Meeting Summary
Multiple Chronic Conditions (MCC) eCare Plan Federal Partners Meeting
Hosted by: National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) and Agency for Healthcare Research and Quality (AHRQ)
Meeting Date: January 24, 2023
Meeting Time: 2:00 - 4:00 PM ET
Location: Virtual

Attendees

NIDDK		Federal Partners	Affiliation
Jenna Norton		Ami Patel	ACL
Neha Shah		Joseph Lugo	ACL
		Edwin Lomotan	AHRQ
AHRQ		Karin Rhodes	AHRQ
Arlene Bierman		Tess Miller	AHRQ
Jacqueline Bagwell		Adam Wong	CDC
Jaime Zimmerman		Maria Carney	CDC
		Maria Michaels	CDC
EMI		Ellen Blackwell	CMS, CCSQ
Dave Carlson		Lorraine Wickiser	CMS, DCPAC
Demri Toop Henderson		Danica Marinac-Dabic	FDA, CDRH
Evelyn Gallego		Hector Izureta	FDA
Gay Dolin		Brenda Akinnagbe	HHS, ONC
Himali Saitwal		JaWanna Henry	HHS, ONC
Karen Bertodatti		Samantha Meklir	HHS, ONC
Savanah Mueller		Sara Armson	HHS, ONC
Sean Muir		Susy Postal	IHS
		Ashley Wilder Smith	NIH, NCI
RTI		Erin Iturriaga	NIH, NHLBI
Laura Marcial			
Jacqueline Bagwell			
OHSU			
Dave Dorr			
HL7 Patient Care Work Group Guests			
Stephen Chu			

Agenda
- Welcome and Introductions
- MCC eCare Plan Project Overview and Progress Update
- MCC eCare Plan Topics and Agency Partner Feedback
  - Patient/Caregiver App Demonstration and Discussion
  - Update on Pilot Process
  - MCC eCare Implementation Guide Walkthrough
- Federal Projects Round Robin Update

- ○ CMS PFS 2023 Chronic Pain Management Codes
- ○ CMS PACIO
- ○ ACL Social Care Referrals Challenge
- ○ ONC Gravity Pilots
- ○ ONC SDOH Clinical Care Implementation Guide Integration Technical Framework and Crosswalk
- ○ ONC Missouri LEAP
- ○ CDC MedMorph
- ○ ONC COVID Machine Learning
- ● Concluding Remarks

Discussion

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Welcome and Introductions	● Karen, Jenna, and Arlene welcomed attendees and reviewed the agenda. Jenna and Arlene invited federal partners to share collaboration opportunities and/or lessons learned from relevant Federal projects and/or to provide general feedback on the MCC e-Care Plan project. ● The NIDDK MCC e-Care Plan is supported by a contract with EMI Advisors. AHRQ is supported by RTI International and Oregon Health Sciences University (OHSU).

MCC eCare Plan Project Overview and Progress Update	● Karen reviewed the EMI, RTI, and OHSU teams supporting the development and testing for the eCare Plan work.
	● The meeting summary will be shared within 2 weeks of this call.
	● Karen reviewed the history of the MCC eCare Plan project.
	  ○ The project was informed by the HHS stakeholder panel definition for a comprehensive shared care plan.
	  ○ The purpose of the project is to develop an interoperable e-care plan to enable the aggregation and sharing of patient data across multiple settings to support people with MCC.
	  ○ The three main deliverables of the project are as follows:
	    ■ develop data elements, value sets, and FHIR mappings,
	    ■ create an HL7 FHIR Implementation Guide (IG), and
	    ■ develop and pilot test a provider-facing and patient/caregiver-facing e-care plan application.
	  ○ We are in year 4 of the 5-year project. The current focus is on refining and balloting the IG, backend updates to two SMART on FHIR care planning apps, and pilot testing.
	● Karen asked if there are any questions on the pre-read slides shared before the meeting. No questions were asked. Questions and comments can also be submitted via email to karen.bertodatti@emiadvisors.net.

MCC eCare Plan Topics and Agency	**Patient/Caregiver App Demonstration and Discussion** ● The app will engage patients and unpaid caregivers for patients with MCC.

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Partner Feedback	• Dave shared that the patient and caregiver applications were combined due to overlap of functionalities; this will also assist caregivers and patients with continuity of care during the natural progression of the disease(s) and patient's capability. Of note, the combined app will support separate sign on for the patient and caregiver(s).
	• The provider-facing app provides a summary of the records as a care plan for all members of the care team.
	• We are developing a common data services library to help share the data aggregation and presentation approaches between the two applications.
	• The vision of the patient/caregiver app is pulled from that earlier definition of a comprehensive shared care plan. Specifically, the app:
	  ○ Is a standards-based application platform.
	    ■ The application is FHIR based.
	  ○ Allows users to write information into the app.
	    ■ The team is researching the development of a research store to save written information.
	  ○ Enables goal-oriented care planning.
	    ■ This will also be facilitated through a research store. Caregivers and patients can write their own goals.
	  ○ Supports interoperable data exchange.
	    ■ This will be done through data aggregation and use of standard value sets.
	  ○ Serves as a companion to the provider app.
	    ■ The common data services library allows for consistent data sharing between both apps.
	• Dave provided a live demo of the web-based application.
	• Key application features that were reviewed include the following:
	  ○ Patients can launch the app within any browser; they may receive a secure link from MyChart.
	  ○ Tasks include questionnaires based on standard instruments.
	  ○ Data is aggregated in our FHIR sandbox right now so the app is pulling Patricia's (MCC eCare persona) goals which includes measurable goals which comes from the FHIR Resource. The app uses the LOINC code associated with the goal to look at all Observations in the data and pull the latest measure relevant to the goal.
	    ■ This is starting to bring in the relationships of the data elements across different FHIR resources in the apps.
	  ○ Retrieval of the problem list, grouped and classified by common value sets. We are working toward using these value sets to classify the problem list when data is aggregated from multiple providers.

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	○ Activities (FHIR Service Requests), medications, health statuses (lab results and tests, classified using the value sets included in our IG), immunizations, and care teams can also be retrieved and displayed. ○ Completed questionnaire results will be stored in the supplemental data store at our pilot site. ○ Patients have the ability to select different provider sources where they receive care and launch the app from those systems. ■ Dave pointed out that there is a provenance resource for every record returned. This displays the source of the data (i.e. Walmart Health) and the author (i.e. Dr. Smith). ● Dave reviewed next steps. ○ The team is developing a research data store to save the aggregated data from multiple providers and present it in one place simultaneously for the pilot. The provider app will use this data store to display patient data from multiple EHR sources. ○ The team is exploring the patient's ability to aggregate data from personal health devices and wearables in a FHIR format to be used with data available in EHRs. ○ The team is developing a common data services library to enable retrieval and display across the patient/caregiver and provider applications consistently. ● Ellen Blackwell suggested calling the "patient" by some other title, such as "person" or "consumer," as this application views care across the continuum, not only in acute settings. ○ Dave agreed that the terminology is challenging, and he often refers to them as the "individual." ● Ellen Blackwell asked in the chat and on the call if the system can differentiate whether the caregiver or patient is the user. ○ Karen responded that the patient and caregiver log into the app using their own EHR portal login; typically the patient will need to grant the caregiver proxy access in the EHR for this to be possible. ○ Ellen shared concerns about security and privacy during workarounds of a proxy login as the patient may not be aware of all the information available via the app that is being shared with the caregiver. ○ Dave replied that access to the data via the app requires authorization and that the patient and caregiver have different logins with different capabilities. Additionally, if the caregiver were to enter information, it is recorded that the caregiver authored it, rather than the patient.

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	○ Jenna clarified that, for the scope of this project, the caregiver is an unpaid caregiver. There is discussion with HL7 around standardization for distinguishing roles and definitions of relationships to patients.
	  ■ Dave added there are discussions around consent of shared data such as limiting access to certain information or allowing view access for only a limited time.
	  ■ Stephen shared that the HL7 Learning Health System WG (in collaboration with PCWG) is working on a Patient-Centered Care Team which defines professional roles and functional roles.
	  ■ Karen shared in the chat that ACF is leading some discussions around the creation of a "Person Resource" (vs the existing FHIR Patient Resource) in the HL7 community. The proposal for that is available here: https://jira.hl7.org/browse/PSS-2153.
	● Jenna is interested in feedback on the change in approach to the applications, such as combining patient and caregiver into one app. She is also interested in input on the research data store.
	● Stephen Chu asked if Dave could share the eCare Plan architecture, especially showing how the apps interact with EMRs and the supplementary Care Plan repositories.
	  ○ Karen responded that there are architecture diagrams in the next presentation.
	
	Implementation of an e-Care Plan for people with MCC
	● Laura Marcial reviewed the key questions the team is evaluating regarding factors that affect implementation and the use of the apps within and across the organization, ways that the apps could influence data collection and sharing, and other intra- and interorganizational sociotechnical factors to consider.
	● The four primary tasks for implementation are below:
	  ○ Design Pilot Test Site
	  ○ Execute and Evaluate Pilot
	  ○ Connectathon
	  ○ Final Report
	● Laura reviewed the pilot phases in more detail:
	  ○ Soft-go-live
	    ■ This took place January 18, 2023, and they are evaluating proof-of-concept in a limited environment.
	    ■ Patients can access FHIR endpoints individually.
	    ■ Purpose is to document any performance issues.
	  ○ Phase 1: Patient-mediated health information exchange and aggregation

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	■ Development of the research data store will be able to store patient-reported outcomes. ■ The goal is to test data aggregation capabilities using the research data store. ○ Phase 2: Filtering ■ Packaged information can be retrieved using FHIR and brought back to the research data store. ■ There are ongoing questions around how we can manage data in the research store. While this looks like a localized personal health record or HIE, the value of doing this includes understanding what data is available and how we might approach reconciling those data. This may provide insight on how to shift the burden, or spread the burden, so it is not on the patient alone to manage care coordination. ○ Phase 3: Reconciliation ■ Eventually, we would like to reconcile or discuss how we can approach data reconciliation using FHIR resources. ● By the time piloting is done, the team aims to reach totals of 10-12 providers and 100 patients. ● The RTI team also hopes to stand up a read-only implementation with MedStar in a sandbox environment. ● Laura reviewed a detailed work plan with expected dates for each task and initiative. ● Laura provided screenshots that demonstrate the soft-go-live success. ● Dave Dorr shared that the app is live in the production and test environments, and it is ready to move to the next phase to understand how to integrate, prioritize, and summarize information for care coordination. ● Questions may be submitted to karen.bertodatti@emiadvisors.net. **MCC eCare Plan Implementation Guide** ● Gay shared that the IG approach changed from developing many profiles for each set of values that are identified for the conditions to creating a baseline set of 10+ profiles that can be used with the 200+ value sets now defined in the IG. ● Other updates to the IG include use case updates, images update, and leveraging the SDOH guidelines. ● Most vendors are focused on implementing and using US Core profiles so our IG makes use of many profiles derived from US Core.

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	- The IG just went through the HL7 for-comment ballot cycle and the team is doing comment reconciliation. The IG will be re-balloted in September as an STU ballot. - The MCC eCare IG can be found here: https://build.fhir.org/ig/HL7/fhir-us-mcc/branches/master/index.html - The HL7 ballot process is ultimately used to achieve consensus. - Comments can be on clarifications needed, implementability, or technical changes. - While the balloting period is officially closed, federal partners can still review the IG and submit comments using the "Propose a change" link in the footer (bottom of the page) of the IG. - Gay reviewed the voting results. 36 voters (35 affirmatives, 1 negative). 26 line-item comments. - The team is working to reconcile comments via triage, making a proposed resolution, putting them up for a vote, and discussing them during Patient Care Work Group calls. - If anyone wants a deeper dive on the IG, please feel free to email Karen at karen.bertodatti@emiadvisors.net. - Gay shared the ballot dashboard is available to anyone who wants to follow the comment reconciliation process more closely. Access does require a free HL7 Jira account which can be requested here. - Ballot Dashboard: https://jira.hl7.org/secure/Dashboard.jspa?selectPageId=16303 - Jenna shared that one major change to the IG is the transition to the value set library approach, reducing the number of FHIR profiles, and associating each profile to a possible set of value sets that can be used along with that profile. - Jenna liked that this makes the IG more implementable and easily expanded. She is interested to hear if others have used this approach and their thoughts. - Maria Michaels asked if the team reviewed other profiles first to see if we could use them without making them MCC profiles? - Gay responded the profiles we used are derived from US Core profiles. Furthermore, in most cases, the only additional constraint we added is the ability to support the resource PertainsToGoal extension. In procedure, there is a must support on the condition. - Maria referenced the US Public Health Library as a way to coordinate profiles that are not yet in US Core. Maria encouraged evaluating whether there

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	are any MCC profiles that makes sense to include in the US Public Health Library.

Federal Partners Round Robin Updates	**CMS Chronic Pain Management Codes** - Ellen Blackwell
	● Ellen shared that a new billing code was released for chronic pain treatment for the Medicare population.
	● When developing CMS's behavioral health strategy, pain treatment was the third goal.
	● The work began in 2021 when CMS solicited comments on designing codes specific to chronic pain. Almost 2000 comments were received.
	● These new HCPCS codes were published in the 2023 Physician Fee Schedule. It is billable starting January 1.
	   ○ G3002
	   ○ G3003
	● The codes require an initial face-to-face visit and health literacy counseling.
	● Jenna asked if this is implemented across CMS.
	   ○ Ellen responded that this is a payment code that any authorized medicare provider can render.
	● Ellen shared that they are having trouble spreading this new information.
	   ○ Arlene recommended reaching out to professional associations such as the Society for General Internal Medicine or the American Geriatrics Society or the Council for Medical Subspecialties.
	   ○ Evelyn commented that EMI will include this news in outreach regarding SDOH and care planning standards.
	   ○ Maria Carney added to Arlene's list: American College of Physicians and American Association of Hospice and Palliative Medicine. She also recommended sharing with health systems directly.
	   ○ JaWanna will share with her clinical team at ONC.
	● Arlene asked how to bill for this code in the context of multi-morbidity for clinical visits.
	   ○ Ellen responded that it can be billed alongside an E/M code.
	● Maria will follow up with Ellen to coordinate dissemination efforts.
	
	CMS PACIO - Lorraine Wickiser
	● Lorraine described that PACIO identified a problem of poor communication across care providers and a lack of uniformity in health care records and timely information.
	● PACIO's Functional Status and Cognitive Status Use Cases have been published as STU1.
	● Speech, Language, Swallowing, Cognitive Communication, and Health (SPLASCH) has been added to the functional status and cognitive status use cases, combining to make the Personal

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	Functioning and Engagement use cases. These should be published by the end of 2023.
	● There are three other use cases (re-assessment time points, advance directives, and quality measures).
	● The Advance Directives Interoperability Use Case should be published as an STU2 by mid-2024.
	  ○ This was due to a two-pronged approach with patient-authored information and physician-ordered information.
	  ○ The first draft was tested at Connectathon 32.
	● The Personal Functioning and Engagement IG went to ballot in September 2022 and will allow different observations and assessments to be exchanged.
	● Re-Assessment Timepoints IG was published in September 2022.
	● Lorraine invited the federal partners to get involved via email or the Confluence page.
	
	ACL Social Care Referral Challenge - Ami Patel
	● The challenge was designed to engage partners across health care and social services systems to demonstrate technical solutions that promote interoperability and address the lack of standardization to better manage referrals.
	● The Challenge highlighted the issue of the use of non-standardized terminology and taxonomy.
	● An action plan is under development with objectives of having an open access human services taxonomy and the necessary steps federal agencies can take to help achieve them. This is a collaborative effort with ONC, ACF, and VA colleagues.
	● ACL Challenge Winners were invited to join Gravity Pilots Affinity Group and present their solution and implementation of Gravity standards (terminology and FHIR IG).
	● Through the testing of the two use cases (social care referral from clinical to social service provider and documentation and tracking SDOH-related interventions to completion), they uncovered the barrier of not having an open-source human services taxonomy.
	● ACL is now focused on the need for an open-source human services taxonomy via an IG, which the federal partners were invited to review.
	● Supplemental slides on the Challenge are included in the slide deck.
	
	ONC Gravity Pilots - JaWanna Henry
	● JaWanna shared an update from ONC on the public health emergency response related HL7 standard solutions and future pandemics cooperative agreement.
	● One of the objectives was to develop, advance, and harmonize SDOH standards using FHIR and API to enhance data exchange and access.

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	- Deliverables included an internal gap analysis, an SDOH interoperability report highlighting approaches to address gaps, an STU2 IG, a pilot support group, and establishing pilot sites. - Last fall, the first Gravity Pilots Affinity Group kicked off. This is a 90-minute meeting that provides technical assistance to pilot sites. - The Gravity SDOH FHIR Clinical Care IG was published last November as an STU2. - Over 100 entities submitted interest pilot forms. - The Gravity Affinity Group is a peer-to-peer learning forum for pilot sites. - ONC is funding two sites (OCHIN and Alliance Chicago) and ONC LEAP is funding one site (UT Austin). - OCHIN is testing the use case for documenting and tracking SDOH (food insecurity, housing instability, and transportation and security). - Alliance Chicago is working on exchanging SDOH health data using FHIR observation profiles. - UT Austin is documenting, exchanging, and tracking SDOH data and interventions beyond clinical care. They aim to demonstrate the feasibility of FHIRed-SHIP and develop an implemented toolkit as a referral system. - The Gravity Terminology workstream is seeking funding for digital access and digital literacy data standards work. - From the Technical workstream side, Gravity led a track at HL7 Connectathon 32 to explore the IG's maturity by having multiple apps and vendors exchange data across separately developed code and backend systems. - JaWanna shared the following link: https://blog.hl7.org/gravity-project-opportunity-to-help-launch-first-national-digital-access-and-digital-literacy-data-standards-development **ONC SDOH Clinical Care Implementation Guide Integration Technical Framework and Crosswalk** - Brenda Akinnagbe - Two main deliverables comprise this work: - SDOH clinical care IG integration technical framework establishes an integration framework as a tool for advancing SDOH data use and interoperability. - https://www.cdc.gov/opioids/pdf/Integration-Framework.pdf - This link demonstrates the prescription drug monitoring framework, which is being used as a framework to model this work. - Technical crosswalk between the electronic long-term services and supports (eLTSS) IG and the SDOH clinical care IG. - This supports use cases that use both IGs.

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	● They will use the Gravity Pilot Affinity Group JaWanna mentioned to gain consensus on this work. She invited federal partners to join. ○ https://confluence.hl7.org/display/GRAV/Gravity+Project+Pilots+Affinity+Group+Home **ONC Missouri LEAP** - Brenda Akinnagbe ● The work occurred between September 2020-September 2022. ● The MO Department of Mental Health Division of Developmental Disabilities won the ONC LEAP to focus on integrating health care and human services data to support improved outcomes. ● They were successful in exchanging data from a state case management system into an HIN/HIE and making that data available to a community provider and a primary care provider. ● Through this use case, they demonstrated how interoperability between health care and human services improves individual outcomes. This opens up the possibilities for home and community-based service (HCBS) providers to provide better reporting for value-based purchasing. ● They will move forward with the eLTSS implementation using the American Rescue Plan funding. Since this has not been done in a state before, it will be really interesting to see how this works out in Missouri. ● Jenna shared with Brenda and JaWanna, the following FY23 initiative from NIDDK: https://www.niddk.nih.gov/about-niddk/advisory-coordinating-committees/national-diabetes-digestive-kidney-diseases-advisory-council/concept-clearances/may-2022/integration-social-medical-care. **CDC MedMorph** - Maria Michaels ● Maria shared that CPG on FHIR will be re-balloted with updates during the September cycle; this will be relevant to the MCC eCare project. ● MedMorph has a reference architecture implementation guide that will be published as an STU1. ● Three content IGs were developed and balloted, which include central cancer registry reporting, health care surveys, and research data exchange. ● The pilot testing for the Hepatitis C use case has been completed with a public health and research use focus in partnership with AHRQ. ● CDC is partnering with AHRQ to develop an IG and pilot FluSurvNET for hospital flu surveillance. ● Maria will be attending and presenting at HIMSS with CMS on MedMorph and FHIR-based quality reporting. **ONC COVID Machine Learning** - Adam Wong

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	- Adam explained that COVID Machine Learning Project is about using machine learning techniques to enable health information exchange to support COVID-19-focused patient-centered outcomes research. - They are recruiting three HIEs to develop this model by implementing USCDI and the bulk FHIR API which will facilitate the interoperable and efficient data access from health systems and providers, test the use of a split learning model with HIE data to conduct this research, and disseminate resources to support adoption by HIEs of technologies used in this project and to encourage PCOR researchers to use HIEs and their data for research. - They have already conducted a research analysis report environmental scan that detailed the infrastructure preparation needs for development, assessed and identified HIE candidates, and proposed some preliminary COVID research questions. ONC collaborated with Dr. Ramesh Raskar from MIT, the creator of split learning. - The report assessed 10 HIEs; 6 of which were technically mature, including the infrastructure to support machine learning, and they had a wide breadth of patient data sources available. - Maria asked if the report is public. Adam shared that this is an internal report. - Phase two of the project is done in partnership with BookZurman for the infrastructure preparation and model development. They are in the process of selecting and onboarding HIEs. - BookZurman has also set up a sandbox to test and evaluate how to accomplish the required data needs. - They are narrowing down the research questions to address, which will be dependent on the HIEs and the types of data they have available. - Next steps include aggregation of data, deployment of the model, a midpoint summary, implementation guide, open-source code, and a journal manuscript. - Results will be disseminated through a federal webinar and other channels.
Concluding Thoughts and Next Steps	Jenna and Arlene thanked the attendees and encouraged them to reach out via email with any questions.