Workgroup Meeting #6: Review and Discuss Use Case 3
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 savanah.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 2 Components</td>
<td>20 minutes</td>
<td>Amy Zimmerman</td>
</tr>
<tr>
<td>Review and Discuss Use Case 3 Personas and Story</td>
<td>15 minutes</td>
<td>Sheetal Shah</td>
</tr>
<tr>
<td>Review and Discuss Use Case 3 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>
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</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 cdcsohworkgroup@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 savannah.mueller@emiadvisors.net
  - Sara Behal at sara.behal@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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</table>
| 4/20   | **CDC SDOH Public Health Workgroup Kickoff**<br>• Initiative Background, Orientation, and Introduction to Business Case | Join the Workgroup via Confluence  
Read: Workgroup Project Charter  
Submit: Comment on the Public Health Business Case via SurveyMonkey by Monday, May 2 by 12 noon ET |
| 5/04   | **Deeper Dive Into SDOH Data Uses For Public Health**<br>• Presentation from Federal and State Partners  
• Review Feedback on Business Case  
• Review Consensus Voting Process for Business Case | Review: Consensus Voting Instructions  
Submit: Vote on the revised Public Health Business Case via SurveyMonkey |
| 5/18   | **Story + Use Case Development Process Kickoff and Business Case Voting Results**<br>• Introduce Use Case Development Process  
• Review Initial Personas, Story Components, and Use Cases  
• Provide a Summary of Business Case Consensus Results | Review: Draft personas and initial story  
Submit: Additional input via email by May 25, 2022 |
| 6/01   | **Review and Discuss Use Case 1**<br>• Provide an Overview of Use Case 1 Components  
• Deep Dive Into Use Case Narratives  
• Review Draft Actors, Transaction Diagrams And Assumptions | Review: Use Case 1 components  
Submit: Additional input via email by June 8, 2022 |
# Workgroup Schedule & Activities

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

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

• Review feedback received on Use Case 2 components and summary of changes incorporated.

• Obtain input on Use Case 3 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.

Gravity Project Use Cases: Upstream Public Health Gap

1. Gather SDOH data in conjunction with the patient encounter.
2. Document and track SDOH related interventions to completion.
3. Gather and aggregate SDOH data for uses beyond point of care.
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://thegridvityproject.net
Public Health

Public health in the context of this SDOH initiative is defined as “the science of protecting and improving the health of people and their communities. This work is achieved by promoting healthy lifestyles, researching disease and injury prevention, and detecting, preventing, and responding to infectious diseases”\(^1\) and chronic disease prevention and health promotion.

\(^{[1]}\) Source: https://www.cdcfoundation.org/what-public-health

Image Source: https://www.cdc.gov/publichealthgateway/publichealthservices/essentialhealthservices.html
Recap & Feedback on Use Case 2 Components

Amy Zimmerman
Recap: Overview Personas and Story

● Personas/Roles:
  ○ Kevin, Care Coordinator, FQHC
  ○ Jessica, Case Manager, CBO
  ○ Claudia, Public Health Analyst, County Department of Health
  ○ Victor, Public Health Program Director, State Department of Health
  ○ 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 Department of Health

Makayla
Project Officer at CDC NCCDPHP Division of Diabetes Translation
# Recap: Use Case 2 Components

Use Case 2: Assessment of State and Centers for Disease Control and Prevention (CDC) Funded Diabetes Programs

<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>Health System</td>
<td>Electronic Health Record (EHR)</td>
<td>Information Source/Data Aggregator/Data Sender</td>
</tr>
<tr>
<td>Data Analyst</td>
<td>State Medicaid Agency</td>
<td>Data Repository</td>
<td>Information Source/Data Aggregator/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 Program Director</td>
<td>State Department of Health</td>
<td>Data Repository</td>
<td>Information Recipient</td>
</tr>
</tbody>
</table>
Recap Use Case 2: Actor-Transaction Diagram
## Feedback Received

<table>
<thead>
<tr>
<th>Theme</th>
<th>EMI Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appropriateness of term &quot;prevalence&quot; in context of story.</td>
<td>EMI removed the word prevalence and utilized &quot;estimated burden&quot; where applicable.</td>
</tr>
<tr>
<td>Broaden the story to include people at risk for diabetes.</td>
<td>EMI revised and included people at-risk for diabetes in the story.</td>
</tr>
<tr>
<td>Add an assumption to appropriately adjust for the amount of missing SDOH data.</td>
<td>EMI added an assumption that state and county department of health will work with clinical providers, community providers, and the HIE to evaluate and identify the amount of missing SDOH data. This includes both: 1) empty fields within a patient's SDOH screen as well as 2) patients not getting screened. This information will be analyzed and included in the reporting of the data.</td>
</tr>
<tr>
<td>Concerns regarding applicability of story to Tribal Nations.</td>
<td>CDC to address.</td>
</tr>
</tbody>
</table>
# Feedback Received

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</tr>
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<tbody>
<tr>
<td>Suggestion to add a Community Health Worker.</td>
<td>EMI recommends submitting a Persona for Community Health Worker via Persona worksheet.</td>
</tr>
<tr>
<td>Suggestion to clarify that a standardized SDOH screening tool be adopted by all clinical and community providers that are part of the HIE.</td>
<td>The Gravity Project is agnostic to the screening tools (e.g., PRAPARE, AHC Screener, Health Leads) and data capture systems (e.g., electronic health record platforms, community-referral platforms, care coordination systems) used in the field to collect, exchange, and aggregate SDOH data. The current assumption states that the clinical and community providers can send the SDOH data in a standardized format using the Gravity code sets.</td>
</tr>
<tr>
<td>Clarify that food insecurity is not just about having sufficient food but also about the quality.</td>
<td>Please see the Gravity Project value sets for level of food insecurity. Link: <a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a> For example, there is a diagnosis code “Nutrition impaired due to limited access to healthful foods (SNOMED CT: 445281000124101)”.</td>
</tr>
</tbody>
</table>
## Feedback Received

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<tr>
<td>Concern that not all screening tools support Gravity project standards. Some screening tools include individually developed questions and responses that are text-based, making it difficult to send all SDOH data to the HIE.</td>
<td>This is a known issue in the field. EMI modified the assumption to indicate that a number of the common screening tools questions, responses, and interventions have been mapped to codes developed through the Gravity Project. The various actors will work together to assess which questions are not mapped, understand why, and work with stakeholders to develop a plan to address this issue.</td>
</tr>
<tr>
<td>Concerns about the lack of widespread use of Z codes, the need to have Z codes more uniformly used for documentation, and the need for other health care providers (who do the screening) to apply the codes.</td>
<td>EMI will add a recommendation in the final report that will address the need to promote the widespread use of Z codes across the care ecosystem.</td>
</tr>
<tr>
<td>Question related to the state Department of Health access to aggregated data collected by the county Department of Health for the purpose of the CHNA (Use Case 1).</td>
<td>Further discuss with workgroup members.</td>
</tr>
</tbody>
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Questions for Discussion based on Feedback

1. How much data sharing occurs between local/county health departments and their respective state health departments? What type of data is shared and for what purposes?
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 3 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 3 Summary: Tracking and Monitoring Program Success at CDC

- Makayla and Victor often touch base to discuss the DDT-funded programs and share promising practices they see in the field. Victor informed Makalya of his data analysis which leveraged clinical, social, and claims data to better understand food insecurity among people with, or at risk for, diabetes in his state.
- DDT is encouraging its awardees to implement food insecurity strategies and track and report the number of individuals with diabetes by demographic factors (e.g., race and ethnicity) who have been identified with food insecurity as a social risk factor and set target outcomes to reduce household or individual food insecurity.
- Awardees report individual and community level social risks associated with health outcomes to the CDC.
- Once Makayla receives her awardees’ progress reports, DDT analyzes the data to assess awardees’ progress towards their targets. These data are aggregated to assess population trends, identify innovative practices, and disseminate the data to all awardees, national partners, and DDT leadership to inform data-driven decisions.
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

**Developed from Project Charter & Business Case

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
**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 3 Components and send recommendations for revisions and additions to: gabirola.gonzalez@emiadvisors.net by Wednesday, July 6, 2022.
Optional: Submit Personas Candidates

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](mailto:gabriela.gonzalez@emiadvisors.net) by July 18, 2022.
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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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.
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 savanah.mueller@emiadvisors.net
  - Sara Behal at sara.behal@emiadvisors.net

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