IHE Work Item Proposal (Detailed)

# Proposed Work Item: Dynamic Care Team Management Plan Definition

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Date: November 12, 2018

Version: 1

Domain: PCC

# Summary

This profile should be a Patient Care Coordination workflow profile that supports the ability to dynamically create and update patient care team information in a comprehensive way. IHE would be a good venue to solve this problem because it involves developing a profile across several existing standards. IHE has the necessary expertise in PCC to address content issues as well as functional workflows. This profile differs from XDW in that it is not limited to sharing of documents although sharing of documents will be supported. This profile is a workflow profile that streamlines the ability to create and share information that will enhance clinical workflow by focusing on the data that is created and shared and how it’s shared and updated.

# The Problem

<Summarize the integration problem. What doesn’t work, or what needs to work?>

Patients are suffering from an increasing number of complex or chronic health conditions which require frequent episodes of care involving multiple providers. With this complexity, it is difficult to identify and coordinate care amongst providers and caregivers. Being able to inform providers and patients with care team information and the functions to support improving care provision is needed. Informing providers and patients of the care needed in real time would assist in effective care provision. There need to be a means of defining how care team management can be derived from relevant selection of care providers along with the services they provide as part of the clinical workflow.

FHIR may provide a solution to the problem. However, there is not enough guidance provided by HL7 FHIR resources on the use of FHIR PlanDefinition resource to create CareTeam management activities.

<Describe the Value Statement: What is the underlying cost incurred by the problem and what is to be gained by solving it? If possible provide quantifiable costs, or data to demonstrate the scale of the problem.>

The World Health Organization (WHO) stipulates approximately 63% of all annual deaths are due to non-communicable or chronic diseases. US Medicare claims data reports $17.4 billion dollars was spent on re-admissions to hospital within 30 days of discharge in 2004. Effective collaboration and communication is needed to support the provision of patient-centered care. This would enable the provision of efficient health information needed for effective care planning and collaboration between applicable providers, participants and the patient.

The purpose of this workflow profile: Provide a mechanism to facilitate programmatic creation and updates of care teams to support care team management as part of the care coordination process.

# Key Use Case

<Describe a short use case scenario from the user perspective. The use case should demonstrate the integration/workflow problem. Feel free to add a second use case scenario demonstrating how it “should” work. Try to indicate the people/systems, the tasks they are doing, the information they need, and where the information should come from.>

A 78 year old patient is admitted to hospital for planned right hip arthroscopic surgery. The plan is that upon discharge from the hospital, the patient will be transitioned to specialist care (orthopedic surgeon) then eventually discharged to home with home health services for skilled nursing and rehab services. The patient is also diabetic and suffers from rheumatoid arthritis. Her diabetes and rheumatoid arthritis are being managed by her primary care physician.

Her discharge from the hospital results in the need to create care planning information that supports the following interactions:

1. Acute care hospital discharge planning and transfer of care information with the surgeon’s post hip arthroscopic surgery order set.
2. Acute care hospital discharge planning and transfer of care information with the Home Health Agency admission protocol.

The patient’s discharge from the hospital results in the need to transition to the next level of care to the appropriate care providers and care settings.

Focus on the end user requirements, and not just the solution mechanism. Give concrete examples to help people trying to understand the problem and the nature of the solution required. Remember that other committee members reviewing the proposal may or may not have a detailed familiarity with this problem. Where appropriate, define terms.>

In order to support care coordination between the patient’s care providers and caregivers, the hospital’s discharge planner will need to create new care teams and/or update existing care teams with the appropriate care team members that will provide the needed care. This will include identifying the rehabilitation facility and eventually the post discharge providers, teams that will provide skilled services and the patient caregivers.

In the process of creating the discharge orders and/or the home health plan of care orders, the end user should be able to access and select care teams and or care team members that are specific for the appropriate care provision. (e.g. the surgeon, to provide post hip arthroscopic surgical care). When the applicable care providers are selected, this would enable the ability to ***initiate*** the creation or update of the patient’s care team.

As providers become involved in ongoing care of the patient, the ability to communicate who the providers are, the role they play and their involvement in the care of the patient is paramount to support care coordination.

# Standards & Systems

<List existing systems that are/could be involved in the problem/solution.>

<List relevant standards, where possible giving current version numbers, level of support by system vendors, and references for obtaining detailed information.>

Standards

* HL7 Care Team Domain Analysis Model
* FHIR Constructs (STU 4)
* Audit Logging
* Error Handling
* Secure Transport

Systems

* EHR
* PHR
* Patient Portal
* HIE
* CPOE

# Technical Approach

<This section can be very short. Feel free to include as much or as little detail as you like. The Technical Committee will flesh it out when doing the effort estimation.>

<Outline how the standards could be used and refined to solve the problems in the Use Cases. The Technical Committee will be responsible for the full design and may choose to take a different approach, but a sample design is a good indication of feasibility.>

This profile will extend the Dynamic Care Team Management profile by providing the ability to create/update care team(s) during the process of care planning.

New actors

<List possible new actors>

* Care Team Definition Service (provides PlanDefinitions and ActivityDefinitions)

Existing actors

<Indicate what existing actors might be affected by the profile.>

[possible grouping]

* DCP - Care Plan Contributor - reads, creates and updates care plans
* DCTM - Care Team Contributor – update care teams

New transactions (standards used)

<Describe possible new transactions (indicating what standards would likely be used for each. Transaction diagrams are very helpful here. Feel free to go into as much detail as seems useful.>

May not need new transactions

<Indicate how existing / /transactions might need to be modified.>

May need to modify the following transactions to support care team(s) creation and updates

* Create/Update Plan Definition; Activity Definition – provides the planDefinition resource that groups the applicable activityDefinition resources
* Search for Plan Definition
* Retrieve Plan Definition
* Create Care Team from Plan Definition
* Create Request Resources (provides the request resources that need to be acted on)

<Point out any key issues or design problems. This will be helpful for estimating the amount of work.>

<If a phased approach would make sense indicate some logical phases. This may be because standards are evolving, because the problem is too big to solve at once, or because there are unknowns that won’t be resolved soon.>

<Indicate how existing / /transactions might need to be modified.>

Impact on existing integration profiles

<Indicate how existing profiles might need to be modified.>

Extends the Dynamic Care Team Management profile by providing the ability to use PlanDefinitions as a means of creating/updating care teams dynamically.

New integration profiles needed

<Indicate how existing profiles might need to be modified.>

Breakdown of tasks that need to be accomplished

<A list of tasks would be helpful for the technical committee who will have to estimate the effort required to design, review and implement the profile.>

# Risks

<List technical or political risks that will need to be considered to successfully field the profile.>

May need possible alignment with ITI Workflow definition profile (e.g. XCHT-WD). ITI may want to add their orchestration part of their workflow to this profile.

# Open Issues

If profiling FHIR STU 4, there is a dependency on HL7 FHIR timeline.

# Effort Estimates

<The technical committee will use this area to record details of the effort estimation.>

<A one page proposal is preferred. Please do not exceed two pages.>