Care Planning

Logistics

Webex - **click here**

CoF PowerPoint

1. Care Coordination
    a. Create Care Coordination Use Case Workflow
        i. **Acute Patient Admission**
            1. Patient Name
                a. Mrs. Patricia (Pat) Chess
                b. 42-year-old full time office assistant, was involved in a road accident
            2. Patient Condition
                a. Post MVA
                    i. **Pat is admitted to ER,** treated and transferred to OR (see primary story)
                    ii. Diagnostic abdominal, peripheral, and chest and spinal X-rays and CT, showed a closed undisplaced comminuted fracture left mid shaft femur, fracture left ribs 6-7 with spleen and liver contusions. No fracture vertebrae detected.
                    iii. Post Surgical open reduction and internal fixation of her femoral fracture and exploratory laparotomy for abdominal injuries.
                        1. No abdominal injuries, successful treatment of femoral fracture.
                        2. Pain treatment and management- (CQF) Opioid Guidelines
                    iv. Post OR and Successful Recovery Pat is transferred to ICU
                        1. Post Op monitoring and treatment for pulmonary embolism.
                        2. When stable pat is transferred to Medical Surgical Floor.
                    v. Medical surgical unit prepares Pat for transfer to extended on site rehabilitation.
                b. History
                    i. Smoking history: average 10 cpd/17 years
                    ii. Hypercholesterolaemia: diagnosed in 2009
                    iii. Hypertension: diagnosed in 2010
                    iv. Ischaemic heart disease in 2015
                    v. She was diagnosed with Type 2 DM in early 2019 and is still working with her diabetes management team to control her blood sugar levels and manage her body weight. Her diabetes care team includes an nutritionist.
                    vi. No daily exercise, BMI 34
            3. Discharge Planning
                a. Discharge Orders
                    i. Referral Transfer Request to Inpatient Rehabilitation until patient is prepared to return to home.
                    ii. Surgical Wound Care
                    iii. Pain management, post surgical and fractured ribs - (CQF) Opioid Guidelines
                        1. Opioid prescription based on CDC guidelines
                    iv. Respiratory Treatments and incentive spirometer exercises.
                    v. Nutrition needs
        ii. **Payer Case Management and Disease Management**
            1. Upon awareness that Pat has been admitted to the hospital due to an MVA followed by surgical interventions, Pat's health plan becomes involved by assist with utilization reviews needed for her ED/In-patient admission. Her health plan also enrolls her in the health plan case management/disease management program to support adherence to care, avoid preventable complications, support the patient in making informed care decisions (that minimize financial impacts), and increase the patient's/caregiver's understanding of and ability to self-manage care. Peggy Payer RN is Pat's Health Plan's Care Manager/Disease Manager. Peggy is a member of Pat's Care Team.

iii. **Rehab Admission**
1. Dynamic Care Planning
    a. Care Planning Condition/Concerns
        i. Physical
            1. Surgical Wound Care
            2. Pain management, post surgical and fractured ribs
            3. Diabetes Management
            4. Strength training
            5. Walking, with assistance as needed
            6. ADL (Activities of Daily Living) Assessment and Training
            7. Respiratory incentive spirometer
            8. Nutrition needs
        ii. SDoH (Social Determinants of Health)
            1. Long term smoker - Potential for respiratory compromise r/t history of smoking and mobility.
            2. Diabetes management / appropriate diet and reduced mobility
            3. Physical Strength and Coordination - No daily exercise - potential weakened state & potential for fall
            4. Mental State - Pat is depressed over her inability to return immediately home and unknown duration of he stay
    b. Discharge to home planning (Orders)
        i. Discharge Orders
            1. Visiting Nurse Assessment
            2. Physical Therapy Sessions
            3. Pain management, post surgical and fractured ribs - (CQF) Opioid Guidelines
                a. Opioid prescription based on CDC guidelines
            4. Follow up visit with Orthopedist Specialist
            5. Continue diabetes plan

iv. **Discharge To Home -**
1. Dynamic Home Care Planning - Pat is discharged to home with home care services. Her treatment modalities orders include Skilled Nursing Services and Physical Therapy. The rehab discharge planner initiates discharge planning workflow to include Pat's consent for home health services which will include skilled nursing and physical therapy. Pat's caregiver agrees to assist Pat with her ADL's and transportation to her Dr's appointments. Discharge assessment includes the fact that Pat will be 'home bound' which supports the need for home health services.
    a. Visiting Nurse Assessment
        i. ADL assessment/mobility
        ii. Smoking cessation options.
        iii. Respiratory Exercises
        iv. Diabetes Management
        v. Pain management, post surgical and fractured ribs - (CQF) Opioid Guidelines
            1. Opioid prescription based on CDC guidelines
    b. Physical Therapy Sessions
        i. Strength Training
        ii. Coordination Exercises
        iii. ADL assessment and gap recommendations
        iv. Monitor pain during exercises
2. **Home Health Care Team Transactions**
    a. Pat's treatment modalities orders initially include Skilled Nursing Services and Physical Therapy. Pat is concerned about how not being able to work will affect her financial needs.
        i. The home health agency
            1. Skilled nursing visits include
                a. Assessing and determining the care Pat needs (Care Planning). This includes involving Pat and her caregiver.
                b. Based on the nursing assessment, a social worker is added to the care team (*added order from provider of record).
                c. Ongoing interactions with other members of Pat's care team as needed.
            2. Physical Therapy visits include
                a. Assessing and determining the care Pat needs (Care Planning). This includes involving Pat and her caregiver.
                b. Ongoing interactions with other members of Pat's care team as needed.
            3. Social work visits include
                a. Assessing and determining the care Pat needs (Care Planning). This includes involving Pat and her caregiver.
                b. Ongoing interactions with other members of Pat's care team as needed.
            4. (Caregiver/Patient) - Pat's ADL needs communicated to her care team members as needed
                a. Pat is in need of community services - e.g. Meals-on-wheels
                b. Pat also need to continue her diabetes care

b. **Care Team management**
i. Condition-Focused, Event-focused Care Team
ii. Acute Care Team Transactions
1. On admission to ED the provider providing care assigned to the patient (Dr. Medy) is auto assigned to CT (Care Team)
2. When patient is transferred to Surgery the Trauma Surgeon (Dr. Burke) assigned to the patient is auto assigned to CT
3. When Patient is transferred/admitted to unit post recovery the attending (Dr. Shackleton) for the care area is auto assigned to CT
    a. Dr. Shackleton is auto assigned as care team lead by institution policy
4. When Dr. Shackleton writes physical Therapy order Physical therapist (Mr. Roberts) is assigned to the CT by his manager based on patient load and expertise.
5. When Patient is transferred/admitted to unit post recovery a primary nurse (Ms Curry) is assigned to the CT by her manager and agreement by Ms. Curry.

6. When Dr. Shackleton writes discharge planning order Care Coordinator (Ms Hopper) is assigned by department manager based on availability
7. When patient arrives/admitted to unit Nutritional assessment is standard assessment and Mr Krum is assigned by Nutrition Department manager.
8. Patient is default added to care team.
9. Patient names sister Ms. Chess - Rollings as her support caregiver the team lead adds sister to care team
10. When Patient discharged after prescribed interval designed to provide support post transfer the Acute Care team is inactivated

iii. **Payer Disease Management/Case Management Team Transactions**

1. The disease/case management screening program of the payer's population health management system identifies Pat as a candidate for proactive care management, triggered by his ED physician assessment/diagnosis and the patient's admission to the inpatient setting. Peggy Payer RN is Pat's Health Plan's Care Manager/Disease Manager.
2. Upon admission, the hospital's care coordinator/discharge planner is made aware of the patient't candidacy for enrollment in the payer's care management program. The hospital care coordinator is also provided a single point of contact for all needed services from the payer.
3. When Pat is able, the payer Care Manager has a telephone discussion with Pat and gets her agreement to enroll in the health plan's Trauma Care Management Program.
4. The health plan's trauma care management program care plan interventions include:
    a. Informing of and providing the patient access to needed services including pre-authorizations.
    b. Providing educational information related to disease/care processes.
    c. Assisting the patient with care coordination between care providers.

iv. **Rehabilitation Care Team Transactions**

1. Rehabilitation Care Team auto adds the rehabilitation provider assigned to cover the newly admitted patient.
2. The Trauma Surgeon (Dr. Burke) is auto added to the care team based on system rules to provide transition of care support.
3. The Trauma Surgeon (Dr. Burke) is auto inactivated after prescribed time interval.
4. When Dr. Burke writes referral order for consulting orthopedic specialist and referred to practice accepts referral and assigns a provider (Dr. Todd) is assigned to the care team.
    a. The patient begins to complain of deep stabbing pain in affected area after start of physical therapy
5. When Dr. Burke writes an order for specific physical therapy Physical Therapist (Mr. Ridge) as assigned by department manager based on availability and expertise.
6. When patient is admitted to Rehabilitation facility Nursing assigns staff (Ms. Bloomaker) based on availability and care team is updated
7. When patient is admitted to Rehabilitation facility, by policy, Discharge Planner (Ms Parks) is added to care team by department manager after review of available staff.
8. When patient is admitted to Rehabilitation facility, by policy, Nutritionist (Ms Kobe) is added to care team by department manager after review of available staff
9. Patient is default added to care team.
10. Patient names sister Ms. Chess - Rollings as her support caregiver the team lead adds sister to care team
11. When Patient discharged after prescribed interval designed to provide support post discharge the Rehabilitation care team is inactivated

v. **Out Patient Community Care Team Transactions**

1. When discharged to community team /home PCP (Dr. Hare) is added to Community Team as provider by default since in the longitudinal care team.
2. Patient is default added to care team.
3. When Patient discharged after prescribed interval designed to provide support post transfer the Acute Care team is inactivated
4. When Dr. Hare orders continuing community care which includes Physical Rehabilitation, Visiting Nursing a care coordinator (Mr Holbert) is added to the care team from the practice staff, by practice policy Mr. Holbert becomes the Care team Lead.
5. When Mr. Holbert reaches out to Care Giver Community Services and the patient to coordinate, a services coordinator (Ms Night) is assigned to the care team and Patient names sister Ms. Chess - Rollings as her support caregiver and Mr. Holbert adds sister to care team.
    a. Alternatively the family support person could have been automatically carried through to each team as she is present in the longitudinal care team.
6. Ms Night coordinates Visiting Nurse and Physical therapy with patient and her sister. As she Does this Visiting Nurse (Mr. Smyth) and Physical Therapist (Mr Ridge) are assigned to the care team by Ms Night.
7. When Mr Smyth completes his first visit he reports concern over patients nutritional status. This report is received by Mr Holbert who discusses with Dr Hare who then writes a nutritional consult referral, at this point a nutritionist (Ms Colby) in the practice is assigned to the Care team.
    a. Ms Colby visits the patient and provides a consultation report which is used by Dr Hare to provide additional nutritional training which Ms Colby carries out. At the completion of this training and satisfactory comprehension by the patient her engagement is complete and she is inactivated from the care team.
8. Mr Holbert receives a complaint by the Patient's sister that they found the visiting nurse to be disrespectful and do not want them to came back. Mr. Holbert reviews with Ms Night and the visiting nurse assignment is changed, Mr. Holbert inactivates Mr. Smyth and adds visiting nurse Ms Doe to the care team. Mr. Smyth's assignment history can still be viewed if inactive team members areAs Physical Therapy progresses the patient responds well and Dr. Hare decides to end the therapy by placing an order. At which point the therapist is inactivated from the care team.
9. When the patient later visits Dr. Hare he reviews the visiting nurses documentation and reviews the updates from therapy and discusses stopping the visits and therapy with the patient . The decision is made to stop both and Dr. Hare writes an order to stop. Mr. Holbert Contacts the community coordinator and cancels both. Mr. Holbert inactivates both the therapist and visiting nurse from the care team.
10. Mr. Holbert contacts the Community services coordiantor and closes the engagement, he then inactivates the post discharge community care team.

vi. **Patient Generated Care Plan**

1. **Discussion needed** - What are expectations of patient generated care plans?
    a. Is this information shared or expected to be shared in systems?
    b. Would this information be consumed by receiving systems like EHRs, etc?

Longitudinal Care Planning

Longitudinal Care Team, Long term cross incident and condition care planning and oversight

Member Name	Role	Relationship to Pat	Clinical Workflow	Expected Outcomes	Associated Encounter (Episode of Care)	Steps (Manual workflow)	FHIR Resource Needed	Comments
Mrs. Patricia (Pat) Chess	Patient				inpatient encounter; Acute Rehab encounter; Home care encounters; Ambulatory Care encounters			
William Hare MD	Primary Care Provider **Care Team Lead**	Longitudinal Care Plan Provider	Longitudinal CP Team Lead		Home care encounters; Ambulatory Care encounters		CarePlan CareTeam	Reference CareTeam from CarePlan
Peggy Payer RN	Payer Care Manager /Disease Manager				inpatient encounter; Acute Rehab encounter; Home care encounters; Ambulatory Care encounters		CarePlan CareTeam Encounter	

Inpatient Care Team

Care Team engaged during Pat's post MVA admission and following surgery until discharged.

Member Name	Role	Relationship to Patient	Clinical Workflow	Expected Outcomes	Associated Encounter (Episode of Care)	Steps (Manual workflow)	FHIR Resource Needed	Comments
Dr Ernie Medy MD	ER Physician	Initial treating provider	Added to team as initial provider in ED		ED encounter			
William Burke MD	Surgeon Care Team Lead	Acute/Trauma Surgeon	Added to team as surgeon on duty when Patricia was admitted. Initial Care team lead, lead then transferred to Attending In some workflows, this surgeon continues to follow the patient throughout inpatient stay, acute rehab, and outpatient - For example, planned care provided by highly specialized providers - oncology, etc. In some workflow, this is a service - surgical services where the surgeon is a member of the surgical team providing the surgical service.		inpatient encounter; Acute Rehab encounter; Home care encounters; Ambulatory Care encounters. **Note** that encounters are independent of each other. For example, patient may get PT as part of her rehab (PT encounters) that might not be part of the PCP encounters.		See gForge 23029 careTeam. encounter need (0..*)	
Ernie Shackleton MD	Attending post surgical care **Care Team Lead**	In patient Medical Coverage	Added to team as primary provider covering area patient transferred to post procedure /ICU Picked up care team lead after patent transfer	Record of provider at time of discharge - Who needs this info? Realistic workflow. What do you need, depending on place /role in workflow. How would you do this in FHIR Template- who would you query, is it a pull/push. The technical data flow paralleling the physical workflow.	inpatient encounter; Acute Rehab encounter; Home care encounters; Ambulatory Care encounters			
Eric Roberts MPT	Physical Therapy	In Patient Physical Therapist	Added to team by provider order					
Miriam Curry RN	Nursing	Inpatient Nursing	Added to team related to patient assignment					
Tricia Hopper LCSW	Discharge Planner / Care Coordinator	Acute Social Services	The Care Coordinator is the facilitator/steward who is responsible for reviewing and reconciling proposed modifications to the care plan					

			Added to team as part of Discharge Planning Order					
Reginald Krum	Registered Dietitian (RD)	In patient nutrition assessment, dietary recommendations	Added to team as standard post op & Diabetic protocol					
Karen Chess - Rollings	Caregiver	Sister		inpatient encounter; Acute Rehab encounter; Home care encounters; Ambulatory Care encounters				
Bobby Knight	Caregiver	Son		inpatient encounter; Acute Rehab encounter; Home care encounters; Ambulatory Care encounters				
Mrs. Patricia (Pat) Chess	Patient			inpatient encounter; Acute Rehab encounter; Home care encounters; Ambulatory Care encounters				

Payer Care Coordination Team
Health plan case management/disease management program to support adherence to care, avoid preventable complications, support the patient in making informed care decisions (that minimize financial impacts), and increase the patient's/caregiver's understanding of and ability to self-manage care.

Mrs. Patricia (Pat) Chess	**Patient**	**Relationship to Patient**	**Clinical Workflow**	**Expected Outcomes**	**Associated Encounter**	**Steps**	**FHIR Resource**	**Comments**
Pamela Care-Manager, RN, CCM	Health Plan CM /DM Nurse	Care coordinator - to support effective care coordination from a payer prospective.	Added to team to assist and inform care providers and patient of available services and resources to promote care.	inpatient encounter; Acute Rehab encounter; Home care encounters; Ambulatory Care encounters				

Rehabilitation Care Team

Care Team engaged during Pat's transfer to and during on site rehabilitation stay

Member Name	**Role**	**Relationship to Patient**	**Clinical Workflow**	**Expected Outcomes**	**Associated Encounter**	**Steps**	**FHIR Resource**	**Comments**
William Burke MD, F .A.C.O.S.	Surgeon	Consulting Surgeon Specialist	The original Trauma Surgeon is anticipated to follow for a short time, at which point the CP Team role becomes inactive					
Bill Warfel MD	Rehab Medical Support	Rehabilitation Medical Team	Added to care team by admission from pool and current case load					
Albert Todd MD	Orthopedic Specialist	Consulting Orthopedic Specialist	Added to care team as referral consultant when patient continues to complain of deep stabbing pain on movement.					
Kyle Ridge MPT	Physical Therapy **Care Team Lead**	Rehab Therapist	Added to care team as available staff and provider order					
Bertha Bloomaker RN	Nursing	Rehab Nursing Staff	Added to care team as available staff and policy.					
Evan Parks RN	Discharge Planner / Care Coordinator	Rehab Social Services	The Care Coordinator is the facilitator/steward who is responsible for reviewing and reconciling proposed modifications to the care plan					
Clementine Kobe	Registered Dietitian	Rehab Nutrition assessment /support	Added to Care Team as protocol and lighter patient load at the time.					
Karen Chess -	Care Giver	Sister						

Rollings								
Bobby Knight	Care Giver	Son						
Mrs. Patricia (Pat) Chess	Patient							

Outpatient /Community Care Team

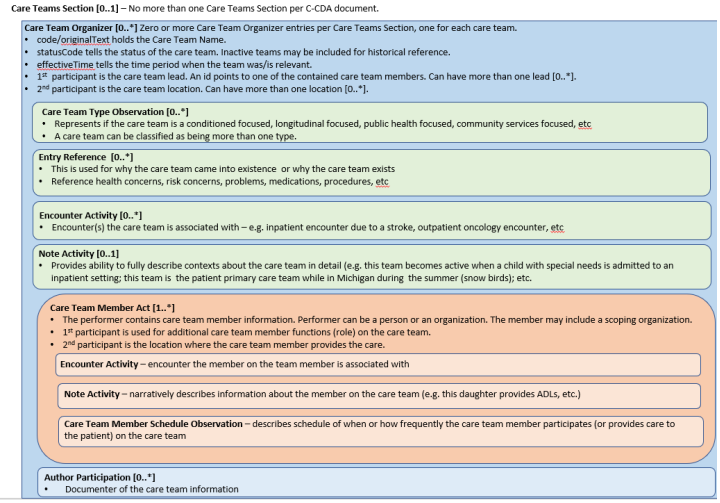
Care Team engaged on Pat's discharge to home

Member Name	Role	Relationship to Patient	Clinical Workflow	Expected Outcomes	Associated Encounter	Steps	FHIR Resource	Comments
William Hare MD	PCP	Primary Provider	As PCP default care team member					
Kyle Ridge MPT	Physical Therapy	Visiting Therapist	Added to care team per order for follow up care					
Peter Smyth RN	Nursing	Visiting Nurse	Added to care team per order for follow up care nursing support. Selected as available by agency. Removed from care team based on patient preference for female nurse					
Jan Doe RN	Nursing	Visiting Nurse	Added to care team as replacement for Peter Smyth RN					
Wayne Holbert	Care Coordinator **Care Team Lead**	Assigned Care Coordinator	The Care Coordinator is the facilitator/steward who is responsible for reviewing and reconciling proposed modifications to the care plan Added to care team per order for follow up care					
Olive Colby	Registered Dietitian	Out Patient Dietitian	Added to care team based on nutrition referral r/t nursing assessment documentation					
Karen Chess - Rollings	Caregiver	Sister						
Bobby Knight	Caregiver	Son						
Gail Night	Community Services		Added to Care Team by referral from PCP					
Mrs. Patricia (Pat) Chess	Patient							
Sarah Social	Social worker	Home health social worker						

i. Care Team Discussion Points

1. The Care Team configuration (pattern) is not rigid. The Care Team adapts to the context, environment, and the patients needs.
    a. Examples
        i. The Care Team Leader may not be consistently held by the same role
        ii. The Patient could be the team lead or partnered with another, this depends on the capability of the patient.
        iii. Care Teams may be Longitudinal, or Condition based, or event based, or all of the above. The longitudinal care team could exist with each condition or event care team existing within the longitudinal frame work.

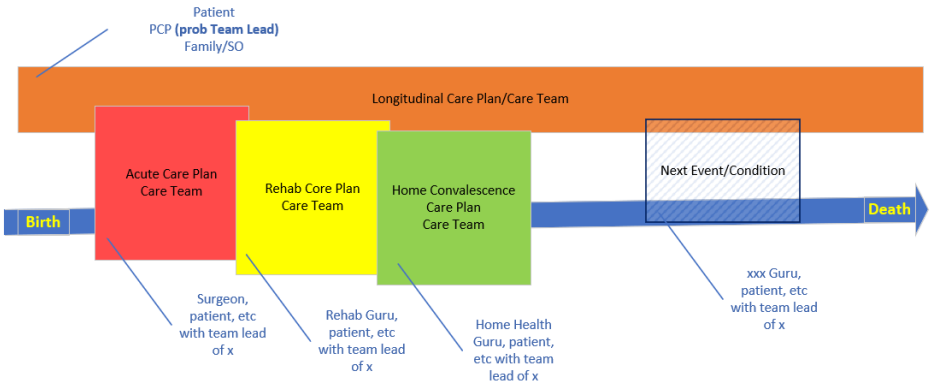
b. Care Team Section / C-CDA



c. Dynamic Care Planning chronic condition (an Example)

d. Care Team Management chronic condition (an Example)

e. Longitudinal Care Team



2019.06.18 - PC CoF meeting Notes - Hand off concentration during Friday CoF

Care team members transitioning on and off teams depending on changing patient condition. Relapse may require an earlier team member returning to active participation. How does the resource handle retrospective / Current / and prospective future/plan . E.g. Planned surgery in future (known location/planning) versus more emergent e.g. "Pin fell out". Focus on workflow - specific to care team (how do CP and CT tie together?) Need transition scenarios and the related data elements. Need Nutritionist added to care plan Rehab/home, maybe acute. (Weight, loss, non compliant, slow wound healing).

1. guidelines/protocol,
2. CQF - FHIR Clinical Guidelines - See examples
3. Proposed Care Team gForges (need use case examples to reflect the following)
    a. Relax the encounter card. to 0..* to support care team that span multiple encounters
        i. provide example from billing perspective, from clinical perspective (workflow, patient care , care team, etc)
    b. participant.role - change card to 1..1
    c. participant.period - relax to 0..*
    d. Add Timing as sibling to period
    e. Add schedule resource as sibling to period

Parking Lot

1. "Stick" - How are goals that are not met dealt with clinically?
2. CarePlan.intent

    a. Is this needed?
    b. What about carePlan not in "intent"? Can carePlans be completed?
    c. Should the cardinality be 1..1
    d. Is this an appropriate value set for intent?
    e.

intent	?!	1..1	code	proposal | plan | order | option Care Plan Intent (Required)

3. Patient generated care plan

1. Is patient generated data "auto added to the EHRs"? Should it be (if not)? How should it be handled?

Resources/Workflow Issues:

Need gForge to add **status and status reason** to careTeam.participant

Action: Request from Clinical Folks: Explore what the triggers are for state machine transition. e.g order accepted, order inalized, procedure completed, procedure cancelled. Need examples of things to search for in the API that will mean a state has changed.

Participant Status

accepted |
rejected| - reasons: rejected by patient, rejected by provider
tentative |

needs-action

inactive

active

deactivated

proposed

enter-in-error (handled differently)

Need to align with FHIR Task state machine

12.1.7 The Cancelled state

Suggestion to replace "in-progress" with "Active"

Code	Display	Definition	Canonical Status
draft = proposed	Draft	The task is not yet ready to be acted upon.	~draft
requested	Requested	The task is ready to be acted upon and action is sought.	~requested
received	Received	A potential performer has claimed ownership of the task and is evaluating whether to perform it.	~received
accepted	Accepted	The potential performer has agreed to execute the task but has not yet started work.	~accepted
rejected	Rejected	The potential performer who claimed ownership of the task has decided not to execute it prior to performing any action.	~declined
ready	Ready	The task is ready to be performed, but no action has yet been taken. Used in place of requested/received/accepted /rejected when request assignment and acceptance is a given.	~on-target
cancelled	Cancelled	The task was not completed.	~abandoned
~~in progress~~ Active	In Progress	The task has been started but is not yet complete.	~active
on-hold	On Hold	The task has been started but work has been paused.	~suspended
failed = suggestions include - not started	Failed	The task was attempted but could not be completed due to some error. - clinical reasons for fails could be — no order --- no coverage ---attempts to contact failed	~failed
completed	Completed	The task has been completed.	~complete
entered-in-error	Entered in Error	The task should never have existed and is retained only because of the possibility it may have used.	~error

Use cases

State - participant has been invited

CareTeam

- Participant
    - Role - Cardiologist
    - Status
        - needs-action
    - StatusReason

State - participant accepts (has not started care)

CareTeam

- Participant
    - Role - Cardiologist
    - Status
        - Accepted
    - StatusReason

State - participant starts

CareTeam

- Participant
    - Role - Cardiologist
    - Status
        - Active
    - StatusReason

State - participant has the order, accepted - but hasn't started

CareTeam

- Participant
    - Role - Cardiologist
    - Status
        - Accepted
    - StatusReason

Need transition from accepted to active

- Participant has agreed to be part of care team but have not done anything - what has to happen for transition

PlanDefinition.goal is limited

Action: Need to add gForges.