

MCC e-Care Plan Project & CQL Overview

January 14, 2022



NIDDK/AHRQ e-Care Plan for Multiple Chronic Conditions Project

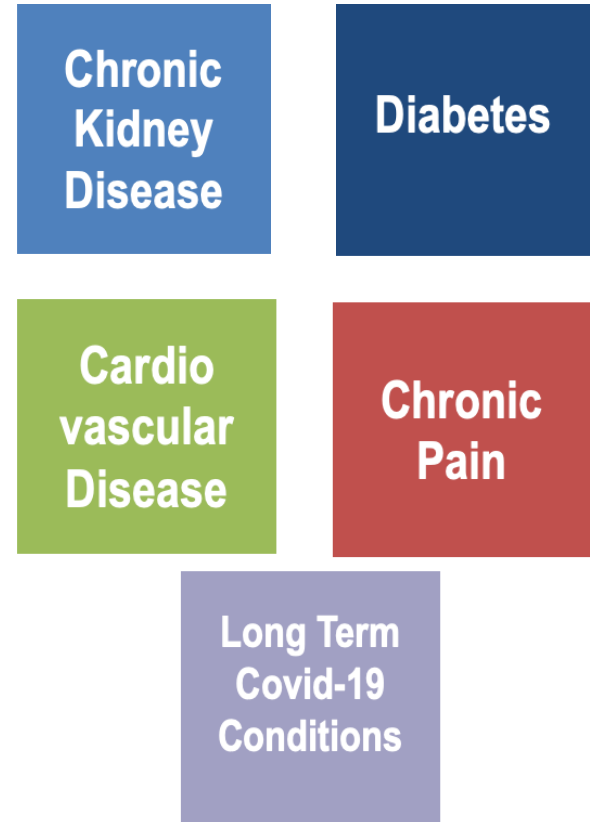
Build capacity for pragmatic, patient-centered outcomes research (PCOR) by developing an **interoperable electronic care plan** to facilitate aggregation and **sharing of critical patient-centered data** across **home-, community-, clinic- and research-** based settings for people with **multiple chronic conditions (MCC)**.

<https://ecareplan.ahrq.gov/collaborate/>



AHRQ-NIDDK Project Deliverables

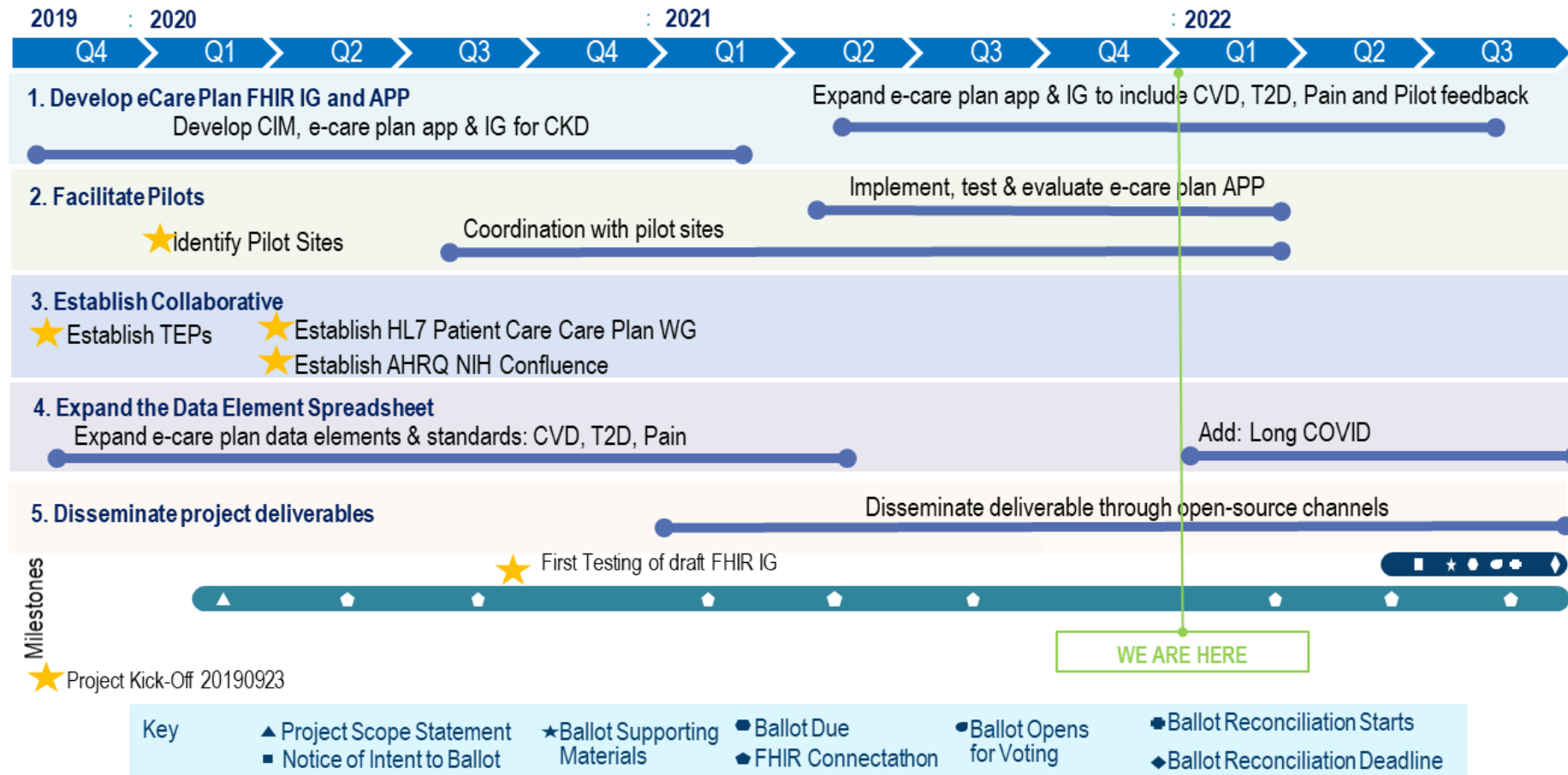
- 1. Data elements, value sets, clinical information models, and FHIR mappings** to enable standardized transfer of data across health & research settings for kidney disease, diabetes, cardiovascular disease, chronic pain & long-term COVID
- 2. Pilot tested patient-, clinician- and caregiver-facing e-care plan applications** that integrate with the EHR to pull, share & display key patient data
- 3. HL7[®] Fast Health Interoperability Resource (FHIR[®]) Implementation Guide** based on defined use cases and standardized MCC data elements, balloted for trial use



*All deliverables will be open-source & freely available



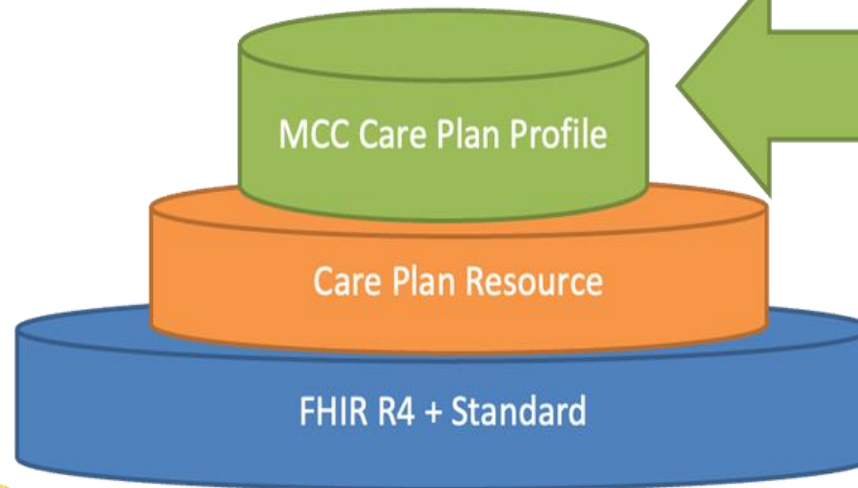
Multiple Chronic Condition (MCC) eCare Plan 2019 – 2022 Roadmap



Reusing and Constraining – FHIR Care Plan

 **Care Plan Resource provides the framework for the IG**

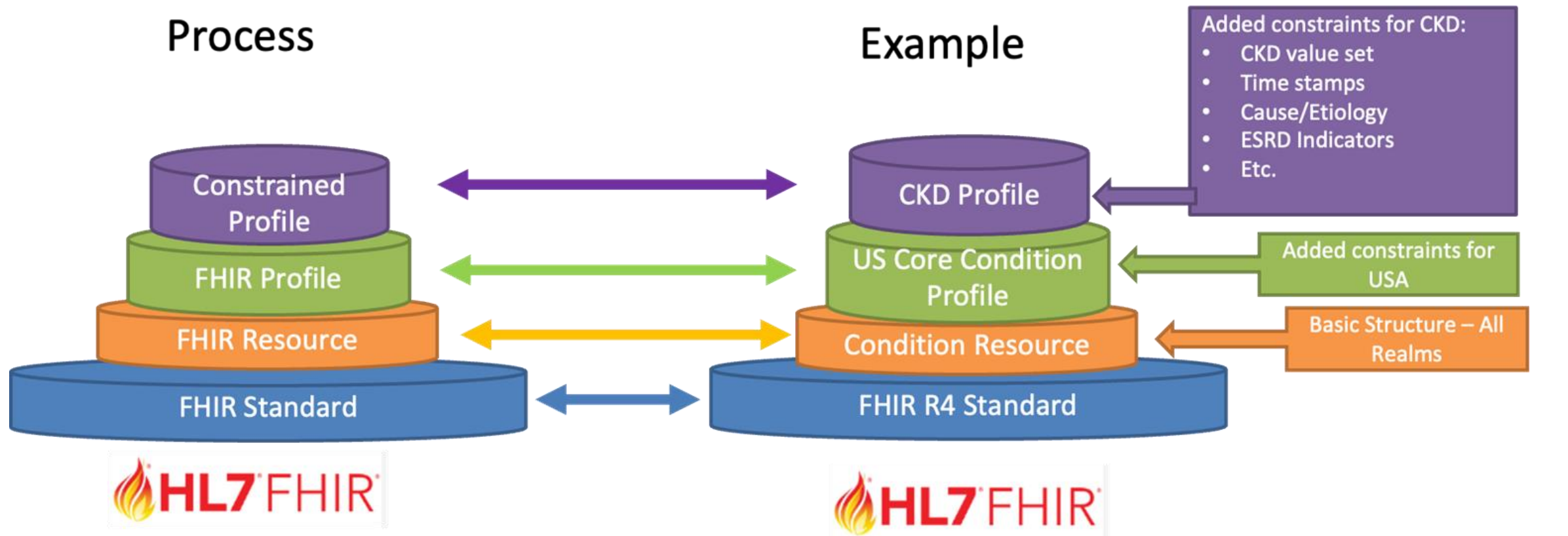
Improve Care
Coordination
without increasing
clinician burden



Constrains/builds to meet needs for
machine assisted care planning for MCC

- References Profiles
 - Library
- Aims to derive data in (EHR) Care Plans
- Aims to derive relevant data outside of (EHR) Care plan
- Aims to provide comprehensive cross system view for Care Coordination

Reusing and Constraining



MCC IG

- https://trifolia-fhir.lantanagroup.com/igs/lantana_hapi_r4/MCC-IG/index.html
 - Artifact Index



Point to Consider

Given that potentially we may have 500 more chronic concepts, is it better to continue down the path of creating a profile for each condition, goal, observation, etc.

OR should we constrain the applicable profile/resource to have the specified must support attributes and indicate the appropriate value sets. i.e. provide the list of value sets that can be used for a specific condition, etc.



CQL

- Developing CQL logic that uses IG value sets to classify data elements and provide decision support for patient-centered goal management

```
MCCGoals.cql — Untitled (Workspace)
MCCConcepts.cql  MCCConditions.cql  DataElementHelpers.cql  MCCGoals.cql
mcc-cds > input > cql > MCCGoals.cql
1  library MCCGoals version '0.1.0'
2
3  using FHIR version '4.0.1'
4
5  include FHIRHelpers version '4.0.1'
6  include DataElementHelpers called DE
7  include MCCConcepts called Cx
8
9  context Patient
10
11  define "Conditions with Goals":
12  [Condition] condition
13  | where exists HasGoals(condition)
14
15  define "Conditions without Goals":
16  [Condition] condition
17  | where not exists HasGoals(condition)
18
19  define "Display Conditions without Goals":
20  DE.DisplayNames("Conditions without Goals")
21
```



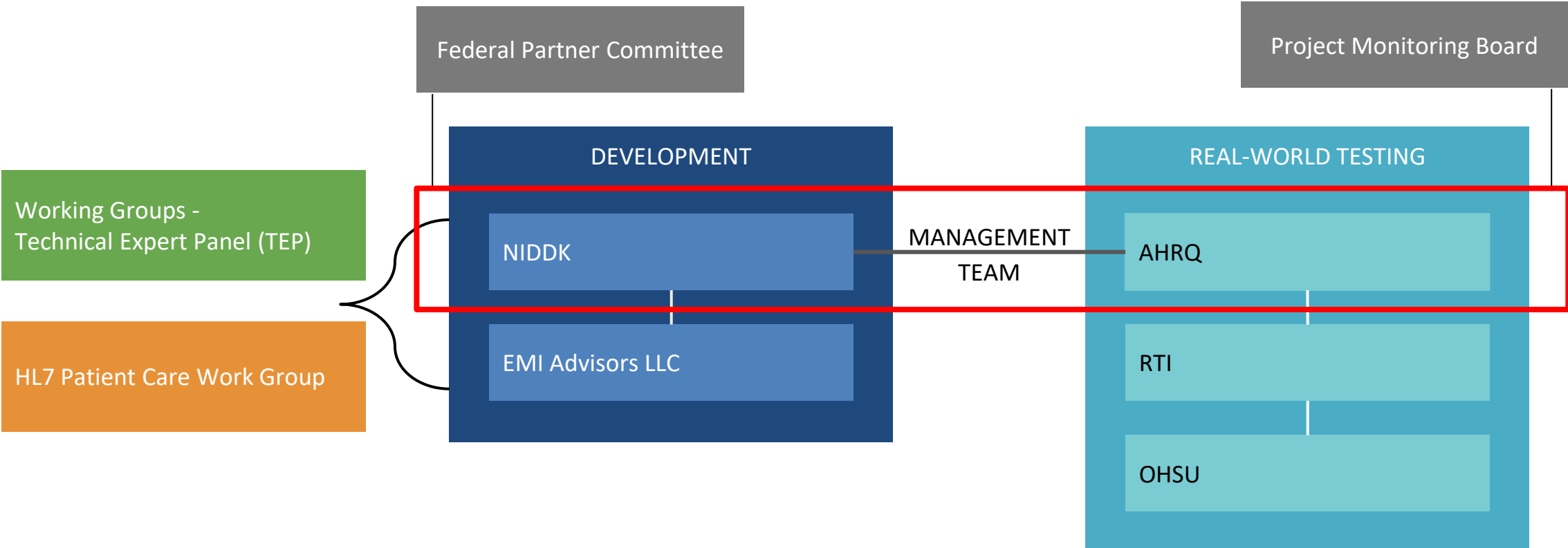


**National Institute of
Diabetes and Digestive
and Kidney Diseases**



National Institute of
Diabetes and Digestive
and Kidney Diseases

Governance Model



MCC eCare Team Project Contacts

| Name | Role | Contact Info |
|------------------|--|----------------------------------|
| Evelyn Gallego | EMI Advisors, Program Director | evelyn.gallego@emiadvisors.net |
| Karen Bertodatti | EMI Advisors, Project Manager | karen.bertodatti@emiadvisors.net |
| Savanah Mueller | EMI Advisors, Project Analyst | savanah.mueller@emiadvisors.net |
| Emma Jones | EMI Advisors, SME | emma.jones@emiadvisors.net |
| Gay Dolin | Namaste Informatics, SME | gdolin@namasteinformatics.com |
| Dave Carlson | Clinical Cloud Solutions, Solutions Architect | dcarlson@clinicalcloud.solutions |
| Sean Muir | JKM Software, App Developer | Sean.muir@emiadvisors.net |
| Kevin Abbott | NIDDK, COR | kevin.abbott@nih.gov |
| Jenna Norton | NIDDK, Program Lead | jenna.norton@nih.gov |
| Neha Shah | NIDDK, Scientific Program Analyst | neha.shah2@nih.gov |
| Arlene Bierman | AHRQ, eCare Plan Lead | arlene.bierman@ahrq.hhs.gov |
| Djibril Camara | AHRQ Fellow, SME | djibril.camara@ahrq.hhs.gov |
| Janey Hsiao | AHRQ, Digital Healthcare Research and Quality, COR for RTI | janey.hsiao@ahrq.hhs.gov |