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Longitudinal Coordination of Care Overview to HL7 Patient Care WG

Wednesday, March 27th, 2013

Agenda

Topic	Presenter
LCC Background and Overview	Evelyn Gallego
Care Plan and Care Planning	Larry Garber
Alignment to HL7 PC Care Plan DAM	Russ Leftwich + LCC Leads

Longitudinal Coordination of Care Workgroup Overview

See Part 1 of the slide deck for details (separate file)

Part 2:

Alignment to HL7 Domain Analysis Model (DAM)

This is Part 2 of the ONC/LCC and PCWG Joint Conference Call slides

Full resolution diagram at: http://wiki.hl7.org/images/2/24/CpDetailedModelImg.png

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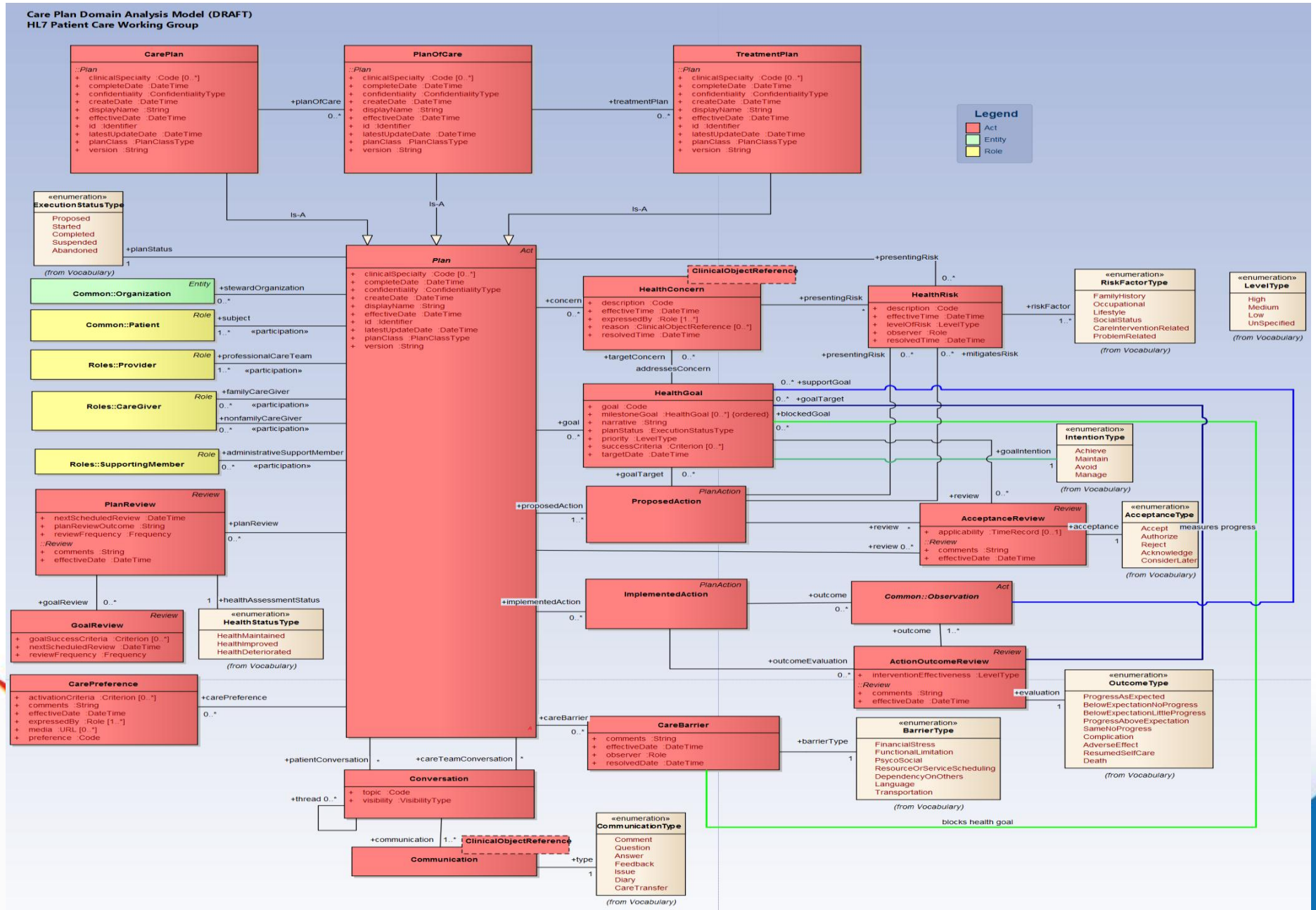


Similarities to the HL7 DAM

- There is extraordinary overlap and alignment in the work accomplished in the HL7 DAM to that required of the LCC Care Plan

HL7 Domain Analysis Model (DAM)

The Model Captures:

- **Who** - Patient, Care Team, Family, other Support Individuals…
- **Why** – Concerns, Risks and Goals
- **What** – Proposed and Implemented Actions, Outcomes Observations, various types of Reviews
  - *LCC: Are Interventions and Instructions the same as Proposed and Implemented Actions?*
- **When** - Effective times, completion times, update times
- **Where** –Steward organization, place of service for interventions

Alignment to HL7 DAM

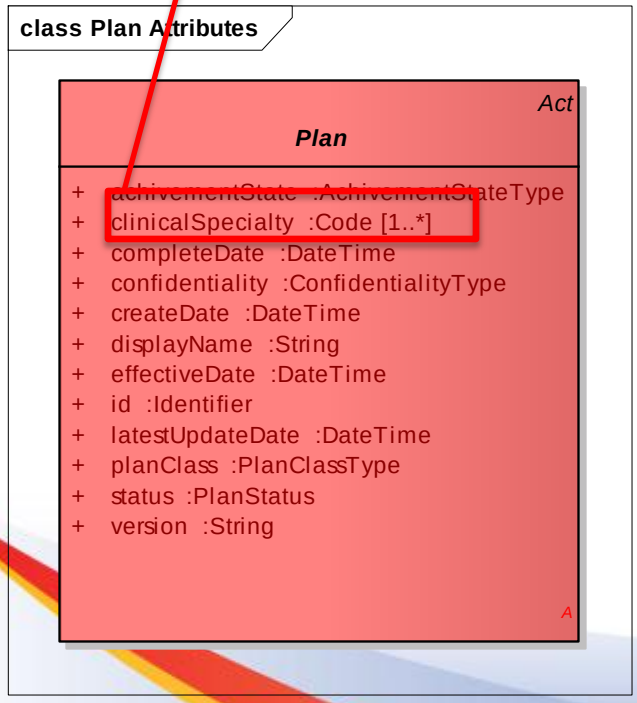
- The areas where we are not in alignment can be addressed by expanding some of the categories (team members, cross walks, prioritization) that are consistent with the HL7 DAM but not explicitly called out
  - Attribute alignment
  - Goal alignment to include Care Team Members and Implemented Actions
    - can you account for non-computable goals?
    - Computable goals are usually tied to an intervention, whereas Patient goals are across multiple interventions
    - Interventions are often constrained by Patient-specified goals
    - Role of the team member in respect to the patient
  - Depiction of many-to-many relationships between Care Team Members and Health Concerns, Goals, Plan Reviews, etc.
  - Depiction of relationships between Health Concerns, Goals, and Interventions
  - Depiction of Object –related relationships, such as causality of health concerns by another health concern (e.g. – pedal edema due to CHF)
  - Distinction between “Health Concerns” and “Barriers”
    - A limitation in cognitive functioning may be a concern, for which there is a goal, interventions, etc.
    - However, a limitation in cognitive functioning may also be “barrier” to addressing other health concerns (e.g., remembering to take medications, ability to complete other interventions….)
  - Move “Patient Preferences” up in the DAM so that they are under “Health Concerns”
    - If the health concern is not a priority to the patient, then goals, interventions, team members, etc. won’t exist

LCC: Should this be "0…*"?

Plan Attributes

The Plan abstract class is specialized by CarePlan, PlanOfCare and TreatmentPlan.

The attributes are shared by all subclasses of the Plan.



Descriptive Attributes

- displayName – descriptive display name for the plan
- clinicalSpecialty – specifies zero or more specialties representing the topic of the plan.
- confidentiality – specifies the plan's confidentiality level

State Attributes

- planStatus – plan stage lifecycle status

Temporal Attributes

- createDate – specifies when the plan was created
- effectiveDate – specifies the start of the plan implementation
- completeDate – specifies when the plan becomes inactive
- lastUpdateDate – specifies the last date/time the plan was changed

Information Management Attributes

- id – unique identifier for the plan
- version – change or difference indicator in the defining plan elements (concern, goal, risk, proposed actions)
  - Implementation and tracking does not change the version of the plan types
- planClass – a class code (Care Plan, Plan of Care, Treatment Plan)

LCC: Provider should be "0 …*"

Plan Participants - Who is involved?

The Plan structure directly references principal collaborators guided by a shared care plan.

The plan is continuously unfolding through the care process. New participants join to collaborate on care and some leave.

Participants are actively engaged through constant communication which in turns alters the state of the plan's content.

Steward Organization: Organizations accountable for maintaining some aspect of the care plan. This may be more than one organization as the plan may span the continuum of care.

Patient: the subject of care is an active participant through the unfolding of the plan. Their preferences are captured and they agree/review proposed care. Cardinality is 1 or more to support group therapy, etc.

Provider:

Licensed independent practitioner (LIP) members of the care team such as physicians, nurses, **physical therapists, behavioral health, LCSW, dietitians, pharmacists, etc.**

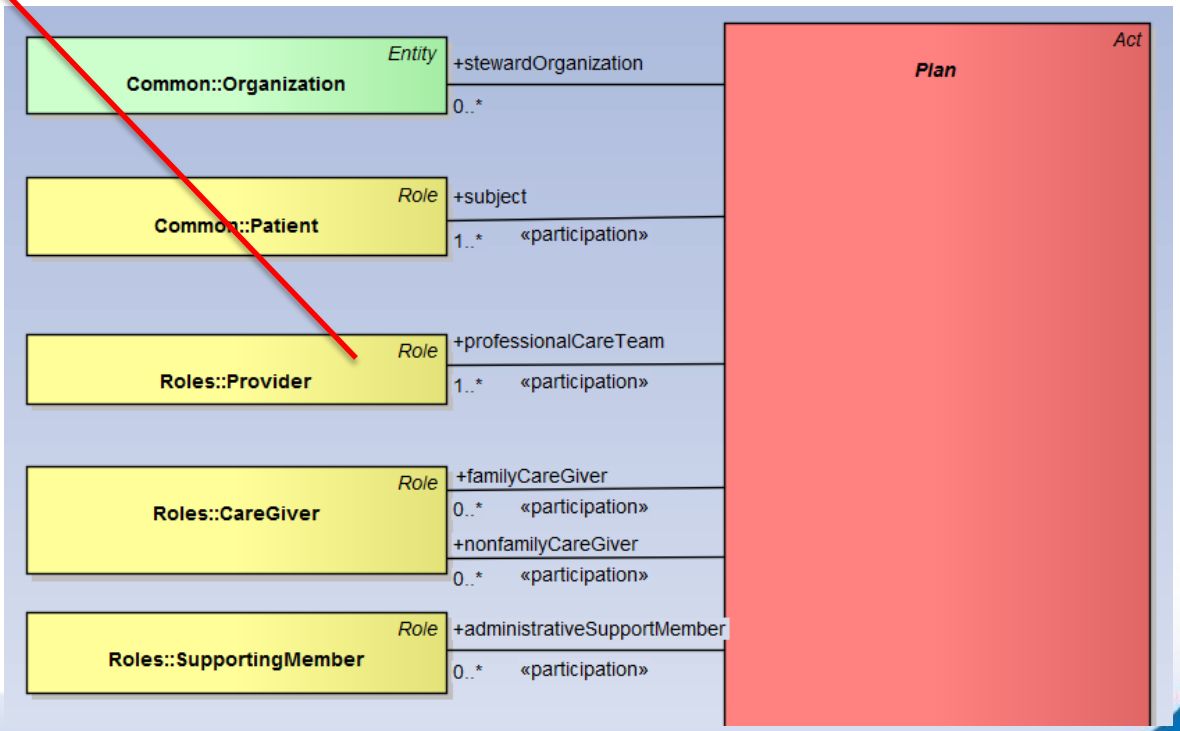
Care Giver:

Non-credentialed members of the care team. This may include professional or family members with care responsibilities.

Supporting Member:

Clerical, administrative or financial support individuals.

Please note that the PlanAction and Communication classes also capture corresponding participants (e.g. an action has a place of service and a communication has participants)

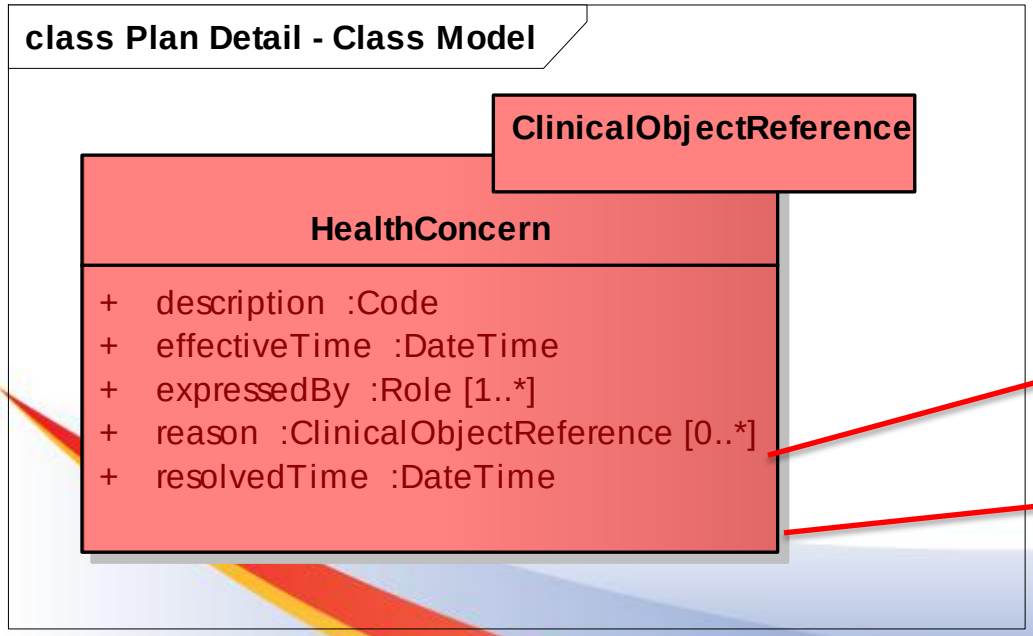


Health Concern Attributes

Todo reconcile with current model from patient care working group.

Attributes

- ***description*** *– name or label for concern. The label may be derived from the clinical context it pertains to.*
- ***effectiveTime*** *– the time the concern is noted*
- ***expressedBy –*** *the individual noting the concern*
- ***reason –*** *reference to clinical context pertaining to the concern. These could be conditions, diagnosis, symptoms, allergies, adverse reactions, a family history observation, etc….*
- ***resolvedTime*** *– the date/time the concern ceases to be an issue for the patient*



LCC: Can this include Active Problem or Significant Past History or Barrier?

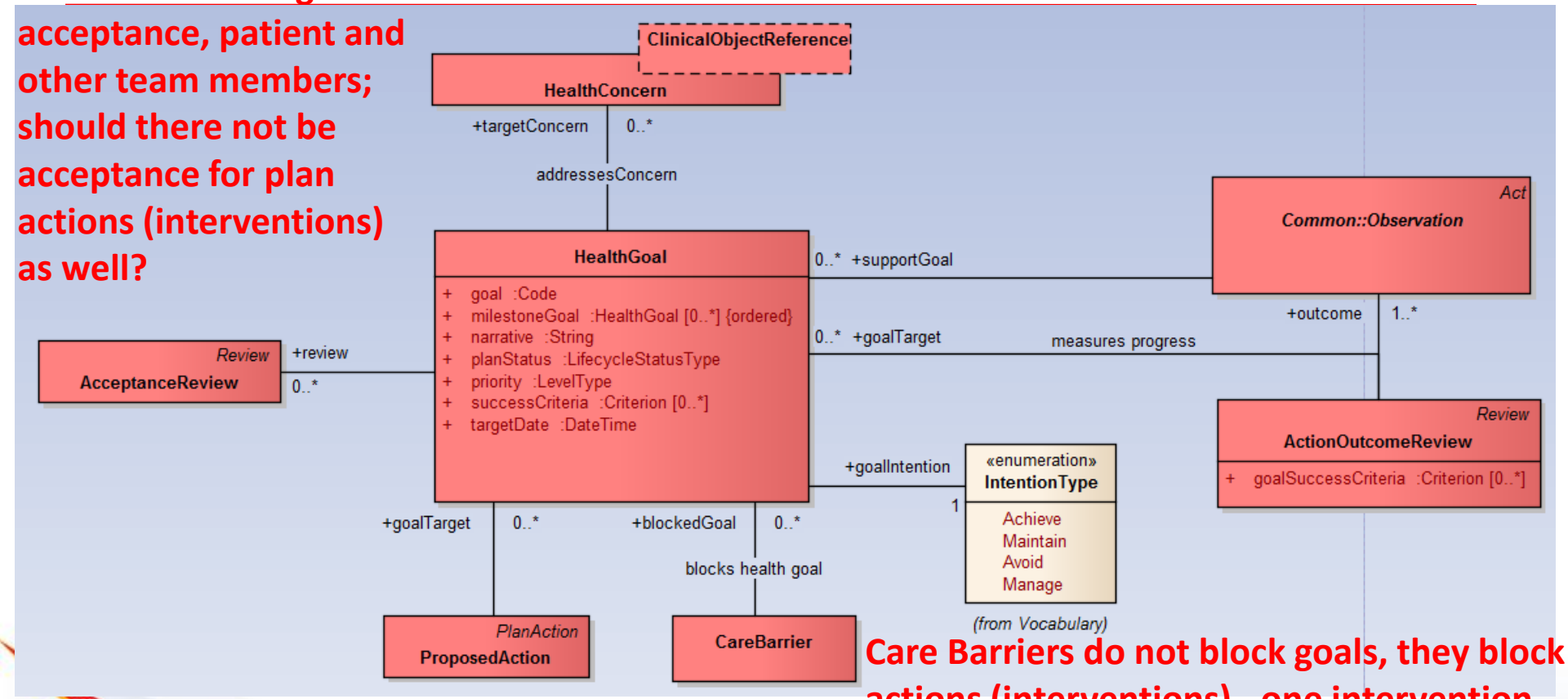
LCC: Add a "status" attribute (active, inactive, etc)

LCC: Add a "priority" attribute

Goal Associations

LCC:
Can this diagram also include a relationship to ImplementedActions?

LCC: Is there a flag for acceptance, patient and other team members; should there not be acceptance for plan actions (interventions) as well?



Care Barriers do not block goals, they block actions (interventions) - one intervention to reach a goal might be blocked and the result is that another intervention needs to be proposed and accepted, the goal is not blocked and does not change

LCC: Add “Age” and “Gender”

Health Risk Attributes

Risks represent clinically significant potential concerns to the patient’s health. They are captured in order to monitor and mitigate the manifestation of a future concern. Risks may be indicated by research evidence or they may capture a provider’s judgment.

There are multiple sources of risks:

A patient may be predisposed to certain risks due to genes, lifestyle or chronic conditions they currently have.

A risk may be introduced by a provider after weighting the benefits of a given treatment. In this case the risk is taken given the probability of the benefit is much greater.

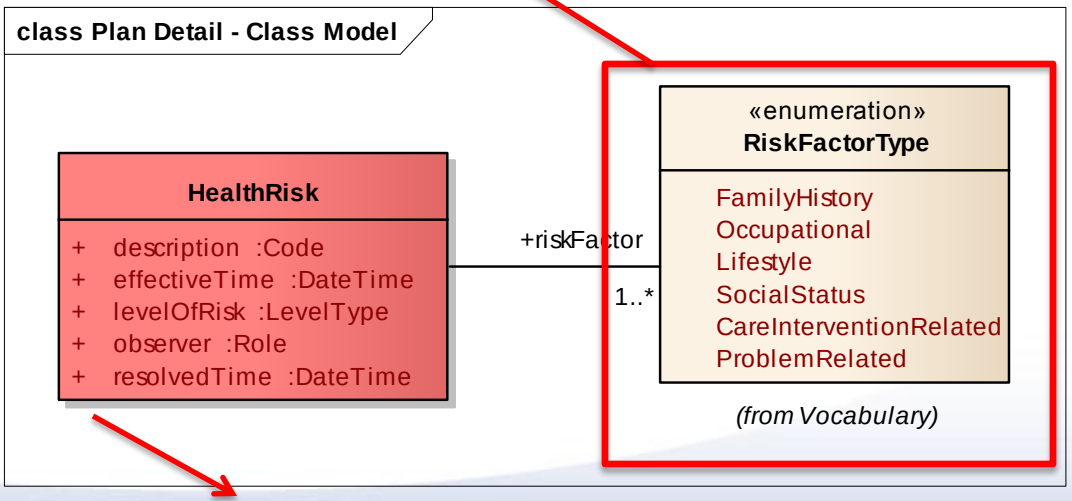
The risk in this case is captured so that interventional activities can be taken to ameliorate the risk and track it in order to avoid the unwelcome state of health

In this later case, risks could be caused by interventional PlanAction(s) contained within a single Plan of Care or they may be caused through the interaction between multiple Plan(s)OfCare

LCC: need to account for positive risk = mitigation

Attributes

- code – names or describes the risk
- riskFactor – category for the risk
- effectiveTime – time at which the risk is identified
- observer – individual who identified the risk
- levelOfRisk – a risk is clinically significant but the level may be low, medium or high depending on the overall health of the patient. E.g. new genetic tests may show I have a gene which strongly predisposes me to a future disease. The risk may be low given my lifestyle but patient and care givers may want track closely.
- resolvedTime – the date the risk is no longer a threat to the health of the patient



LCC: Can you link “HealthRisk” to “HealthConcern” or add a RiskFactor attribute to “HealthRisk”

Risk Factors, Health Risks, & Health Concerns

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- LCC Example:
  - Link HealthRisks to HealthConcern (preferred approach)
    - Where risk is Asbestos Exposure and concern is Mesothelioma

  OR

  - Add a RiskFactor attribute to HealthRisk
    - Where HealthRisk is Mesothelioma and RiskFactor is Asbestos Exposure
    - RiskFactorType would be Occupational

Plan Actions

- Propose
- Implement
  Start, Complete, Suspend, Abandon

Plan actions express what is to be done, by whom, where and constraints which must be met for execution.

Examples:

- Diagnostic tests
- Preventive procedures
- Surgical interventions
- Medication administrations
- Vaccinations
- Treatments
- Consults
- Physical therapy
- Counseling
- Patient Education
- Care Transfer, Referral
- Patient diary action
- Patient questionnaire action
- Etc..

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Proposed Action

- A proposal to perform an action towards the achievement of the patient's goal, in support of a patient health concern, risk or care barrier.
- May require an acceptance review to indicate understanding, acknowledgement or authorization to carry out the proposal
- May specify criteria required for implementation

Implemented Action

- Realizes a ProposedAction but may also exist without a proposal
- Captures performers and outcome reviewers
- Captures place of service
- Links to outcome observations
- Indicates resources allocated in support of implementation

Proposed or Implement Actions

- May be suspended for a period of time (e.g. due to resource constraints)
- May be abandoned (e.g. due to impending risks, or current barriers)
- May reference supportive clinical context
- May consist of multiple steps optionally determined based on Decision points

Resource Allocation

- Captures resource requirements for proposed actions
- Captures utilization once action is implemented

LCC: Add a bullet that states, "May include patient instructions"

Next Steps

- LCC will set up a Tiger Team to gather comments on the Care Plan DAM
  - Need interested individuals
  - Start next week?
- LCC will formally submit all comments on the HL7 Ballot
- LCC to join Patient Care WG's Ballot Reconciliation process
- HL7 SOA group to present the Care Coordination Service to LCC