Connectathon 30
MCC Care Planning Track Kickoff

Dave Carlson & Emma Jones
04/27/2022
Agenda

• Track Introduction
• Track Scenario & Testing
• Communication & Resources
• Appendix
MCC CARE PLANNING TRACK
INTRODUCTION
Track Description

- Hosted by the Multiple Chronic Conditions (MCC) eCare Plan project
- Continue testing of the MCC eCare plan FHIR IG, SMART on FHIR Apps (clinician- and patient/caregiver-facing) and value sets defined for MCC clinical domains
- Supports the development and exchange of FHIR-based care plans and applying evidence-based clinical practice guidelines at the point of care to create and share person-centered care plans and to manage their ongoing care.

For more background info visit: 2020-05 Care Coordination Track
Track Goals

• **Demonstrate** the purpose of using goals in care planning, where goals may be created by any member of the care team, including patients and caregivers.

• **Explore**:  
  – How care goals in practice can be both **clinically useful and interoperable**.
  – The **relationships** between a goal, the conditions and/or assessment observations that it addresses, and outcome observations that document goal progress.
  – The **clinical workflow feasibility** for creating FHIR Goal.description using coded terminology vs free text.
  – Examine the **clinical workflow and challenges** with creating measurable goals that reference specific codes, e.g., lab or vital sign LOINC code.

• **Evaluate**:  
  – The use of **FHIR Goal** to capture and track SMART goals, i.e., Specific, Measurable, Achievable, Relevant, and Time-Bound.
  – Evaluate and **recommend updates** to existing **US Core Goal Search Parameters**.
TRACK SCENARIO & TESTING
Diabetes Diet Intervention Scenario

The scenario is an extension on the May 2022 PCWG Clinician on FHIR Track 4 use case which illustrates a common scenario for patients with MCC and multiple interdependent interventions.

Patricia and her primary care physician, Dr. John Carlson capture the following goals for diabetes control:

**Patient identified:**
1. Keep a carb consistent diet consuming 45-60 gms of carbohydrates per meal.
2. Control blood sugars within 1-2 hours after eating to < 180 mg/dl

**Physician identified:**
1. Patricia has been keeping a food diary logging what she eats at each meal. Generally for breakfast and dinner the carb count is within the desired limits. But the carb count at lunch is consistently above the desired limits. Patricia likes to go out to lunch with her friends and does so 5-6 days a week. Patricia has a very limited include and has also started attending events at the Senior Center many afternoons and finds there are snacks and treats often part of the afternoon activities. She is using these activities to access food she can eat as one of her meals for the day.
2. Patricia’s blood sugar logs show her blood sugar is well controlled after breakfast, but after lunch and dinner the values are inconsistent, and often high. And Patricia has begun experiencing low blood sugar events during the night.
3. Obtain an HgbA1c < 7% within six months.
Patient Identified Goals

1. Keep a carb consistent diet consuming 45-60 gms of carbohydrates per meal.
   ● Goal.description: Keep a carb consistent diet consuming 45-60 gms of carbohydrates per meal (LOINC estimated carbs/24 hrs)

2. Control blood sugars within 1-2 hours after eating to < 180 mg/dl
   ● Goal.description: Control blood sugars within 1-2 hours after eating to <180 mg/dl
   ● Goal.description: HgbA1c <7.5 by next encounter in 3 months.
     ● Outcome - reference observation with HgbA1c LOINC code (most recent) - 41995-2 Hemoglobin A1c [Mass/volume] in Blood

[Note: Goal progress provides insight to the effectiveness of the related intervention(s). Use Goal.notes to record the progress on the goal. This would be notes recorded by patient, caregiver, care providers, etc.]
Physician Identified Goals

Captured as text notes

[These are provider notes about the goal that was entered in the system]

1. Patricia has been keeping a food diary logging what she eats at each meal. Generally for breakfast and dinner the carb count is within the desired limits. But the carb count at lunch is consistently above the desired limits. Patricia likes to go out to lunch with her friends and does so 5-6 days a week. Patricia has a very limited include and has also started attending events at the Senior Center many afternoons and finds there are snacks and treats often part of the afternoon activities. She is using these activities to access food she can eat as one of her meals for the day.

2. Patricia's blood sugar logs show her blood sugar is well controlled after breakfast, but after lunch and dinner the values are inconsistent, and often high. And Patricia has begun experiencing low blood sugar events during the night.

3. Obtain an HgbA1c <7% within six months.
Topics to Address

1. Notes on goals
   - Resource: Goal.notes
2. Concerns addressed by the goal
   - Resource: Goal.addresses
3. Goal barriers
   - Resource: Goal.extension:Barrier
4. Goal with related interventions
   - Resource: resource.extension:resource-pertainsToGoal
5. Goal related to other goals
   - Resource: Goal.extension:goal-relationship
Patient Persona: Patricia Noelle

Age: 65 years old

Clinical Health Concerns: CKD, Diabetes, CHF, Chronic Low Back Pain, Depression

Social Risks: Transportation and food security

Family: 1 child, Rose, who is her caregiver

Location: TBD

About Patricia:
- Patricia is a retired school teacher.
- Her husband passed away a few years ago, and she currently lives with her daughter, Rose.
- Patricia feels nervous and overwhelmed managing her MCCs. This also impacts her depression.
- Patricia relies on Rose to drive her to the doctor and thereby can only schedule appointments when Rose is not working.

Patricia’s Typical Routine and Interactions:
- Patricia spends her days watching TV, walking around the house, and sometimes having a meal with friends.
- She finds certain activities like reading more difficult now due to decreased vision.
- Currently she follows a carbohydrate-controlled, heart-healthy diet.
Patient Persona: Patricia Noelle

**Age:** 65 years old

**Clinical Health Concerns:** CKD, Diabetes, CHF, Chronic Low Back Pain, Depression

**Social Risks:** Transportation and food security

**Family:** 1 child, Rose, who is her caregiver

**Location:** New Jersey, U.S.

**Challenges and Goals:**
- Patricia is finding it hard to schedule appointments with her physician and specialists because of frequent time conflicts.
- Patricia is stressed because she does not know which of her many doctors to listen to, what she should be eating, which medications to take.
- Over the last month, Patricia has become increasingly anxious and depressed regarding her progressive CKD and what course of action she needs to take should her kidneys fail.
- She is also concerned about tapering off the opioids she is currently on to manage lower back pain.
Sample Data

FHIR Bundle JSON files containing scenario resources for Patricia Noelle are available on GitHub and also loaded into our track's FHIR sandbox.

FHIR Sandbox and Endpoints

- CarePlanning MELD FHIR Sandbox (http://meld.interop.community)
  - OAuth2 secure: https://gw.interop.community/CarePlanning/data
  - Open endpoint: https://gw.interop.community/CarePlanning/open

- EHR vendor FHIR R4 sandboxes
  - Used for testing eCare Plan SMART on FHIR apps
  - Epic (fhir.epic.com)
  - Cerner (fhir.cerner.com)
  - VA (developer.va.gov)
  - Add your sandbox here!
<table>
<thead>
<tr>
<th>Agenda</th>
<th>Date</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kickoff (Overview)</td>
<td>May 3</td>
<td>9:30 – 10:00 AM EST</td>
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<tr>
<td>MCC eCare Plan FHIR IG Draft Walk Through</td>
<td>May 3</td>
<td>10:00 – 10:50 AM EST</td>
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<tr>
<td>CQL use in Care Plan SMART on FHIR app demo</td>
<td>May 3</td>
<td>11:00 AM – 12:30 PM EST</td>
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<tr>
<td>Care planning process with PACIO, US Core, and Gravity/SDOH</td>
<td>May 3</td>
<td>1:30 PM – 3:30 PM EST</td>
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<tr>
<td>Day 1 Wrap-up</td>
<td>May 3</td>
<td>3:30 – 4:00 PM EST</td>
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<tr>
<td>Track Check-in</td>
<td>May 4</td>
<td>9:30 – 10:00 AM EST</td>
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<tr>
<td>Open testing</td>
<td>May 4</td>
<td>10:00 AM – 12:00 PM EST</td>
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<tr>
<td>Open discussion</td>
<td>May 4</td>
<td>1:00 – 2:30 PM EST</td>
</tr>
<tr>
<td>Day 2 Wrap-up</td>
<td>May 4</td>
<td>2:30 – 3:00 PM EST</td>
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<tr>
<td>Care Planning Track Highlights</td>
<td>May 4</td>
<td>3:30 – 3:40 PM EST</td>
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We invite you to contribute to our Track Report Out with the following information:

- Indicate your participation daily
- Share notable achievements while participating in our track
- Share any screenshots or links that show your achievement
- Share discovered issues and questions

https://docs.google.com/document/d/1ttXTixNUylugBfaTUr9kICRi8NQD3dYx_SfB9R4IXZ0/edit?usp=sharing
Get Involved

• **Register** for the Care Planning Track
• Zulip (chat.fhir.org)
  – Care Planning Connectathon Zulip Chat
  – Use this to follow the Connectathon Management Stream

• Log issues in JIRA
  – Use your Confluence user ID and password

• Contact your Track lead and supports
  – Dave Carlson, Track lead, dcarlson@clinicalcloud.solutions
  – Emma Jones, Track lead, emma.jones@emiadvisors.net
  – Karen Bertodatti, Track support, karen.bertodatti@emiadvisors.net
  – Savanah Mueller, Track support, savanah.mueller@emiadvisors.net
Resources

- Whova (link will come in your email)
- Connectathon 30 Confluence Page
- Track Page
- FHIR Chat
- FHIR Specifications
Questions?
Care Planning Framework

Source: HL7 Patient Care Work Group “Draft Care Plan Domain Analysis Model 2.0”, August 2020

Conceptual Framework

Source: Gravity Project Conceptual Framework
Care Plan Domain Analysis Model (DAM) 1.0

Health Concerns:
- Impaired mobility
- At risk for impaired skin integrity

Goal: Intact skin

Interventions:
Requested
- Turn Q 4 hours
- Assess skin Q 8 hours
- Performed: Turned 0600, 0800, 1200, 1600
- Skin assessment 0800, 1600

Outcome Observation: Intact Skin

Progress Toward Goal: Met

Evaluations/Outcomes

HAS COMPONENT
HAS COMPONENT
HAS SUPPORT
HAS SUPPORT
HAS REASON
HAS REASON
Source: HL7 Patient Care WG Thursday Q1 Sept 2019 Progress Report
Goal-Oriented Care Planning
Why attend Connectathon?

• Join a community of FHIR users
• Develop and test systems and use of the standard
  – Increase visibility of resources, profiles, and implementation guides
• Demonstrate what is possible
• Refine the FHIR Specification
  – Testing a part of a Connectathon is a prerequisite for resources and implementation guides progressing up the FHIR Maturity Model.
How to attend Connectathon?

• Complete the pre-Connectathon survey to select a Track
• Sign up on Whova
• Add Whova sessions to your calendar
• Sign up on chat.fhir.org
• Join Zoom meetings via Whova
  – Please do not share URLs with those who are not registered through HL7.
  – By registering for the HL7 FHIR Connectathon, participants agree to behave ethically including not using the event to gain competitive knowledge or disclosing information gained about other participants’ systems during the event. In addition, participants agree to not engage in derogatory actions using the internet.
# Connectathon Schedule

<table>
<thead>
<tr>
<th>Agenda</th>
<th>Date and Time</th>
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<tbody>
<tr>
<td>HL7 Connectathon Kick Off</td>
<td>Monday, May 2 4:00 – 5:00 PM CST</td>
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<tr>
<td>Connectathon Testing</td>
<td>Tuesday, May 3 – Wednesday, May 4 8:00 AM – 5:00 PM EST</td>
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Standard Hours unless listed on track page: 8:00 AM – 5:00 PM EST
Special Sessions and Recordings

- Newcomer Orientation
- Participant Information Session