The Gravity Project

Patient Story 1 and Use Cases

May 30, 2019

Welcome

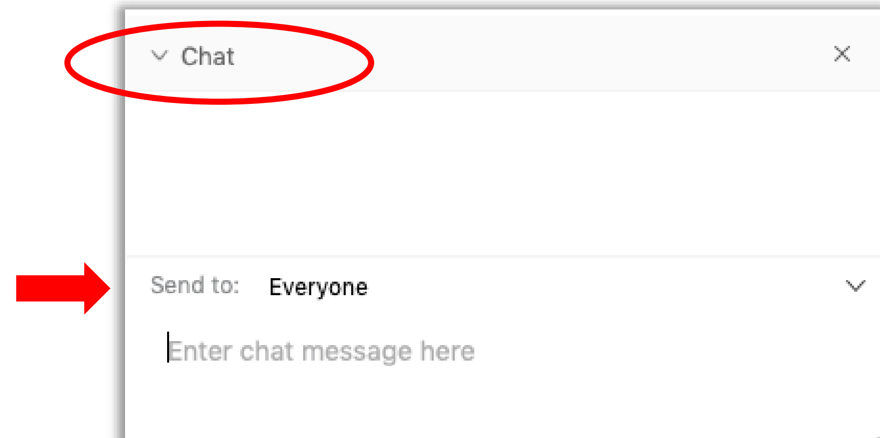
Thank you for joining the **Gravity Project** Workgroup meeting!

Due to the large number of attendees, participants are **muted upon entry**. Please remain muted to avoid background noise.

- This call is being recorded; recording will be available on the Gravity Confluence page following the meeting.

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

Please send chats to "Everyone."



We will review and try to address all comments submitted during the call. If you are experiencing technical difficulties, please contact lynette.elliott@emiadvisors.net.

Gravity Project Participation

- If you have not already done so, we invite you to officially join the project here: https://confluence.hl7.org/display/PC/Join+the+Gravity+Project
- If you want to check whether you have already signed up or if others from your organization have signed up, please review the existing membership here: https://confluence.hl7.org/pages/viewpage.action?pageId=46892669#JointheGravityProject-GravityProjectMembershipList
- For all other Gravity Project information, please visit: https://confluence.hl7.org/display/PC/The+Gravity+Project+Home

Agenda

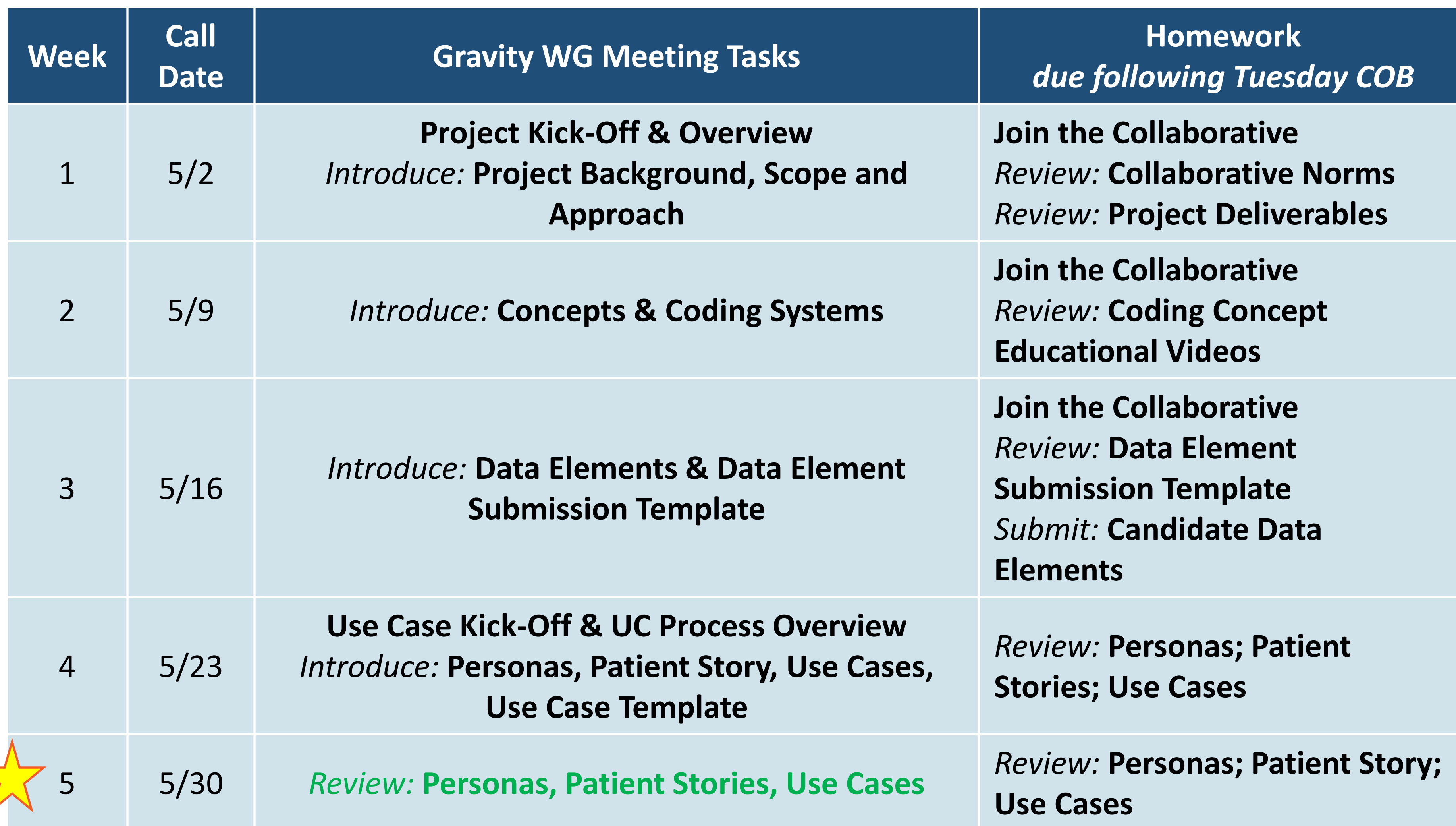
Topic	Presenter
Recap Gravity Project Schedule	Evelyn
Recap Use Case Package Components	Evelyn
Deep Dive Patient Story 1	Evelyn
Deep Dive Use Case Narratives	Evelyn
Q&A	All
Confluence Walk-through	Lynette
Next Steps	Lynette

Please submit questions and comments using the Webex chat feature.

Goals for Today

- Walk through Patient Story 1 as an illustrative story of personas interacting with each other and the health system in documenting and sharing coded SDH data
- Walk through Use Case narratives of the interactions between the personas and the systems they use

Gravity Project Schedule and Activities (May)



Week	Call Date	Gravity WG Meeting Tasks	Homework *due following Tuesday COB*
1	5/2	**Project Kick-Off & Overview** *Introduce:* **Project Background, Scope and Approach**	**Join the Collaborative** *Review:* **Collaborative Norms** *Review:* **Project Deliverables**
2	5/9	*Introduce:* **Concepts & Coding Systems**	**Join the Collaborative** *Review:* **Coding Concept Educational Videos**
3	5/16	*Introduce:* **Data Elements & Data Element Submission Template**	**Join the Collaborative** *Review:* **Data Element Submission Template** *Submit:* **Candidate Data Elements**
4	5/23	**Use Case Kick-Off & UC Process Overview** *Introduce:* **Personas, Patient Story, Use Cases, Use Case Template**	*Review:* **Personas; Patient Stories; Use Cases**
5	5/30	*Review:* **Personas, Patient Stories, Use Cases**	*Review:* **Personas; Patient Story; Use Cases**

Gravity Project Schedule and Activities (June to July)

Week	Target Date	Gravity WG Meeting Tasks		Homework *due following Tuesday COB*
6	6/6	**Assumptions, Pre/Post Conditions, Actors & Roles**	*Review:* **Personas, Patient Stories, Use Cases**	*Review:* **Assumptions, Pre/Post Conditions; Actors & Roles**
7	6/13	**Base Flow, Activity Diagrams, Functional Requirements, Sequence Diagram**	*Review:* **Assumptions, Pre/Post Conditions, Actors & Roles**	*Review:* **Base Flow; Activity Diagrams; Functional Requirements, Sequence Diagram**
8	6/20	**Data Set Considerations, Risks, Issues, & Obstacles**	*Review:* **Functional Requirements, Sequence Diagram**	*Review:* **Data Set Considerations, Risks, Issues, & Obstacles**
9	6/27	**Risks, Issues & Obstacles**	*Review:* **Data Set Considerations, Risks, Issues, & Obstacles**	**Begin: End-to-End Review**
10	7/4	**NO MEETING**		
11	7/11	**End-to-End Review (6/28-7/8)**	*Review:* ***End-to-End Comment Dispositions To-Date***	**End-to-End Review due 7/8**
12	7/18	**Food Insecurity Kick-Off** *Introduce:* **Food Insecurity Data Set Submissions**		**UC Consensus Voting (7/15-7/19)**
13	7/25	**FINAL UC CONSENSUS**	*Review:* **UC Vote Dispositions**	*Review:* **Food Insecurity Data Set Submissions from Community**

Why do we need a Use Case to develop coded SDH concepts?

- A Use Case sets the foundation for *identifying* and *specifying* the standards required to support the data exchange, reference implementations, and tools
- Describes operational context for documenting, sharing, and exchanging **coded** SDH data
- Illustrates the information flows that must be supported by the **coded** data exchange
- Defines the types of data and their specifications required in the data exchange

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.
- **Patient Story (the WHAT).** Describe the Personas engaging with the service, technology, or setting over a period of time to accomplish a specific goal.
- **Use Case(s).** Narratives of the interactions between the personas and the systems they use.

Persona Candidates

- Rebecca Smith (patient)
- Samir Patel (clinical staff member)
- Dr. Carla Sanchez (primary care physician)
- Reeza Shah (care coordinator)
- Michael Frank (asthma home visit provider)

https://confluence.hl7.org/display/PC/Gravity+Personas

Patient Story 1 Components

- Personas:
  - Rebecca Smith (patient)
  - Samir Patel (clinical staff member)
  - Dr. Carla Sanchez (primary care physician)
  - Reeza Shah (care coordinator)
  - Michael Frank (asthma home visit provider)
- Settings:
  - Rebecca's home, PCP office, Rebecca's work site
- Activities:
  - Screening, diagnosis, planning, and treatment

Use Cases

- Document SDH data in a patient encounter.
- Document SDH actions taken in response to identified needs.
- Gather and aggregate data for use beyond the point of care.

Patient Story 1 Assumptions/Pre Conditions/Post Conditions (for discussion next week)

Assumptions outline what needs to be in place to meet or realize the requirements of the use case. e.g.,

- Patient has health insurance
- Patient has access to health care—can schedule annual wellness visit
- Patient's information will be shared and accessed in compliance with policy, regulation, and Patient Consent Directives

Pre Conditions are those conditions that must exist for interoperable SDH data sharing. e.g.,

- PCP is using an EHR that can document coded social risk factors as part of a screening, diagnosis, planning, or treatment activity

Post Conditions describe the state of the system that will result after the execution of a process activity or task. e.g.,

- PCP is using an EHR that can aggregate coded SDH data and generate reports using coded SDH data

Patient Story 1

- Rebecca schedules annual well visit with Dr. Carla Sanchez
- Samir collects Rebecca's vital signs and administers screening questions
- Rebecca answer questions from a social risk screening tool using mobile tablet
- Samir uploads completed questionnaire into the EHR
- Dr. Sanchez inquires how Rebecca has been since their last visit
- Rebecca tells Dr. Sanchez she feels overwhelmed and guilty
- Dr. Sanchez uses EHR to review the results of the social risk screening and past history for Rebecca
- She examines Rebecca and notes in the EHR Rebecca is overweight and her asthma is worse
- Rebecca saves money by buying low-cost foods such as macaroni and cheese and pizza.
- Rebecca cannot always afford medications so spaces out her asthma controller medication

Patient Story 1 (cont'd)

- Dr. Sanchez inquires about mold or another allergen remediation. Rebecca confirms she has not thought about this
- **Dr. Sanchez tells Rebecca the screening responses indicate distinct risk around food insecurity, housing instability and quality, and transportation access**
- **Rebecca confirms these are three areas she needs help with**

- To address **asthma concern**, Dr. Sanchez and Rebecca identify **goals** to reduce asthma triggers in the home and minimize the cost of medications
- Dr. Sanchez reviews the cost of Rebecca's asthma controller medication and determines an equally effective, lower cost medication is available
- **Dr. Sanchez confirms Rebecca is eligible to receive an asthma home visit, places an order for a new asthma medication, and submits an electronic request for an asthma home visit to assess for asthma triggers.**

Patient Story 1 (cont'd)

- To address the **three social risk factors**, Dr. Sanchez and Rebecca identify goals to
  - find more affordable housing solutions and healthier food options; and
  - find more efficient transportation options.

- They discuss an action plan to **address the goals that involves Rebecca working with a care coordinator**
- Dr. Sanchez refers Rebecca to her practice's care coordinator, Reeza Shah
- Dr. Sanchez documents the agreed upon health concerns, patient goals, action plan, and referral in the care plan within the EHR.
- Samir returns to the exam room and works with Rebecca to schedule the appointment with Reeza for the following week and a follow-up appointment with Dr. Sanchez within three months of the appointment with Reeza

Patient Story 1 (cont'd)

- The following week Rebecca meets with Reeza
- Reeza has reviewed Rebecca's care plan and identified several resources available to support the care plan goals
- Reeza walks Rebecca through the California SNAP eligibility and enrollment process
- Reeza determines Rebecca is eligible for SNAP benefits and encourages Rebecca to complete the SNAP application either online or by visiting the local SNAP Office
- Rebecca completes and submits the online application the next day during one her work breaks
- Reeza contacts Rebecca within one week of their initial consultation
- Rebecca confirms she submitted the application
- Reeza documents the action in the EHR
- Within two weeks Rebecca receives an email confirmation that her application has been approved
- Rebecca begins to receive SNAP benefits 1 month later

Patient Story 1 (cont'd)

- Michael Frank, an asthma home-visit provider, contacts Rebecca by phone to schedule the asthma site visit
- Michael conducts the assessment and discovers there is slight mold in the apartment that is aggravating Rebecca's asthma
- Michael emails Rebecca, Dr. Sanchez, and Reeza a copy of the home-visit report and recommends Rebecca be referred to a housing coordinator
- Reeza reviews Michael's report and uploads into the EHR
- Within 1 week, Reeza emails Rebecca with the names of two housing coordinators.

- Rebecca meets with Dr. Sanchez for her three-month follow-up appointment
- Dr. Sanchez discusses Michael's home visit report results with Rebecca and Rebecca confirms she is receiving SNAP benefits
- Dr. Sanchez updates Rebecca's care plan in the EHR

Use Case 1: Document SDH data in a patient encounter

This use case describes how coded SDH data are captured in a health care system and how data are shared with other systems. SDH data are documented either as part of screening or assessment/diagnosis activities.

- Patient visits PCP for annual well visit. Patient completes a social risk screening questionnaire on a mobile tablet
- Clinical staff member uploads completed questionnaire into EHR
- PCP uses EHR to review and discuss the results from the social risk screening with Patient. The results indicate distinct risk around three factors (food insecurity, housing instability and quality, and transportation access)
- PCP records in the EHR that Patient would like assistance in all three areas

Use Case 2: Document SDH actions taken in response to identified needs

This use case describes how actions taken in response to data collected about social risks are documented in electronic health information systems. Actions can include counseling and education, consults, referrals, referral tracking, care planning, and modifications to treatment.

- PCP uses the results from the screening and examination to directly engage Patient in developing a care plan to address the health concerns and social risks identified
- PCP and Patient identify goals, interventions to address the goals, and actions the PCP and Patient will take to achieve the goals
- These are documented within the EHR's care plan. PCP uses EHR to submit a new order *(asthma prescription*) and submit an electronic request for an intervention (*asthma home visit*)
- In the EHR, PCP notes the other priority intervention as a referral to the care coordinator

Use Case 2: Document SDH actions taken in response to identified needs (cont'd)

- Care coordinator reviews the Patient's care plan in the EHR
- Care coordinator contacts the Patient and documents the actions (*SNAP benefits counselling and referral activities*) in the EHR
- Care coordinator enters an alert for herself to follow-up with the Patient in one week
- After one week, the care coordinator contacts the Patient via phone to inquire whether Patient completed the action (*apply for SNAP benefits*)
- Patient confirms she/he has completed the action (*submitted the application online*). The care coordinator updates the Patient's care plan in the EHR

Use Case 2: Document SDH actions taken in response to identified needs (cont'd)

- PCP meets with Patient for follow up appointment
- PCP sees all updates made by care coordinator in the EHR including the new referral (*to housing coordinator*) based on the completion of a previous intervention (*asthma home visit*)
- Patient confirms she/he has started to receive treatment (*SNAP benefits*) and has a positive outcome (*feels healthier*)
- PCP documents the outcome of the referral intervention in the EHR

Use Case 3: Gather and aggregate data for use beyond point of care

This use case describes how patient level social risk information documented in the EHR can be aggregated and analyzed to support clinic, system, and community activities, including panel and population health management, risk adjustment, value-based payment, and community health improvement.

Population Health Management:

- A Clinical Manager at the PCP clinic reviews data monthly about social needs and related referrals
- Clinical Manager sees that one social risk factor (*food insecurity*) is the most frequently reported social risk factor in their patient population
- Clinical Manager notes that the social risk factor (*food security*) is rarely reduced with (*food resource*) referrals
- *Clinical Manager explores how to ensure social risk (food insecure) patients are consistently being referred to appropriate services and how to track whether those referrals are effective*

Use Case 3: Gather and aggregate data for use beyond point of care (cont'd)

Quality reporting: *The PCP practices in a state that recently began requiring providers to identify social risk factors among Medicaid patients at least annually and to refer patients with risks to appropriate resources.*

- Clinical Manager uses EHR to generate quarterly reports that list the total number of Medicaid patients screened and the total number of Medicaid screened patients who were referred to services
- Clinical Manager submits reports electronically to the payer (State Medicaid Agency or Managed Care Organization) on an annual basis

Use Case 3: Gather and aggregate data for use beyond point of care (cont'd)

Risk Adjustment and Risk Stratification:

- Clinical Manager uses the EHR to generate annual reports that list the total number of patients screened and the outcomes of identified interventions for screened patients
- Clinical Manager sends the report to the Payer
- *Payer uses the report to stratify outcomes for members and to examine the impacts of social risks on outcomes for development of future risk adjustment*

QUESTION FOR WORKGROUP: Do Primary Care Practices send reports to Payers or send claims that incorporate coded SDH concepts?

Questions?

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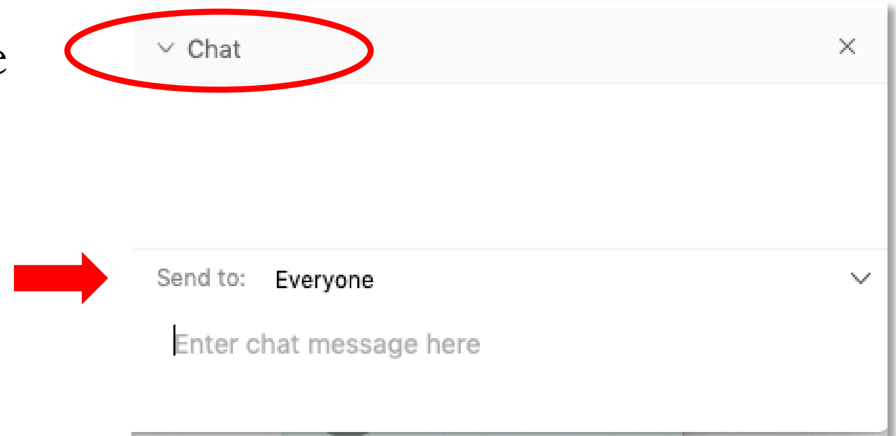

Confluence Homework

https://confluence.hl7.org/display/PC/The+Gravity+Project+Workgroup

Upcoming Workgroup Meeting

Date	Time	Topic	Webinar Information	Homework
Thursday, May 30, 2019	4:00-5:00pm ET / 1:00-2:00pm PT	Gravity Project Workgroup Meeting • Detailed look at Patient Stories and Use Cases	Please log on before dialing in and enter the provided participant ID. ***Please note: this meeting will launch at 10 minutes before 4:00pm ET (1:00pm PT) and will be locked prior to that time.*** URL: https://emiadvisors.webex.com/emiadvisors/j.php?MTID=m9ec3c58b6940b23e068ac88e8a46c4ca Dial-In: (415)655-0003 Meeting ID: 738 112 808 Password (for app users): gravity	Join the Gravity Project Review: • Personas • Patient Story • Use Cases Email comments and feedback to GravityProject@emiadvisors.net

CLICK HERE FOR A FULL MEETING SCHEDULE

Next Steps (Homework)

- Join the Gravity Project either as a Committed Member or Other Interested Party https://confluence.hl7.org/display/PC/Join+the+Gravity+Project
- Download and begin to populate the Data Element Submission Template https://confluence.hl7.org/display/PC/Data+Element+Submission
- Review Patient Story and Use Cases and send recommendations for revisions and additions to: gravityproject@emiadvisors.net

Thank you for participating in this national consensus-building process.

Additional questions? Contact: gravityproject@emiadvisors.net