Social Determinants of Health Data Exchange for Chronic Disease Prevention Initiative

May 18, 2022

Workgroup Meeting #3: Story + Use Case Development Process Kickoff and Business Case Voting Results
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

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<th>Topic</th>
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<td>Welcome</td>
<td>5 minutes</td>
<td>Gabriela Gonzalez</td>
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<td>Story and Use Case Development Process Overview</td>
<td>15 minutes</td>
<td>Evelyn Gallego</td>
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<td>Initial Personas and Story Presentation and Discussion</td>
<td>55 minutes</td>
<td>Amy Zimmerman, Sheetal Shah, Kate</td>
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<td>Business Case Consensus Voting Results and Summary of Comments Dispositions</td>
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<td>Workgroup Confluence Navigation</td>
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<td>Savanah Mueller</td>
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<td>Next Steps/Homework</td>
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<td>Gabriela Gonzalez</td>
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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

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| 4/20 | CDC SDOH Public Health Workgroup Kickoff  
  • 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  
  • 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  
  • 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 | Use Case 1 Presentation  
  • 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 |
## Workgroup Schedule & Activities

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

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<tr>
<td>6/15</td>
<td><strong>Use Case 2 Presentation</strong>&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</td>
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<td>6/29</td>
<td><strong>Use Case 3 Presentation</strong>&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</td>
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<td>7/13</td>
<td><strong>End-To-End Review and Consensus Voting Process Overview</strong>&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><strong>Final Review and Consensus Voting</strong>&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

• Introduce the development process for a Use Case Package (workgroup deliverable)
• Present and discuss initial Personas and Story
• Review consensus voting results on the Public Health Business Case and summary of comments dispositions
• 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.
Use Case Development Process Overview

Evelyn Gallego
What is a Use Case?

- A framework to guide the development of the solution needed to meet the business drivers or business need.
- Defines the functional requirements and technical specifications of the solution by describing the interactions between the system and its user(s).
- Can be used for business process development, software development, systems engineering, and standards development.
- Allows you to communicate what the solution needs to do without actually knowing ‘how’ the solution will be built.
Use Case Key Components

- **Personas (the WHO).** Fictional characters who represent a person expected to use a service or product. Also referred to as the human actors within a use case.

- **Story (the WHAT).** Describes the Personas engaging with the service, technology, or setting over a period of time to accomplish a specific goal.

- **Use Cases(s).** Narratives of the interactions between the personas and the system they use.
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 Actors
   4.1 User Actors
      4.1.1 Personas
      4.2.1 Story

5.0 Use Case Assumptions

6.0 Use Cases
   6.1 Use Case 1 (repeat for 2 and 3)
      6.1.1 Activity Descriptions
         6.1.1.1 Preconditions
         6.1.1.2 Main Flow
         6.1.1.3 Postconditions
      6.1.2 Functional Requirements
      6.1.3 Sequence Diagram

7.0 Issues, Risks, and Obstacles

Appendices
   Related Use Cases
   References

**Developed from Project Charter & Business Case
Use Case Development Approach

Workgroup members will:

• Provide **feedback** on draft Personas, Story and Use Cases.
• Provide **feedback** on draft Actors and Roles. This activity defines the person, business, and system actors.
• Identify the Assumptions, Preconditions and Postconditions. These sections lay the foundation for creating the functional and data set requirements.
• Provide **feedback** on draft diagrams. These diagrams are crafted to pictorially represent the interaction between systems.
Use Case Development Approach (cont.)

• **Provide feedback on draft functional requirements.** Members will identify the capabilities a system must have in order to enable interoperable collection, analysis, exchange, and use of SDOH data. This provides a detailed breakdown of the requirements in terms of the intended functional behaviors of the application.

• **Provide feedback on identified issues, risks and obstacles.** Throughout the Use Case development process, this list can be compiled as the Workgroup identifies various issues, risks and obstacles associated with the Use Case.

• **Achieve consensus on the Use Case Package.**
Initial Personas and Story Presentation and Discussion

Amy Zimmerman
What is a Persona?

• Personas are fictional representations of users, who represent the goals, behaviors and motivations of real users.
• It’s not a stereotype, it’s an archetype.
• They can be used to share insights across a team, serve as a common language to align interdisciplinary teams and help build empathy.
• Although they are fictional, they are based on common user needs and patterns.

Persona Components

- Name and Role
- Age
- Family Status
- Education
- Employer
- Preferences: What does this persona enjoy? What are their interests?
- Challenges: What are this persona’s primary challenges and obstacles?
- Goals: What are their short-term and long-term goals?
Questions for Workgroup Members

- Do the personas + story reflect real-world experiences?
- Do the personas + story provide a compelling reason to leverage SDOH data?
- Do the personas + story have broad applicability to the public health ecosystem?
- What additional activities or information are relevant for the personas + story?
- Do the personas + story seem feasible?
Persona Candidates

Kevin  Claudia  Victor  Makayla
Kevin: Care Coordinator

Age: 48
Education: Licensed Clinical Social Worker (LCSW)
Family Status: Single Parent
Employment: Sunville Community Health Center, a Federally Qualified Health Center (FQHC)

Preferences: Enjoys engaging with his patients directly in identifying and addressing health and social needs.

Challenges: Unable to maintain increasing care coordination needs for rising patient numbers with food insecurity and other economic hardships due to COVID-19 and limited resources. Kevin struggles with locating the right resources that provide the needed services identified from SDOH data collected in his FQHC’s EHR system.

Goals: Help patients identify and obtain needed health and social services and use data in the EHR to better manage, track, and report on patient outcomes.
Claudia: Senior Public Health Analyst

**Age:** 29  
**Education:** Bachelor of Science in Public Health and Master of Science in Data Analytics  
**Family Status:** Unmarried  
**Employment:** Forest County Department of Health

**Preferences:** Loves analyzing data, identifying trends, and engaging with stakeholders to understand community needs and to strategize on solutions.

**Challenges:** Lack of consistent and timely data related to social care, making it harder for Claudia to evaluate community needs and deploy evidence-based interventions.

**Goals:** Identify trends in population health to improve the health of individuals and communities, with emphasis on diabetes care because of the impact the chronic disease has had on members of Claudia’s family.
Victor: Public Health Program Director

Age: 55
Education: Master in Public Health
Family Status: Married with children
Employment: State Health Department’s Diabetes Program Director

Preferences: Enjoys building partnerships with stakeholders across the health ecosystem, learning about innovative solutions to challenging problems. Does not want to let “perfect” be the enemy of good.

Challenges: His department is short staffed and leadership has been focused on pandemic response. The data he reviews is limited in helping him identify what community resources are available or are required to address his population’s growing social needs.

Goals: Wants to help advance and deploy evidence-based public health interventions to address health disparities, especially for those at risk for, or managing, diabetes.
Makayla: Project Officer

Age: 38
Education: Master of Science in Public Administration
Family Status: Married
Employment: CDC NCCDPHP Division of Diabetes Translation

Preferences: Loves to work with grant awardees on implementing public health programs across the US, recognizing the importance of establishing performance and outcomes measures to achieve goals.

Challenges: Given the diversity of her awardees, it’s challenging at times to make “apples-to-apples” comparisons. CDC does not always have consistent data across awardees to help guide program decisions and identify best practices.

Goals: Help all her awardees be successful, disseminate best practices, facilitate meaningful peer-to-peer connections, and help reduce health disparities among those at risk for, or diagnosed with, diabetes.
Discussion

You can use the **Reactions** feature to raise your virtual hand and ask a question or share your feedback live. Please be mindful of your background noise.
Questions & Discussion for Workgroup Members

• Do the personas reflect real-world experiences?
• What additional activities, information, or challenges are relevant for these personas?
• Do the personas have broad applicability to the public health ecosystem?
High-Level Story

- **Personas/Roles:**
  - Kevin, Care Coordinator
  - Claudia, Senior Public Health Analyst
  - Victor, Public Health Program Director
  - Makayla, Project Officer at CDC NCCDPHP Division of Diabetes Translation

- **Settings:**
  - FQHC
  - County Health Department
  - State Health Department
  - CDC

- **Story:**
  - Individual level data captured at the clinical or community based setting can be leveraged at all organizational levels of public health (state, tribal, local, or territorial (STLT) + CDC)
Story (Part 1): Community Concerns Regarding Food Insecurity

- Kevin (FQHC) attends a Public and Environmental Health Advisory Board meeting for the County Health Department (CHD) where Claudia works. Claudia is also in attendance.
- Kevin raises concerns about an increasing number of patients with food insecurity. He is concerned about the impact it will have on his patients with diabetes.
- Since Claudia is going to be conducting a countywide community health assessment, she wants to explore this problem further.
- She determines that some FQHCs and other clinical and community providers screen their patients for social risks and needs, and document this in their EHRs.
- Most of the clinical providers in the county participate with a regional HIE, and some send SDOH related data.
- The HIE provides Claudia’s team with regional clinical and social needs data.
- Claudia and her team start to analyze the prevalence of food insecurity among people with diabetes in their county and examine what types of interventions are already being employed at the zip code level to address this issue.
Victor is working on a Diabetes Prevention Program (DPP) renewal application to CDC for continued funding.

As part of the application, he is conducting an assessment of local programs the state DPP program is funding, along with any other DPP programs in the state funded directly by CDC, to better understand program outcomes.

Specifically, Victor is interested learning more about diabetes prevalence and the level of food insecurity at the zip code level since the DPP programs were initially implemented.

He learns that he can access some SDOH related data from a regional HIE, some directly from clinical and community providers (that are not part of the HIE), and some Medicaid claims data (z-codes). He can combine this data with his DPP program data to better understand how programs are performing on an ongoing basis related to diabetes prevalence and food insecurity.

Victor realizes the data is not perfect, nor covers everyone in the state, but is the most robust, standardized data, and timely SDOH data he can gather for his renewal application, and potentially on an ongoing basis.
Story (Part 3): CDC Division of Diabetes Translation and DPP awardees

• Makayla is the Project Officer with the CDC Division of Diabetes Translation for Victor’s state DPP Program.

• Victor and Makayla are close colleagues. Victor shares with Makayla the findings from his data analysis and how he leveraged clinical, community, and claims data to gain a better understanding of food insecurity among people with diabetes in his state.

• Makayla wants to ensure that all DPP awardees are leveraging data to better assess and monitor their programs based on the CDC requirements of the grant, especially related to addressing SDOH.

• Given this, Makayla encourages all awardees to track and report the number of individuals with diabetes by race/ethnicity who have been identified with food insecurity as a social risk and set target goals to reduce that number. (*Based on recent SDOH measures guidance from NCCDPHP).

• Additionally, CDC wants to ensure all awardees are leveraging USCDI v2 where applicable, and utilize standards developed via the Gravity Project in their program monitoring efforts.
Discussion

You can use the **Reactions** feature to raise your virtual hand and ask a question or share your feedback live. Please be mindful of your background noise.
Questions & Discussion for Workgroup Members

- Does the story reflect real-world experiences?
- Does the story provide a compelling reason to leverage the data?
- Does the story have broad applicability to the public health ecosystem?
- Does the story seem feasible?
Public Health Business Case Consensus Voting Results

Gabriela Gonzalez
Business Case Consensus Voting Results

★ 63.09% Committed Members voted.

We have reached consensus, thank you for your support!
Workgroup Committed Members as of May 16, 2022

Committed Member by Partner Type

- Public Health Agency: 17
- Federal/State/Local Agency: 16
- Other: 15
- Other System IT Vendor: 8
- Health Professional: 6
- Research Organization: 5
- Health Information Exchange (HIE)/Health…: 5
- Community-Based Service Provider: 4
- Health IT Vendor (EHR, EMR, PHR, HIE): 4
- Provider Organization (institution/clinically…): 2
- Healthcare Payer/Purchaser or Payer…: 1
- Standards Organization: 1

Total: 84
Summary of Comments

- 7 workgroup members submitted comments during the voting period. Feedback was successfully integrated into the final deliverable and dispositions will go out this week.

- General themes:
  - Tech/language edits
  - Gravity Project description adjustment
  - Relevant updates and resources

CDC SDOH Public Health Business Case final deliverable will be posted at https://confluence.hl7.org/display/GRAV/Documents
Questions?

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Please send all chats to Everyone. We will review and address all comments submitted.
Workgroup Confluence Navigation

Savanah Mueller
Public Health Use Case Workgroup for Chronic Disease Prevention Home

Created by Savannah Mueller, last modified by Gabriela Gonzalez yesterday at 2:32 AM

**Background**

The Center for Disease Control and Prevention's (CDC) National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP) Office of Informatics and Information Resources Management (OIIRM), with support from EMI Advisors, is pleased to launch the **Social Determinants of Health (SDOH) Data Exchange for Chronic Disease Prevention Initiative** to inform and drive SDOH data sharing and interoperability within public health agencies supporting prevention and control of chronic disease and health disparities.

The CDC is establishing a cross-sector SDOH Public Health Use Case Workgroup to engage public and private sector partners to advance SDOH data exchange for chronic disease prevention and health promotion. This Workgroup follows the Gravity Project framework, a Health Level Seven (HL7) Fast Healthcare Interoperability Resource (FHIR®) Accelerator Project.

**Scope**

1. Establish and convene multi-sector partners to inform the development of a consensus-based SDOH public health business case and high-priority use cases for chronic disease prevention and health promotion.
2. Design and publish up to three high-priority public health-focused use cases that extend on those developed for clinical care by the Gravity Project.

**Workgroup Information**

All members of the SDOH Workgroup should sign up for the listserv here. If you would like to change the status of your membership, please contact Gabriela Gonzalez at gabiela.gonzalez@emiadvisors.net. You do not need to complete another form.

**Project Charter**

The project charter provides an overview of the initiative's needs statement and describes the scope, objectives, and expected outcomes of the Workgroup.

To review the project charter, please go here.

**Workgroup Meeting Schedule**

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

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**Please send all chats to Everyone. We will review and address all comments submitted.**
Next Steps
Homework

• If you were unable to provide feedback during today’s call, please review the persona candidates + story and send recommendations for revisions and additions to: gabiela.gonzalez@emiadvisors.net by Wednesday, May 25, 2022.

NOTE: WE NEED TO DEFINE ONLY A SELECT NUMBER OF PERSONAS FOR THE PUBLIC HEALTH STORY AND USE CASES. OUR FOCUS IS CREATING PERSONAS THAT CAN HELP US REFLECT REAL-LIFE SCENARIOS.
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**

• CDC NCCDPHP Point of Contact:
  
  • Kailah Davis at **lui9@cdc.gov**
Questions?

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Please send all chats to Everyone. We will review and address all comments submitted.
Thank you for participating in this national consensus-building process.