td>Join the Workgroup via Confluence&lt;br&gt;Read: Workgroup Project Charter&lt;br&gt;Submit: Comment on the Public Health Business Case via SurveyMonkey by Monday, May 2 by 12 noon ET</td>
</tr>
<tr>
<td>5/04</td>
<td><strong>Deeper Dive Into SDOH Data Uses For Public Health</strong>&lt;br&gt;• Presentation from Federal and State Partners&lt;br&gt;• Review Feedback on Business Case&lt;br&gt;• Review Consensus Voting Process for Business Case</td>
<td>Review: Consensus Voting Instructions&lt;br&gt;Submit: Vote on the revised Public Health Business Case via SurveyMonkey</td>
</tr>
<tr>
<td>5/18</td>
<td><strong>Story + Use Case Development Process Kickoff and Business Case Voting Results</strong>&lt;br&gt;• Introduce Use Case Development Process&lt;br&gt;• Review Initial Personas, Story Components, and Use Cases&lt;br&gt;• Provide a Summary of Business Case Consensus Results</td>
<td>Review: Draft personas and initial story&lt;br&gt;Submit: Additional input via email by May 25, 2022</td>
</tr>
<tr>
<td>6/01</td>
<td><strong>Review and Discuss Use Case 1</strong>&lt;br&gt;• Provide an Overview of Use Case 1 Components&lt;br&gt;• Deep Dive Into Use Case Narratives&lt;br&gt;• Review Draft Actors, Transaction Diagrams And Assumptions</td>
<td>Review: Use Case 1 components&lt;br&gt;Submit: Additional input via email by June 8, 2022</td>
</tr>
</tbody>
</table>
# Workgroup Schedule & Activities

90-minute Zoom Meeting every other week for a total of 8 sessions

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<tr>
<th>Date</th>
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<th>Homework</th>
</tr>
</thead>
<tbody>
<tr>
<td>6/15</td>
<td>Review and Discuss Use Case 2&lt;br&gt;• Provide an Overview of Use Case 2 Components&lt;br&gt;• Deep Dive Into Use Case Narratives&lt;br&gt;• Review Draft Actors, Transaction Diagrams And Assumptions</td>
<td>Review: Use Case 2 components&lt;br&gt;Submit: Additional input via email by June 22, 2022</td>
</tr>
<tr>
<td>6/29</td>
<td>Review and Discuss Use Case 3&lt;br&gt;• Provide an Overview Of Use Case 3 Components&lt;br&gt;• Deep Dive Into Use Case Narratives&lt;br&gt;• Review Draft Actors, Transaction Diagrams And Assumptions</td>
<td>Review: Use Case 3&lt;br&gt;Submit: Additional input via email</td>
</tr>
<tr>
<td>7/13</td>
<td>End-To-End Review and Consensus Voting Process Overview&lt;br&gt;• Review Use Cases 1 through 3&lt;br&gt;• Review Consensus Voting Process</td>
<td>Review: Use Cases 1 through 3&lt;br&gt;Submit: Comments on Use Cases</td>
</tr>
<tr>
<td>7/27</td>
<td>Final Review and Consensus Voting&lt;br&gt;• Provide Summary and Synthesis of Use Case Comments/Feedback Received&lt;br&gt;• Publish Use Cases for Consensus Voting&lt;br&gt;• Summarize Next Steps</td>
<td>Submit: Vote on Use Cases</td>
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Objectives for Today

• Review feedback received on Use Case 1 components and summary of changes incorporated.

• Obtain input on Use Case 2 personas, story, and components.
General Reminder: Out of Scope Elements

- Defining data exchange standards or data elements for:
  - Race, Ethnicity, Sex, Primary Language, Disability, Sexual Orientation, Gender Identity (SOGI), and
  - SDOH domains.

- Creating use cases that do not directly support the public health data activities listed in the Scope Statement section of the Workgroup Project Charter.

- Providing incentives for implementation of the use cases or develop data-sharing agreements and policies that promote public health and health care provider data exchange.

- Developing Fast Healthcare Interoperability Resources (FHIR) Implementation Guides.
Background on Gravity Project Use Cases

Gravity Project developed three use cases (*primarily from a clinical care perspective*):

1. Document SDOH Data in Conjunction with a Patient Encounter (SDOH screening and diagnosis)
2. Document and Track SDOH Related Interventions to Completion (bidirectional referrals)
3. Gather and Aggregate SDOH Data for Uses beyond Clinical Care (quality reporting)

CDC SDOH Public Health Use Case Package: Builds off Gravity Project Use Case 3 to focus on reusing SDOH data *upstream to support public health*.

Learn more about the Gravity Project at [https://thegravityproject.net](https://thegravityproject.net)
No use case exists to define **upstream** use of SDOH data for public health.

Gather and aggregate SDOH data for uses beyond point of care

Document and track SDOH related interventions to completion

Gather SDOH data in conjunction with the patient encounter.
Building off Gravity Project Use Case 3

Past
The Gravity Project has made significant strides in establishing a foundation for representation and exchange of electronic SDOH data across and between health and community-based systems.

Present
Gravity Use Cases focus on data documentation during a clinical encounter for exchange with other non-clinical and administrative systems.

Future
Design and publish up to three high-priority use cases for public health. Future efforts will extend beyond those developed for clinical care by the Gravity Project.

Learn more about the Gravity Project at https://thegravityproject.net
Adapted from Castrucci B, Auerbach J. Meeting Individual Social Needs Falls Short of Addressing Social Determinants of Health. Health Affairs Blog. January 16, 2019
Recap & Feedback on Use Case 1 Components

Amy Zimmerman
Overview Personas and Story

- **Personas/Roles:**
  - Kevin, Care Coordinator, FQHC
  - Jessica, Case Manager, CBO
  - Claudia, Public Health Analyst, County Health Department
  - Victor, Public Health Program Director, State Public Health Department
  - Makayla, Project Officer, CDC

- **Story:**
  - **Part 1:** Aggregated SDOH Data Leveraged for a Community Health Needs Assessment
  - **Part 2:** Assessment of State and CDC Funded Programs at State Level
  - **Part 3:** Monitoring and Tracking Program Success at CDC
Personas and Roles

Kevin
Care Coordinator at Sunville Community Health Center

Jessica
Case Manager at Lakeview Social Services Organization

Claudia
Public Health Analyst at Forest County Department of Health

Victor
Public Health Program Director at State Health Department

Makayla
Project Officer at CDC NCCDPHP Division of Diabetes Translation
### Recap: Use Case 1 Components

#### Use Case 1: Leverage Aggregated SDOH Data for a Community Health Needs Assessment

<table>
<thead>
<tr>
<th>Human Actor</th>
<th>Business Actor</th>
<th>System Actor</th>
<th>Technical Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Care Coordinator</td>
<td>Federally Qualified Health Center (FQHC)</td>
<td>Electronic Health Record (EHR)</td>
<td>Information Source/Data Sender</td>
</tr>
<tr>
<td>Case Manager</td>
<td>Social Service Non-profit Organization (CBO)</td>
<td>Case Management Technology System</td>
<td>Information Source/Data Sender</td>
</tr>
<tr>
<td>Director</td>
<td>Regional Health Information Exchange (HIE)</td>
<td>Trusted Intermediary</td>
<td>Information Recipient/Data Aggregator/Data Sender</td>
</tr>
<tr>
<td>Public Health Analyst</td>
<td>County Health Department</td>
<td>Data Repository</td>
<td>Information Recipient</td>
</tr>
</tbody>
</table>
Recap Use Case 1: Actor-Transaction Diagram

1. SDOH encounter data in standard format

Direction of Data Flow

Regional HIE

Data Aggregator/Data Sender

2. Aggregated SDOH data in standard format

Direction of Data Flow

County Health Department

Information Recipient

Data Repository

FQHC

Information Source

EHR

CBO

Information Source

Case Management Platform
# Feedback Received

<table>
<thead>
<tr>
<th>Theme</th>
<th>EMI Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Community Health Needs Assessment (CHNA) may have biases based on gaps in data collection and could end up reducing the inclusion of specific groups. This could be addressed through an assumption indicating that the County Health Department will assess and adjust for data collection bias.</td>
<td>EMI has added this assumption to the Use Case.</td>
</tr>
<tr>
<td>Type of data being shared: Unless there is a treatment purpose, SDOH data being shared for a CHNA likely needs to be de-identified. This could be addressed through constraining the use case to de-identified, aggregated data.</td>
<td>While it is likely that data needed for the CHNA would be aggregated, de-identified data, we have chosen to avoid specifying identifiability to best support broad applicability. Additionally, Use Case 1 assumptions state that all local, state and federal privacy, security and consent laws and regulations will be adhered to.</td>
</tr>
</tbody>
</table>
Feedback Received

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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Clarify specifically what medical and SDOH data are being shared, e.g. diagnoses.</td>
<td>EMI added an assumption that medical diagnosis data shared will be related to Diabetes and SDOH risks. It is anticipated that specific data elements will be identified through the future development of an implementation guide (IG).</td>
</tr>
<tr>
<td>Specify the County Health Department’s data repository requirements for accepting standardized SDOH data from a trusted intermediary (HIE), and how will the data be used.</td>
<td>Further discuss with workgroup members.</td>
</tr>
</tbody>
</table>
Additional Personas Received

- Julie, FQHC Clinic Staff
- Otto, FQHC Director
- Terry, Patient
- Theo, Durable Medical Equipment (DME) business owner

Thank you for your input. Find a compiled list of submissions HERE.
Questions for Discussion based on Feedback

1. What specificity is needed related to the County Health Department’s data repository requirements that is currently missing from the use case package?

2. Do HIEs have data that public health jurisdictions can leverage to support determining prevalence rates of chronic disease?
Questions?

You are encouraged to actively participate in the discussion using the **Zoom chat** feature (bottom of the Zoom Meeting window).

You can also use the **Reactions** feature to raise your virtual hand and ask a question live. Please be mindful of your background noise.

**Please send all chats to Everyone. We will review and address all comments submitted.**
Use Case 2 Components Discussion

Sheetal Shah
Questions & Discussion for Workgroup Members

• Do they meet the needs of public health professionals?
• Do they provide a compelling reason to leverage SDOH data for public health purposes?
• Do they have broad applicability across the public health ecosystem?
• Do they help drive towards a desired future state?
Part 2: Assessment of State and CDC Funded Diabetes Programs

Victor is conducting an assessment of state and CDC funded diabetes programs to better understand health outcomes and social risks.

Victor wants to focus on decreasing food insecurity in areas of the state where diabetes prevalence is highest. He also wants to determine if there are CDC-recognized organizations offering the National Diabetes Prevention Programs (National DPP) Lifestyle Change Program (LCP) or other diabetes self-monitoring and education programs in the areas where diabetes prevalence and food insecurity is high.

He learns that a regional HIE can provide limited, but timely data on diabetes prevalence and food insecurity by zip code for certain geographic regions in the state.

He wants to combine the HIE data with data from other clinical and community providers and existing Medicaid claims data (z-codes) to identify where diabetes prevalence and food insecurity is high.

Victor
Public Health Program Director
State Health Department
Recap: Use Case Package Outline

1.0 Preface and Introduction

2.0 Initiative Overview
   2.1 Public Health Business Case**

3.0 Use Case Scope
   3.1 Background**
   3.2 In Scope**
   3.3 Out of Scope**
   3.4 Partners**

4.0 Story

5.0 Actors
   5.1 Human Actors, Business Actors, System Actors

6.0 Use Cases
   6.1 Use Case 1 (repeat for 2 and 3)
      Activity Descriptions
      6.1.1 Assumptions
      6.1.2 Preconditions
      6.1.3 Transaction
      6.1.4 Message Content
      6.1.5 Postconditions
      6.1.6 Alternate Flow
      6.1.7 Actor Transaction Diagram

7.0 Issues, Risks, and Obstacles

Appendices
   Related Use Cases
   References

**Developed from Project Charter & Business Case
Key Definitions

• **Use Case**: Defines the functional requirements and technical specifications of the solution by describing the interactions between the system and its user(s). A Use Case can be used for business process development, software development, systems engineering, and standards development.

• **Actors**: Actors are participants in the information exchange requirements of the Story.

• **Assumptions**: Items expected to be true or to be in place such as a policy, process, or procedure for the execution of a specific transaction.
Key Definitions

- **Pre-conditions**: Refers to the initial state of the system before an action or transaction occurs. These describe what must be in place from a systems perspective to support interoperable data sharing for a specific transaction.

- **Transaction**: The data exchange between two systems.

- **Message Content**: The content or substance of what is exchanged within a specific transaction.

- **Post-conditions**: Refers to the state of the system that will result after the execution of a process the transaction.

- **Alternate Flow**: Describe a scenario other than the basic flow that results in a user completing his or her goal.
Questions & Discussion for Workgroup Members

- Do they meet the needs of public health professionals?
- Do they provide a compelling reason to leverage SDOH data for public health purposes?
- Do they have broad applicability across the public health ecosystem?
- Do they help drive towards a desired future state?
Next Steps

Gabriela Gonzalez
Homework

• If you were unable to provide feedback during today’s call, please review Use Case 2 Components and send recommendations for revisions and additions to: gabiela.gonzalez@emiadvisors.net by Wednesday, June 22, 2022.
We encourage workgroup members to submit additional personas that will supplement the Use Case Package being developed as part of this initiative.

**How to Submit a Persona:**

1. Click here to download [CDC SDOH Use Case Personas Worksheet](#).

2. **Rename** the Worksheet file using the following format: `orgname_actortype_submittername_date.xlsx`.
   
   a. Example: EMIAdvisors_patient_gabrielagonzalez_20220601.xlsx

3. Populate worksheet with persona(s) you wish to submit for future design and development.

4. Email completed worksheet(s) to gabriela.gonzalez@emiadvisors.net.
Announcement: CMS FHIR Connectathon in July

Join the Centers for Medicare & Medicaid Services (CMS) Health Level Seven (HL7) International FHIR Connectathon in July 19 - 21. Register for this free event through June 30.

Gravity Project is seeking SDOH and health equity data integrators to help test and validate the updated SDOH Clinical Care FHIR Implementation Guide.

If you have a technology solution that serves to connect the health and social service sectors to address SDOH needs, please sign up here: https://confluence.hl7.org/display/FHIR/CMS+2022+-+07+FHIR+Connectathon+3
Questions?

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**Please send all chats to Everyone. We will review and address all comments submitted.**
Closing Remarks

● Please join the Workgroup either as a Committed Member or Other Interested Party.
  https://confluence.hl7.org/display/GRAV/Public+Health+Use+Case+Workgroup+for+
  Chronic+Disease+Prevention+Home

● For all other Workgroup information, please contact us.
  ○ Gabriela Gonzalez at gabriela.gonzalez@emiadvisors.net
  ○ Savanah Mueller at savannah.mueller@emiadvisors.net

● CDC NCCDPHP Point of Contact:
  ○ Kailah Davis at lui9@cdc.gov
Thank you for participating in this national consensus-building process.